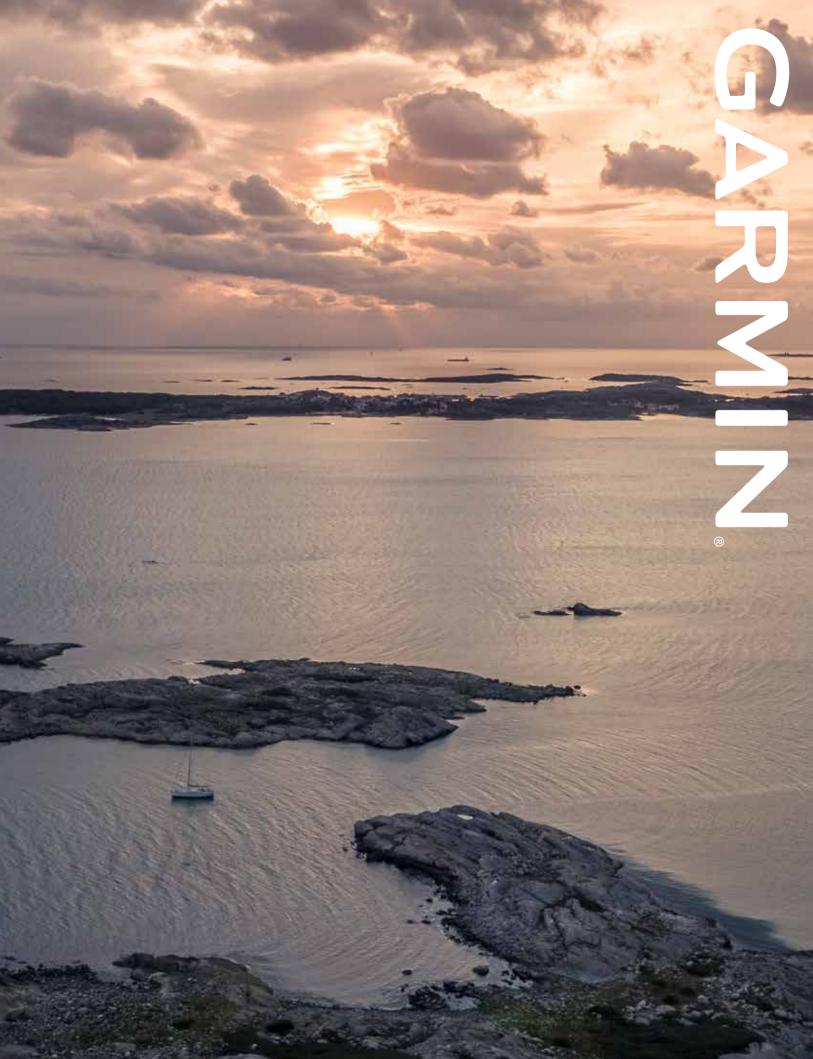


CONTENTS

Garmin Marine Family	
Sonar Technology	. 06
Cartography and Apps	. 14
Build, Manage and Control	. 22
Marine Entertainment	-
Chartplotters	. 36
Trolling Motors	. 46
Radar	. 50
Instruments	. 54
Communications	
Sonar Black Boxes	
Panoptix Transducers	
Fishfinders	
Autopilots	
Cameras	
Wearables and handhelds	
Accessories	. 92
Specifications	
Support	106





GARMIN®

AT GARMIN WE STRIVE TO MAKE THE BEST PRODUCTS FOR EVERYTHING YOU DO ON THE WATER. THESE BRANDS ARE Part of the Garmin Family because they represent the strongest and best of what they do.

BRAND FAMILY



MARINE ENTERTAINMENT

FUSION® ENTERTAINMENT IS WORLD-RENOWNED FOR ENGINEERING INNOVATIVE AUDIO SOLUTIONS THAT ARE ENJOYED AROUND THE GLOBE BY THE MOST PRESTIGIOUS BOAT DESIGNERS AND MANUFACTURERS.



CARTOGRAPHY

EXPERIENCE UNPARALLELED COVERAGE AND BRILLIANT DETAIL WHEN YOU'RE ON THE WATER. Bluechart® G3 Coastal Charts and Lakevü G3 Inland Maps Provide Exceptional Coverage, Clarity and Detail.



DIGITAL SWITCHING

EMPIRBUS BRINGS ALL THE POWER AND CONVENIENCE OF ADVANCED HOME AUTOMATION TO YOUR VESSEL, ALLOWING YOU TO CONTROL AND MONITOR ALL ONBOARD ELECTRONIC SYSTEMS FROM YOUR GARMIN CHARTPLOTTER OR MFD.



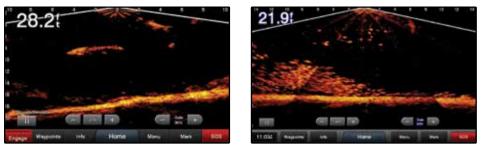


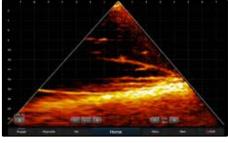
PANOPTIX LIVESCOPE

Our award-winning Panoptix LiveScope sonar brings scanning sonar to life in real time. It shows highly detailed, easy-to-interpret live scanning sonar images of structure, bait and fish swimming below and around your boat in real time, even when your boat is stationary.

THREE MODES IN ONE TRANSDUCER

PANOPTIX LIVESCOPE DOWN

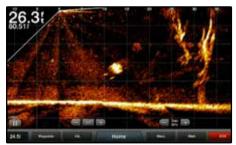


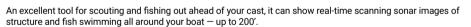


Live, easy-to-interpret scanning sonar images of structure and swimming fish in incredible detail below your boat –up to 200'.

Panoptix LiveScope LVS12 Down.

PANOPTIX LIVESCOPE FORWARD







Panoptix LiveScope LVS12 Forward

PANOPTIX LIVESCOPE SCANNING SONAR SYSTEM

Transom/Trolling Motor Mount - Part no: 010-01864-00 Thru-Hull Mount - Part no: 010-02233-00

Includes a compact GLS 10 sonar black box with LVS32 transducer and simple plug-and-play Garmin Marine Network connector to easily install and seamlessly integrate with your compatible Garmin chartplotter². Use the transducer as a supplemental traditional and ClearVü sonar source to see a historical representation of structure and fish below your boat. Available with trolling motor and transom mount transducer options.



The Panoptix LiveScope[™] LVS12 transducer provides an economical solution for your GPSMAP[®] 8400xsv or ECHOMAP[™] Ultra chartplotter — without the need for a black box. With 30-degree forward and 30-degree down real-time scanning sonar views.

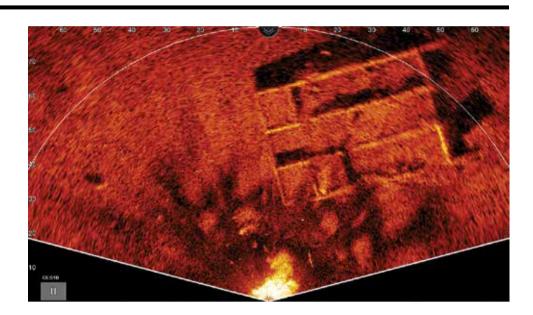


PANOPTIX LIVESCOPE[™] PERSPECTIVE MODE MOUNT

See what's beneath the surface like never before with this transducer positioning accessory. Get incredibly detailed, real-time images of what's all around and ahead of the boat — including bait, fish and structure. You'll still be able to adjust the transducer to fit your fishing techniques, including LiveScope Forward view to see around your boat and LiveScope Down view for what's below your boat. With the addition of the Perspective Mode Mount, you'll be able to see what's out in front and down from your boat with an overhead vantage point — making it great for shallow water.

Part no: 010-12970-00, Perspective Mode Mount





ADDED PERSPECTIVE

Easy-to-interpret, highly detailed live scanning sonar lets you scout fish and structure in shallow waters to 50'.

ROCK-STEADY SONAR

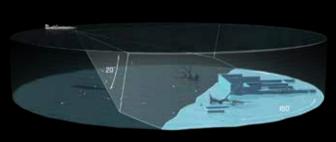
Built-in AHRS attitude/heading reference keeps the sonar view stable, even in rough conditions.

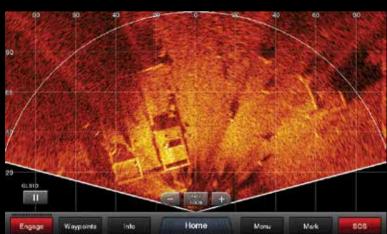
ONE MOUNT, THREE VIEWS

Select scanning sonar views for Forward, Down and Perspective modes with trolling motor mounting (no transom mount available).

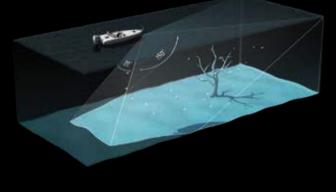
AUTO-DETECTION

Update the software on your compatible chartplotter¹ to get auto-detection of each mode.



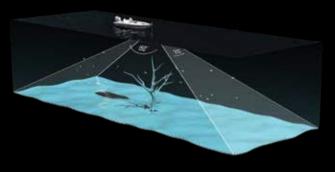


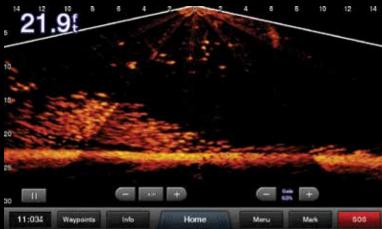
LIVESCOPE[™] PERSPECTIVE MODE





LIVESCOPE[™] FORWARD





LIVESCOPE[™] DOWN

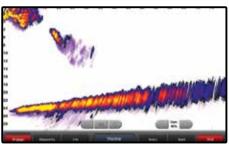
PANOPTIX" ALL-SEEING SONAR

Panoptix sonar is opening up a new world for serious fishermen. It makes it possible to see fish and bait swimming, in real time, around or under your boat – even when the boat is not moving.

PANOPTIX FORWARD

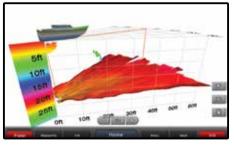
Includes 3 forward views: LiveVü Forward, RealVü 3D Forward and FrontVü¹.

LIVEVÜ FORWARD



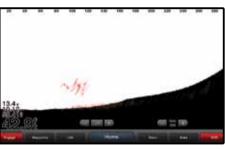
Provides a live sonar look at fish swimming and moving toward or away from the boat. Cast right at fish. See your lure. See fish react to your lure. See and feel the strike.

REALVÜ 3D FORWARD



Scans the area in front of your boat, creating a forward-looking 3D view of the bottom, structure and fish.

Frontvü

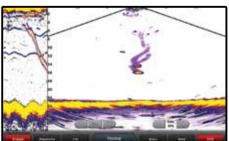


To help give you time to avoid collisions with submerged obstacles, FrontVü shows underwater obstructions within a 300-foot range as you approach them in real time².

PANOPTIX DOWN

Includes 3 downward views: LiveVü Down, RealVü 3D Historical, and RealVü 3D Down.

LIVEVÜ DOWN



Shows real-time moving sonar images of small baitfish and large target fish swimming below your boat and pinpoints their distance left or right and their depths.

REALVÜ 3D HISTORICAL



Scrolls through sonar data as the boat moves to show the history of the entire water column from the bottom to the surface and all of the fish in between.

REALVÜ 3D DOWN



Scans below the boat – front to back and side to side – to construct a full 3D view of the area under the boat, letting you see contour changes, fish and structure, even while stationary.

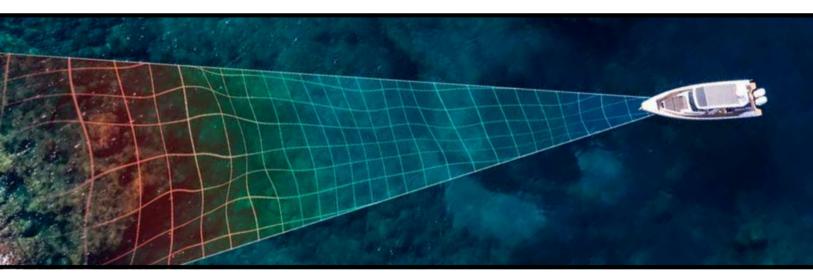
IN

PANOPTIX" ALL-SEEING SONAR

PANOPTIX FRONTVÜ SONAR Part no: PS51-TH: 010-01753-00



Multibeam thru-hull transducer with premium FrontVü forward-looking sonar helps you avoid running aground¹ by displaying the bottom ahead of your boat in real time on your chartplotter. It also includes LiveVü Forward sonar to give you the unique ability to see fish — even divers — swimming in real time under and ahead of your boat with a 300-foot forward range.



THE LINEUP						
	PS21-TM	PS22-TR	PS30	PS31	PS51-TH	PS60
RealVü 3D Down			•			•
RealVü 3D Historical			•			•
LiveVü Down		•	•			•
RealVü 3D Forward				•		
LiveVü Forward	•	•		•	•	
FrontVü Forward	•	•		•	•	
Independent Power Connection	•	•	•	•	•	•
Transom Mount Included	• ²		•	• ²		
Trolling Motor Mount Included		•		•		
Thru-Hull Mount and Fairing Block					•	•

¹The ability to effectively avoid running aground with FrontVü sonar decreases as speed rises above 8 knots

²The forward-facing transom transducer should be mounted in a location that is out of the water at speeds over 32 km/h (20 mph). If located below the water line, cruising speeds over 40 km/h (25mph) should be avoided. he ability to effectively avoid running aground with FrontVü sonar decreases as speed rises above 8 knots

SCANNING SONAR SYSTEM **ULTRA HIGH-DEFINITION**

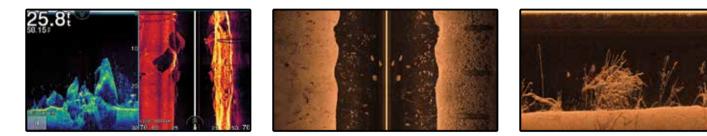


The Ultra High-Definition Scanning Sonar redefines scanning sonar. See everything below and off to the sides of your boat in amazingly sharp, crisp detail. The UHD transducers provides image details so clear and precise, you can actually see fish hanging just off branches of submerged trees, brush and rocks. You can see size differences between bigger and smaller fish and even see individual fish swimming in bait balls.

Share Ultra High- Definition scanning sonar images seamlessly across multiple networked chartplotters¹. You can also add optional Panoptix all-seeing sonar to your networked sonars.

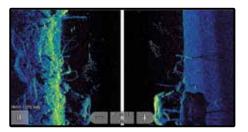
SEE EVERYTHING

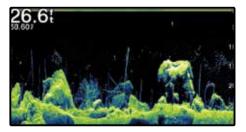
Clarity and detail are redefined with the Ultra High-Definition scanning sonar system. It delivers greater resolution by putting more power on targets with a higher frequency range than conventional marine sonar technologies.

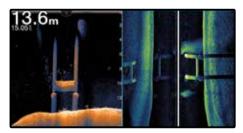


VIVID SONAR

See fish and structure in colorful detail with Vivid scanning sonar. It features high-contrast color palettes and realistic target imaging to show you precisely what's beneath the surface.



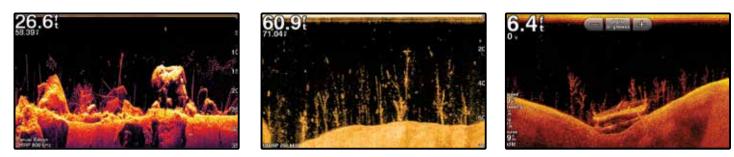




CHIRP SONAR

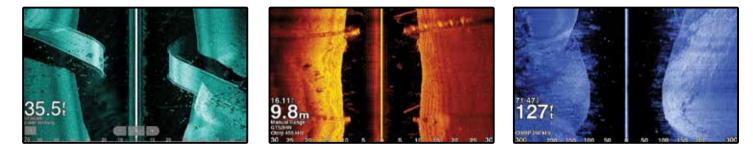
UHD CHIRP CLEARVÜ

ClearVü with CHIRP technology is high-frequency sonar that delivers an amazingly clear picture of what's under your boat. ClearVü produces an ultra-clear image for a more detailed representation of objects, structure and fish.



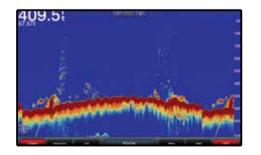
UHD CHIRP SIDEVÜ

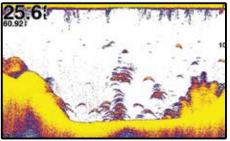
SideVü with CHIRP technology provides a highly detailed, high-resolution image of structure and fish off to either side of your boat. It's excellent for scouting, finding fish and the right types of structures for successful fishing.

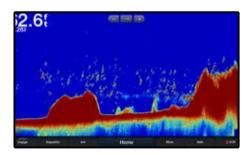


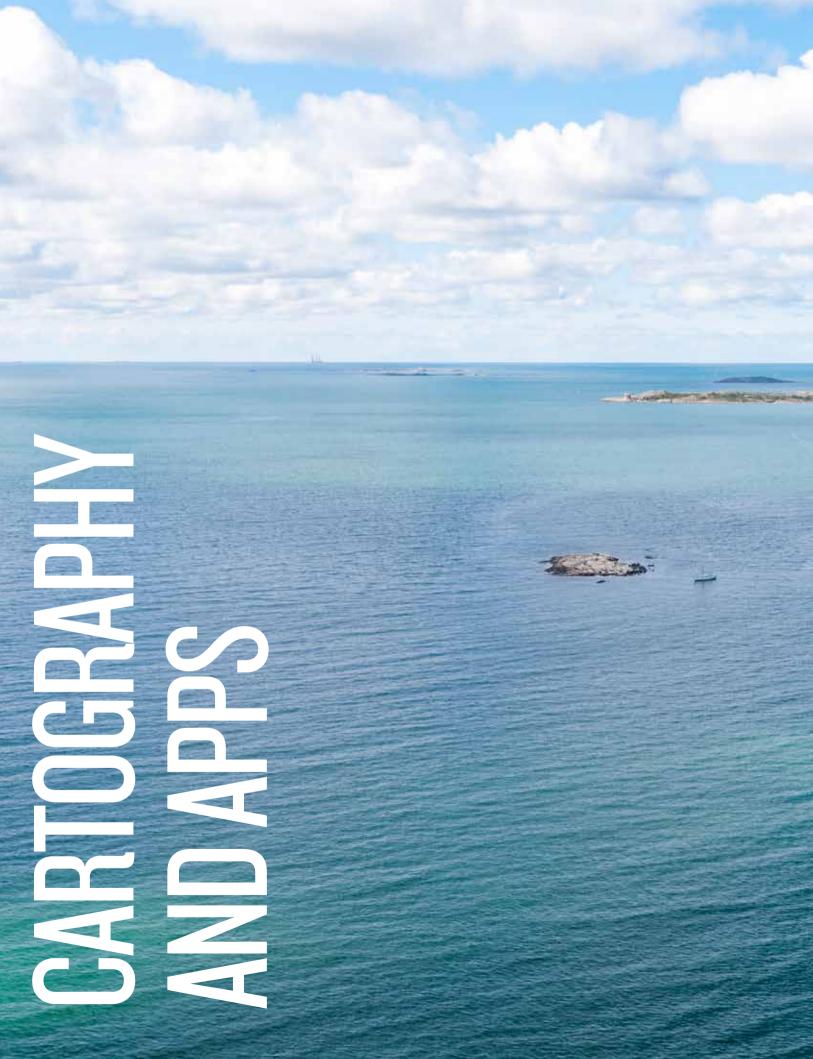
TRADITIONAL CHIRP SONAR

Garmin CHIRP traditional sonar sends a continuous sweep of frequencies ranging from low to high. This sweep of frequencies provides a wide range of data to create an amazingly clear, high resolution image.









THE BEST OF GARMIN WITH THE BEST OF NAVIONICS

Experience unparalleled coverage and brilliant detail when you're on the water. BlueChart[®] g3 charts now provide industry-leading coverage, clarity and detail with integrated Garmin and Navionics[®] content.

BLUECHART[®] G3 / BLUECHART G3 VISION

FEATURING **NAVIONICS**[®] DATA

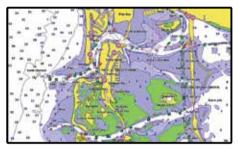
$\textbf{BLUECHART}^{\circ}\ \textbf{G3} \ \square$

Experience unparalleled coverage and brilliant detail when you're on the water. BlueChart® g3 charts provide industryleading coverage, clarity and detail with integrated Garmin and Navionics® content. The charts also let you easily calculate suggested routes with Auto Guidance¹.

BLUECHART® G3 VISION =

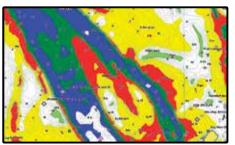
BlueChart g3 Vision is our premium chart offering which includes all the reliability, features and integrated Garmin and Navionics[®] content of BlueChart g3 while adding even more industry-leading features to help you along your journeys.

ADVANCED CHART DETAIL □ ■



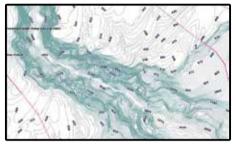
Highly detailed charts with Navionics data help the mariner guide their boat in and out of port with confidence.

DEPTH RANGE SHADING \Box =



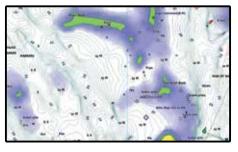
Displays high-resolution Depth Range Shading for up to 10 depth ranges so you can view your designated target depth.

DETAILED CONTOURS □ ■



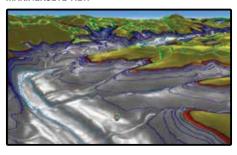
BlueChart g3 features 1-foot contours that provide a more accurate depiction of bottom structure for improved fishing charts and enhanced detail in swamps, canals and port plans.

SHALLOW WATER SHADING \Box



Shallow water shading allows for shading at a user-defined depth to give a clear picture of shallow waters to avoid.

MARINERSEYE VIEW



Provides a 3D representation of the ocean floor as seen from below the waterline.

AUTO GUIDANCE □ ■



Includes Auto Guidance¹ technology, so you can easily calculate routes and see a suggested path to follow.

HIGH-RESOLUTION SATELLITE IMAGERY



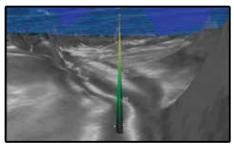
High-resolution satellite imagery overlaid onto navigational charts provides a realistic view of your surroundings.

AERIAL PHOTOGRAPHY



Shows exceptional detail of many ports, harbors and marinas. Ideal when entering unfamiliar ports.

FISHEYE VIEW



Provides a 3D representation of the surrounding area both above and below the waterline.

¹Auto Guidance is for planning purposes only and does not replace safe navigation operations Not all chart features will display on all devices, particularly legacy devices. As engineering enhancements are ongoing, new features may not display on such legacy products, as well

RELIEF SHADING FOR BLUECHART[®] G3 VISION

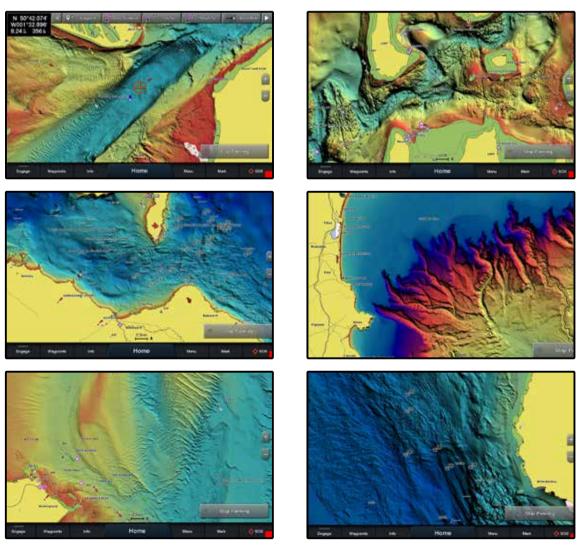
MAPPING WILL NEVER BE THE SAME

Relief Shading combines color and shadow to bring an entirely new level of detail to the ocean floor. For the waters around the UK, Ireland, Belgium, France, Germany, the Netherlands and Norway, high-resolution relief shading brings bottom detail to life. The easyto-interpret, stunning color palette reveals complex and intricate bottom detail of channels, offshore shelves, artificial reefs, wrecks and sandbars, so that boaters can better understand their surroundings at a glance and anglers can more easily identify fish-holding structure.

Relief Shading feature (where available) can be downloaded to a microSD / SD data card via the ActiveCaptain app.

EUROPE - EXAMPLE PICTURES

Relief Shading is only available in BlueChart g3 Vision and for specific cover areas. For more information about Relief Shading cover areas visit garmin.com.



ACTIVECAPTAIN[®] **APP**



Give yourself the advantages of the ultimate connected boating experience. Download the free all-in-one ActiveCaptain[™] app. It provides you with a powerful connection to your Garmin chartplotter, charts, maps and the community. Wherever you are, you can have unlimited access to your cartography, the ability to purchase new maps and charts and access the Garmin Quickdraw[™] Contours Community.



SPECIAL ACTIVECAPTAIN FEATURES

- OneChart[™] gives you access to all your charts and maps from your mobile device and even lets you purchase new ones
- Receive smart notifications, such as calls and texts, on your chartplotter display when paired with the app
- Download software updates and notifications from the app • directly to your Garmin devices
- Connect to fellow boaters with the ActiveCaptain[™] community for up-to-date feedback on marinas and other points of interest
- · Make, save and transfer routes and waypoints between the app and chartplotter - with zero button presses¹
- Easily upload and download the latest Garmin Quickdraw™ Contours content from the community – with zero button presses¹
- View and control your chartplotter from your smartphone or tablet²



GARMIN.COM

WORLD LEADERS IN CARTOGRAPHY



Since Garmin and Navionics came together, we have been combining the best of our data and technology to produce superior cartography products.

EACH PRODUCT OFFERS THREE LAYERS OF CONTENT

NAUTICAL CHART

Essential cartographic reference detail for cruising, sailing and fishing: port plans, safety depth contours, marine services, tides and currents, and navigation aids.

SONARCHART™

An HD bathymetry map featuring extraordinary bottom contour detail for marine and lake areas. Great for increasing awareness of shallow waters and for locating fishing areas at any depth level.

COMMUNITY EDITS

All kinds of valuable local information is constantly enhanced by users of the Navionics Boating app, such as seasonal buoys, lights, rocks, moorings, boat ramps, points of interest, restaurants and provisioning shops.

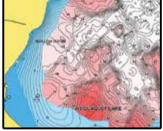
Start out from day one with up-to-date charts. A one-year subscription provides access to daily updates and advanced features on compatible chartplotters.

DOCK-TO-DOCK AUTOROUTING



Head to your next destination with Dock-to-dock Autorouting, which calculates a suggested route, even through narrow passages and channels, based on chart data and your own boat settings.

SONARCHART LIVE



Create your own maps on the fly. Watch new 1 ft/0.5 m HD bathymetry maps develop in real time as your boat moves along the water.

ADVANCED MAP OPTIONS



Change the way you view Navionics charts and focus on the details that matter most to you. Highlight shallow areas, adjust contour density or select a fishing range.

PLOTTER SYNC



Transfer routes and markers, update charts and more between your plotter card and mobile app — wirelessly. You can even activate or renew your card's subscription and upload sonar logs.

ACCESSORY CARDS

Navionics cartography is available on MSD/SD accessory cards for a variety of hardware brands. The same detailed content is integrated within Garmin BlueChart g3 and BlueChart g3 Vision via accessory card or download for Garmin chartplotters and combos.

NAVIONICS+

Provides complete inshore to offshore marine content, plus rivers, bays, and more than 38,000 lakes around the world. Available in very large coverage areas to more localized chart cuts.

PLATINUM+

All the marine content of Navionics+, enhanced with additional viewing options: satellite overlay, 3D View and panoramic photos. Choose from coverage areas worldwide.

INCLUDES SONARCHART SHADING

A detailed rendering of the seafloor and lake bottom delivers a unique perspective of underwater topography at a glance.

MOBILE APPLICATION



Boating Marine & Lakes is a powerful app with content and features, including ActiveCaptain[®] Community data, that goes where you go. Great on its own or to supplement your boat's electronics, experience charts and features for all coverage areas for 2 weeks before you subscribe.

GARMIN.COM

LARGE COVERAGE AREAS - BLUECHART G3 VISION*

EU721L Northern Europe EU723L Southern Europe EU722L Europe Atlantic Coast rents SWEDEN FINLAND RUSSIA 14 Sea ITU. POLAND GERMAN UKRAIN ANC ROMANIA ITAL

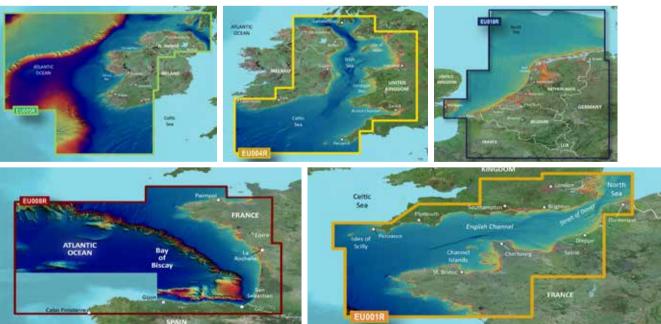
REGULAR COVERAGE AREAS - BLUECHART G3 & BLUECHART G3 VISION^{*}

•	EU001R	English Channel
	EU002R	S/E England-Belux Inland Waters
•	EU003R	Great Britain, Northeast Coast
-		1:10

- EU004R Irish Sea
- t Coast
- EU005R EU006R EU008R
 - Scotland, West Coast
 - Bay of Biscay

Ireland, West Coast

EU018R Benelux Offshore and Inland Waters



For more information and world wide coverages, please visit www.garmin.com

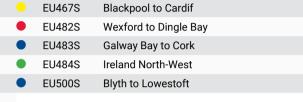




SMALL COVERAGE AREAS - BLUECHART G3 VISION*

EU456S English Channel, Central-East

- EU457S Bretagne
 - EU461S Thames Estuary
- EU463S Bristol Channel and England S/W
- EU464S Penmarch to Les Sables D'Olonne
 - EU465S La Baule to San Sebastian













For more information and world wide coverages, please visit www.garmin.com



BUILD A COMPLETE ONBOARD SYSTEM

The Garmin Marine Network and NMEA 2000® network allow you to easily view multiple functions, such as chartplotter, radar, sonar, AIS, on one or more displays. All Garmin Marine Network and NMEA 2000 devices come with an easy plug-and-play setup. The system automatically detects the devices in the network and makes them ready to use.

NMEA 2000 CONNECTIVITY

Utilize NMEA 2000 to connect FUSION-Link[™] enabled audio systems, AIS, VHF, autopilots, engine data, fuel flow sensors and wind sensors.

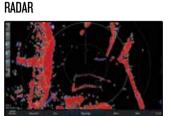






GARMIN MARINF NFTWORK

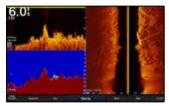
Utilize Garmin Marine Network to connect Garmin marine electronics such as sonar, radar, monitoring cameras, video data, and multiple MFDs and chartplotters.



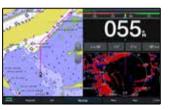
FUSION-LINK



SONAR



AUTOPILOT



ENGINE DATA



WIND SENSOR



CONTROL. EVERYTHING.

ONEHELM™

Our integrated solution is designed to work with marine products manufactured by third-party companies to bring you the power and convenience of controlling onboard boat systems such as digital switching, lighting, stabilization and more. It's all in one simple, convenient control center - the screen of your Garmin MFD.









ONDECK[™] SYSTEM

When paired with the ActiveCaptain® app on your smartphone, the OnDeck remote connectivity solution lets you track, monitor and control up to 5 switches on your boat from virtually anywhere. Keep tabs on systems such as battery, shore power, bilge or saltwater pumps and receive alerts if a security sensor is triggered or if your boat is moved from its GPS geofenced area. Get 24/7 peace of mind with OnDeck technology onboard¹.



DIGITAL SWITCHING / EMPIRBUS

These innovative and intelligent products, solutions and services provide a complete suite of embedded systems, power supply and power distribution, creating the backbone for complete digital control and smart boat features. EmpirBus components connected with Garmin MFDs allow cruisers, sailors and anglers to easily control virtually any device on their vessel - from propulsion to pumps, air conditioning to infotainment. This connectivity enhances situational awareness and helps make time on the water even more enjoyable.





REMOTE CONNECTIVITY SOLUTIONS

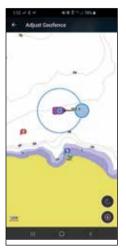
ONDECK[™] SYSTEM

Part no: 010-02134-00

When paired with the ActiveCaptain[®] app on your smartphone, the OnDeck remote connectivity solution lets you track, monitor and control up to 5 switches on your boat from virtually anywhere. The system includes the GTB 10 OnDeck hub for collecting and storing data; door, temperature and shore power sensors for notifications and alerts; a relay switch for remote control of up to 5 systems and more¹.

TRACK

//////



Be the first to know if a security sensor has been triggered, or if your boat has been moved. The internal GPS sensor updates every 15 or 30 minutes, depending on power status, and will send text alerts¹ if your boat leaves the geofenced area.

ACTIVECAPTAIN APP



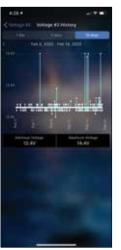
Download the ActiveCaptain app to your compatible smartphone or tablet to manage your vessel. It's where you can set up alarm notifications, take control of your boat and so much more¹.

MONITOR



Get updates¹ on your boat's battery status, bilge activity, shore power, temperature changes and more. Set up alarm notifications in the ActiveCaptain[®] app.

STORE DATA



Securely collect vessel data with the GTB 10 OnDeck Hub and store it in the cloud for up to 30 days.

CONTROL



Get out on the water faster when you turn on up to 5 selected systems, including battery chargers, ice makers and more, from afar via relay switches.

ALWAYS ON CONNECTION



GTB IO The GTB 10 hub uses 3G/4G coverage.

4:29 7	al 🗢 🔳
← Sensors	EDIT
	DRIVINE PUMER
BLOE P	dle
A	AGE #Y .4 × 8.8 ×
GPS HE	ADING VESSEL COCAMETER
CURRENT S CRPS 0.67 CPS	the second se
(2) MAXIMUM S (2) 10.1 (3) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2)	- @ 0.64-
HI.	0 <



DIGITAL SWITCHING AND MONITORING

EmpirBus

EmpirBus brings all the power and convenience of advanced home automation to your vessel by allowing you to control and monitor all onboard electronic systems from your Garmin chartplotter or multifunction display: lighting, wipers, entertainment and security systems, air-conditioning, navigation lights and much more. EmpirBus replaces the standard mechanical circuit breakers and switches with state-of-the-art digital power distribution that provides reliable, convenient and easy-to-use operation.

ELEGANTLY SEAMLESS

An EmpirBus digital switching system comprises one or more compact digital distribution control modules (DCM) and master control units (MCU). The DCM supports between 16 and 31 circuits that are customized to meet the exact needs of the equipment being controlled. Each DCM connects to the existing NMEA 2000® network backbone, enabling it to communicate with the other DCMs and Garmin multifunctional displays via a WDU unit on the Garmin Marine Network. This flexible network architecture enables the DCMs to be mounted near the equipment they are controlling, providing a system that is simpler to install and troubleshoot. The MCU is the central processor that drives the system, providing computing power, intelligence and decision making. It talks to the other system components via the network.

CREATIVITY UNBOUND



EmpirBus systems feature fully customizable layouts and graphics that allow for every circuit switch or monitor to be shown in any configuration with a simple drag-and-drop graphic interface builder. Screens can even be personalized by uploading boat images.

USER INTERFACE FOR COMPATIBLE GARMIN CHARTPLOTTERS



DIGITAL SWITCHING AND MONITORING

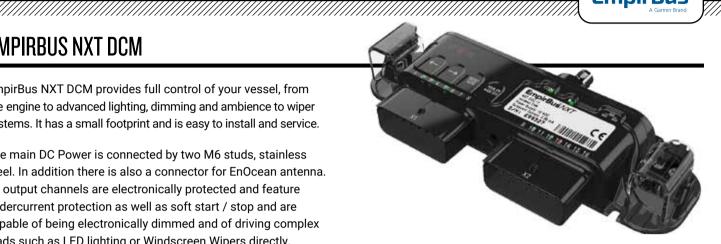
EMPIRBUS NXT DCM

EmpirBus NXT DCM provides full control of your vessel, from the engine to advanced lighting, dimming and ambience to wiper systems. It has a small footprint and is easy to install and service.

The main DC Power is connected by two M6 studs, stainless steel. In addition there is also a connector for EnOcean antenna. All output channels are electronically protected and feature undercurrent protection as well as soft start / stop and are capable of being electronically dimmed and of driving complex loads such as LED lighting or Windscreen Wipers directly.

To increase output capacity outputs may be paralleled and to simplify installations both High Side and Low Side switching is possible.

With multiple input capabilities and ranges the DCM is an



EmpirBus

extremely versatile and cost effective means to interface signals to the system and when combined with the powerful NXT software complex monitoring and control systems are easily realized in practice.

EMPIRBUS CONNECT 50

EmpirBus Connect 50 is a more compact version of the NXT DCM, designed for smaller or less complex installations. It includes the durability and competence of the NXT DCM and delivers outstanding cost/channel ratio without sacrificing important functionality.

The outputs have been fitted with high accuracy current feedback that enables real time readout of the current consumption per channel. A new design of the NMEA connection provides galvanically isolated connection, without the need for a powered NMEA bus. The power consumption from the NMEA bus is ZERO for the Connect 50!

The Connect 50 comes as standard with 11 input channels and 20 output channels. As an option it can be equipped with ports for additional galvanic isolated CAN and serial interface. In addition



there is also an option to fit the Connect 50 with WiFi for wireless control and connectivity.

Reverse polarity on two channels to control of tables, windows, hatches etc. is supplied as standard as well as capability of controlling and synchronizing window wipers.

DIGITAL SWITCHING AND MONITORING

EmpirBus

EMPIRBUS NXT MASTER CONTROL UNIT (MCU)

The NXT Master Control Unit is an essential component of a NXT installation and provides multiple functions. It is the central processor that drives the system, provides the computing power, intelligence and decision making. In addition there are various interfaces for connection to external devices.

The master Control Unit (MCU) is a NMEA 2000 device and talks to all of the other system components via the NMEA2000 network. The MCU both stores and executes the configuration files for the installation holding data for every EmpirBus unit present. Should any unit or membrane panel need to be replaced it is the MCU that distributes the specific data to the replacement. The base address of the new component has been entered. Standard Microsoft drivers are utilised for connecting the MCU to the PC, no drivers required. The GSM interface provides possibilities for interaction with the system utilizing SMS. A three-digit display provides displaying parameters and messages. Touch buttons allow new settings to be entered. The GSM interface provides possibilities for nteraction with the system utilizing SMS. A three-digit display provides displaying parameters and messages. Touch buttons allow new settings to be entered. The



TD 50 OEM MARINE INSTRUMENT

The TD50 is a 5" touchscreen display intended for use as a secondary EmpirBus digital switching unit. EmpirBus allows you to control onboard electrical and electronic systems like lighting, air-conditioning, navigation lights, wipers, horns, entertainment systems, security systems and much more. The TD50 has configurable backlight and language capabilities. Its software can be updated by MFD or ethernet Garmin card reader.



EMPIRBUS WEB DISPLAY UNIT (WDU)

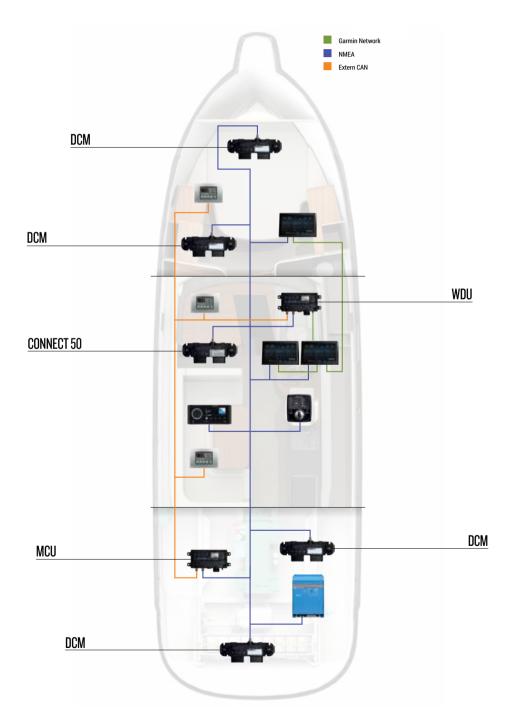
The EmpirBus Web Display (WDU) unit is a webserver unit to distribute customized graphics to any HTML5-supporting device. The WDU allows any EmpirBus system to be controlled and monitored by a user interface fully optimized for its purpose.

The WDU is an EmpirBus system add-on to enable control from HTML5-supporting devices and software. NMEA2000 connected to EmpirBus system and Ethernet (RJ45 sealed) for HTML5 distribution. HTML5 pages and apps can be graphically configured without limitations and work seamlessly with the EmpirBus software.



SYSTEM CONFIGURATION

Control all electronic and electrical systems from a compatible Garmin display, replacing standard mechanical circuit breakers and switches with a state-of-the-art digital power distribution. Simple, easy to use, cost-effective and with seamless, reliable operation, EmpirBus digital switching makes a perfect solution to centralize all controls. Enjoy full control of your boat along with marine specific monitoring solutions like battery levels, lighting, trim controls, temperature, tank monitoring and more. The EmpirBus interface can be easily customized for each boat model, resulting in intuitive operation.



A B N F



FUSION[®] MARINE ENTERTAINMENT



THE FUTURE WITH FUSION

Fusion, a Garmin brand, is passionate about enhancing your time on the water. Founded on New Zealand's trademark "Kiwi" determination, ingenuity and passion for life on the water, our first-hand experience with the ocean and great outdoors has provided a solid understanding of what it really takes to be a successful marine entertainment manufacturer. It is this experience and passion that is at the core of everything we do. Our drive to continually innovate has seen the delivery of many industry- and world-first, award-winning and customercentric products that have set a new benchmark for marine audio entertainment. A commitment to innovation, quality and brilliant audio on the water – it's what we do best.













TRUE-MARINE[™] DESIGN



Fusion's True-Marine design philosophy stems from our collective experience confronting harsh marine and outdoor environments. With True-Marine accreditation and an industry-leading 3-year warranty, you can be assured that each product is engineered from the ground up, specifically to last season after season on your boat. MULTI-ZONE[®] TECHNOLOGY



Fusion introduced Multi-Zone technology to the marine industry more than ten years ago, giving you the freedom to independently control the music in up to four separate zones on board. Adjust the balance, subwoofer and volume levels, with each zone able to be named for quick zone identification, providing a simple, quick and easy way to control the audio in each zone of your boat.

FUSION DSP



The power of Fusion DSP enables the optimization of your audio system in each zone on board, providing customized listening in any environment. Every step of the audio chain is calculated and optimized by our engineers to deliver a technically superior listening experience – without the need for you to have the technical understanding. From the kick drum to your eardrum, Fusion DSP ensures you enjoy your music in the quality the musicians intended.

THE WORLD'S FIRST WI-FI® STEREOS



Wi-Fi audio streaming provides highquality audio streaming with a faster data transfer rate in comparison with BLUETOOTH® wireless technology. Seamless Apple AirPlay[®]2 streaming is now available over Wi-Fi from a compatible Apple device to the Apollo Series* stereos, enabling you to stream your music to multiple Apollo units on the same network.

FUSION-LINK



GARMIN.COM

FUSION-Link makes control of your on-water entertainment simple, convenient and easier than ever. Quickly find your favorite song, tune in to the sports or turn up the volume, all from your partnered multifunction display (MFD) with FUSION-Link over NMEA 2000[®].

Download the free FUSION-Link app to bring wireless audio control to the palm of your hand, via BLUETOOTH wireless technology or Wi-Fi with your compatible device. Enjoy wireless audio control with your compatible device and the FUSION-Link app, or right from your wrist with your compatible Garmin watch and the free FUSION-Link Lite app.



*MS-RA670 will get Apple AirPlay 2, PartyBus and over-the-air software updates when connected to an Apollo Series network enabled with Wi-Fi technology. Wi-Fi is a registered trademark of the Wi-Fi Alliance. The Bluetooth word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Garmin is under license.

THE SUM OF AUDIO INNOVATION

APOLLO[™] SERIES

An entirely new creation sculpted from the experience of the past, designed with a vision of the future, and delivered in an unparalleled form factor of premium elegance. The Apollo Series has redefined audio excellence through revolutionary technology coupled with innovative design never seen before in the marine industry, forever changing the face of marine entertainment and becoming the standard in which all others will be shaped.

MS-RA770



The Apollo RA770 is the world's most awarded marine stereo. It features a 4.3" touchscreen display with Fusion DSP, built-in Wi-Fi with Apple AirPlay 2, PartyBus™-Network technology, over-the-air software updates and Multi-Zone[™] technology in four zones. It also has Fusion-Link[™] control and an IPX6 and IPX7 water resistant front face with True Marine accreditation.

MS-RA670



The Apollo RA670 reembodies awardwinning innovation in a more compact form factor. Key features include a 2.7 optically bonded color LCD, Fusion DSP, Multi-Zone technology in three zones and Fusion-Link control. When connected to a Wi-Fi network, you have the additional features of Apple AirPlay 2*, over-the-air software updates* and PartyBus-Network technology*

MS-WB670



The Apollo WB670 hideaway stereo is designed to save dash space at the helm with its compact form factor. It inherits key features from the Apollo RA670 including Fusion DSP, PartyBus-Network technology*, Wi-Fi audio streaming* with Apple AirPlay 2* and over-the-air software updates*. It includes Multi-Zone technology in three zones and Fusion-Link control

SRX400



A perfect companion to the Apollo RA770, the compact Apollo SRX400 zone stereo features a 2.7" optically bonded color LCD, Fusion DSP, built-in Wi-Fi with Apple AirPlay 2, PartyBus-Network technology and over-the-air software updates for a superior audio experience.



QUALITY, CONVENIENCE, BEST IN CLASS. THE ONLY MARINE STEREOS WITH Apple AirPlay 2.



The world's first marine stereo series to bring you seamless high-quality audio streaming from a music app via Apple AirPlay 2' over Wi-Fi from a compatible Apple device. With Apple AirPlay 2, you can stream the same audio to every compatible Apollo stereo connected to the same network, and enjoy high-quality audio synchronized across the entire boat with volume control individually or globally.

THE INDUSTRY AWARD-WINNING FEATURES OF THE APOLLO SERIES



FUSION DIGITAL SIGNAL PROCESSING

A technically superior listening experience made simple. Fusion DSP optimizes the audio signal delivered to your Fusion system to produce superior sound quality at all volume levels, in every listening environment.

THE WORLD'S FIRST **Built-in** MARINE WI-FI STEREO

Enjoy the clarity and premium guality of Wi-Fi audio streaming in a world-first for marine stereos, including the convenience of Apple AirPlay 2 and UPnP, with faster data transfer rate and increased connectivity range in comparison with BLUETOOTH audio streaming.

Wireless 😱 OVER-THE-AIR SOFTWARE UPDATES

Over-the-air software updates are now available from your compatible device via the free Fusion-Link app, making the Apollo Series intelligently simple and always up to date.



FUSION PARTYBUS-NETWORK

Wi Fi

Engineered for those who value the freedom to play what they want, where they want, Fusion PartyBus-Network is the audio distribution system of the future. We have introduced a new intuitive user experience for the Apollo Series, allowing you to seamlessly navigate and control your entire boat's audio network.

Key functionalities include:

- · Stereo grouping play the same synchronized audio source across grouped stereos.
- Volume control individual or group volume control.
- · Power options turn on any Apollo Series stereo on the PartyBus-Network from another Apollo Series stereo.
- Home zone easy access to control where the stereo is installed.

*MS-RA670 / MS-WB670 will get Apple AirPlay 2, PartyBus and over-the-air software updates when connected via Ethernet to an external wireless router (sold separately), Garmin MFD or Apollo Series stereo network enabled with Wi-Fi technology.

GARMIN.COM

FUSION® MARINE ENTERTAINMENT

SIGNATURE SERIES 3 - THE POWER OF MUSIC REVAMPED



The Fusion Signature Series 3 range has been designed by musicians and engineered by boating enthusiasts with an unwavering vision of producing exceptional audio systems for those seeking a superior listening experience. The Signature Series offers unparalleled performance in the harshest marine conditions. By designing each product in the range from the ground up and with the full marine entertainment system in mind, we have developed a premium range of loudspeakers, subwoofers and amplifiers that are designed to work in perfect harmony. The result is the formation of a product range that delivers a truly high-quality, purpose-built immersive musical experience.

SPEAKERS



The new, revamped Signature Series 3 speakers push the boundaries of what is possible on the water even further – delivering stunning signature acoustic performance from Fusion now with industry-first CRGBW LED lighting (sports-style only). By incorporating both Cool White and Warm White to the standard RGB LEDs, an unprecedented spectrum of colors can now illuminate your boat. From premium pastels, to vibrant hues to match your music for an unparalleled, more ambient on-water entertainment experience.

SUBWOOFERS



Take your boating experience to another level with premium low frequencies and industry-first CRGBW lighting (sports-style only). The 10" subwoofer is engineered with an upgraded 600-watts peak power – so you can truly feel the Power of Music.

AMPLIFIERS



The Signature Series range is made up of five premium, efficient and powerful amplifiers – monoblock, 4-channel, 5-channel, 6-channel and 8-channel, all designed to take your boating experience to the next level. A new 24-volt 6-channel amplifier is now also available for boats operating on 24-volt electrical systems.



XS SERIES MARINE SPEAKERS



Enjoy high-performance acoustics on the water season after season with the XS Series speakers. Continuing to set the benchmark for marine audio entertainment, these full-range speakers bring you trademark quality audio reproduction from Fusion, enhanced marine aesthetics and RGB LED lighting, all at a mid-range price point.

FM SERIES MARINE SPEAKERS



The FM Series marine speakers are engineered to deliver quality acoustics to your boat in a sleek and minimalistic aesthetic to meet the latest boat design trends. The FM Series is designed to be flush mounted with a mounting profile no thicker than 2.5mm [3/32"], for a near flat finish.

THE BENCHMARK FOR MARINE ENTERTAINMENT

MS-RA210



The MS-RA210 is a powerful compact marine stereo featuring Fusion's new-look design aesthetics and DSP for an optimized audio entertainment experience. With a brilliant 2.7" optically bonded, full-color LCD, Fusion-Link control, and IPX6 and IPX7 rated from the front face, the MS-RA210 is a sleek addition to your boat.

REMOTE AUDIO CONTROLS

APOLLO™ ERX400 WIRED REMOTE



Sleek, compact and easy to install, the Apollo ERX400 wired remote control adds intuitive and integrated audio control to any zone on board your boat. It features a 2.7" optically bonded color LCD. And connecting a single proprietary Ethernet cable to an Apollo Series network or individual stereo makes installation a breeze. MS-RA70 / MS-RA70N / MS-RA70NSX



The value-for-money RA70 Series is perfect for delivering quality audio on board, featuring a DIN sized design, BLUETOOTH* wireless technology and ANT* capabilities. Enjoy NMEA 2000* connectivity (MS-RA70N and MS-RA70NSX) and SiriusXM*-ready satellite radio, with advanced features (available only in MS-RA70NSX). MS-RA55



Perfect for small boats, this compact stereo will keep singing even after exposure to the marine elements. With an IPX5 water-resistant front panel, the MS-RA55 delivers on quality while remaining our most compact and competitively priced marine stereo yet.

ANT-ENABLED ARX REMOTE



Retrofit your Fusion ANT-enabled system with the MS-ARX70 ANT remote to enjoy the convenience of wireless audio control from anywhere around your boat. Rated both IPX6 and IPX7 water resistant, the remote is perfect for the swim platform, bow, transom or anywhere you want quick access to audio adjustments.

CRGBW WIRELESS REMOTE CONTROL

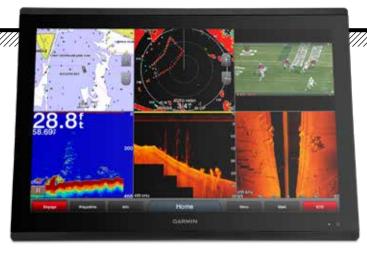


Enjoy full control of the illumination options and functions of your Fusion CRGBW speakers and subwoofers with the CRGBW wireless remote control. Control the color using the intuitive color select wheel and also adjust the brightness, light mode (static or dynamic) and speed with the press of a button.





GPSMAP[®] 8400 MFD SERIES









010-01510-00 | GPSMAP 8417

010-01511-00 GPSMAP 8422

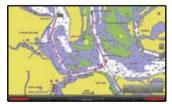
010-01512-00 GPSMAP 8424

Large-format multifunction displays feature full HD in-plane switching (IPS) touchscreens that provide consistent, accurate colors from all viewing angles even while wearing polarized sunglasses.

PINCH TO ZOOM TOUCHSCREEN

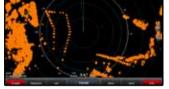
HIGH RESOLUTION, IPS DISPLAY

BLUECHART G3 CHARTS



Highly detailed maps and cartography featuring Navionics data and Auto Guidance technology¹

FANTOM RADAR



Supports Fantom[™] radar with MotionScope[™] technology.

ADDITIONAL SERIES FEATURES

- SmartMode™ provides one-touch access to docking, cruising, fishing, anchoring and more
- Install multiple displays either flush or flat mounted edge-to-edge
- Supports Garmin black box sonar systems; view multiple sources simultaneously
- Enhanced video processing with up to 4 IP (internet protocol) camera streams at the same time
- Built-in Wi-Fi[®] pairs with free ActiveCaptain™ app for access to OneChart™ to purchase and download new charts, smart notifications², software updates, Garmin Quickdraw Community data and more

HIGH PERFORMANCE PROCESSOR

FULLY NETWORKABLE

DIGITAL SWITCHING SUPPORT



Nearly all your controls are available right at your fingertips.

CAMERA INTEGRATION



Supports camera integration for Garmin marine cameras, select Axis cameras, FLIR[®] thermal vision cameras and VIRB® action cameras.

- Presets for sonar, radar, cameras, media and digital switching can be independent or incorporated into SmartMode™ station controls
- Built-in Garmin SailAssist[™] feature provides data, displays and prerace guidance needed to gain a competitive edge
- Network compatible connectivity includes Wi-Fi®, ANT® technology, 4-wired Ethernet ports, NMEA 2000, HDMI and USB ports, FUSION-Link integration
- OneHelm and EmpirBus bring full control of all your onboard boat systems, such as digital switching, lighting, propulsion, pumps, air conditioning and infotainment, to your MFD screen

GRID 20 REMOTE INPUT DEVICE

Landscape: 010-02011-01 Portrait: 010-02011-00



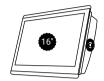
The easy-to-use remote input device provides access and control of your entire Garmin marine system. It features a 360-degree joystick with a rotary knob and push-to-select button for easy chartplotter menu/setting navigation and fine control, even in the worst conditions. You can designate 4 favorite keys to restore your system to a previously saved configuration.

GPSMAP[®] 8400 CHARTPLOTTER SERIES









010-02093-00 | GPSMAP 8416 010-02093-02 | GPSMAP 8416xsv

010-02091-00 | GPSMAP 8410 010-02092-010-02091-02 | GPSMAP 8410xsv 010-02092-

010-02092-00 | GPSMAP 8412 010-02092-02 | GPSMAP 8412xsv

Chartplotter and chartplotter/sonar combos featuring full HD in-plane switching (IPS) touchscreen displays for wider viewing angles, superior clarity and sunlight readability, even with polarized sunglasses.



HIGH RESOLUTION, IPS TOUCHSCREEN DISPLAY

HIGH PERFORMANCE PROCESSOR

FULLY NETWORKABLE

XSV MODELS INCLUDE BUILT-IN SUPPORT FOR THE FULL SUITE OF GARMIN SONAR OPTIONS



ULTRA HIGH-DEFINITION SONAR



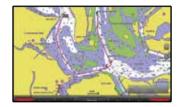
Built-in support for the Ultra High Definition Scanning sonar system, no black box needed.

PANOPTIX LIVESCOPE



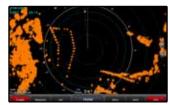
Supports all Panoptix Sonar including Panoptix LiveScope system.

BLUECHART G3 CHARTS



Highly detailed maps and cartography featuring Navionics data and Auto Guidance technology¹.

GMR FANTOM RADAR



Supports Fantom[™] radar with MotionScope[™] technology.

ADDITIONAL SERIES FEATURES

- Full HD IPS touchscreen display for wider viewing angles, superior clarity and sunlight readability even with polarized sunglasses
- Built-in support for the full suite of Garmin sonar capabilities (xsv models): CHIRP traditional, ClearVü and SideVü scanning sonars, Ultra-High Definition scanning sonar (no black box needed), the Panoptix LiveScope[™] system, Panoptix LiveScope[™] LVS12 and the full line of Panoptix sonars (transducers sold separately)
- Built in support for the full suite of Garmin sonar capabilities (xsv models): CHIRP traditional, ClearVu and SideVu scanning sonars, Ultra-High Definition scanning sonar (no black box needed), the Panoptix LiveScope[™] system and the full-line of Panoptix sonars (transducers sold separately)
- Adds a stunning appearance with ability to install multiple displays either flat mounted edge-to-edge to create a sleek glass helm look or mounted flush
- Fully NMEA 2000[®] and Garmin Marine Network capable to easily build your marine system, from sonar, radar and autopilots to instruments, cameras and multimedia

Bluetooth, ANT, Wi-Fi[®] connectivity for quatix 6, VIRB 360, gWind Wireless 2 and more

- OneHelm[™] and EmpirBus bring full control of all your onboard boat systems, such as digital switching, lighting, propulsion, pumps, air conditioning and infotainment, to your MFD screen
- SmartMode[™] station controls enable presets for one-touch access to docking, cruising, fishing, anchoring and more
- Built-in SailAssist provides data, displays and pre-race guidance needed to gain a competitive edge
- Use built-in Wi-Fi[®] to pair with the free ActiveCaptain[™] app for access to OneChart[™], smart notifications², Garmin Quickdraw[™] Community data and more
- Watch your favorite entertainment while on the water! Connect HDMI and composite video for full integration with your PC or phone

GPSMAP® X3 SERIES









010-02367-00 | GPSMAP 1223 010-02367-02 | GPSMAP 1223xsv

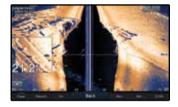
Boasting more pixels and processing power than previous-generation GPSMAP devices, these fast, responsive touchscreen units offer seamless network integration and support for traditional and scanning sonar capabilities¹, J1939 engine connectivity, OneHelm[™] digital switching and more.



J1939 ENGINE Connectivity ONEHELM™ DIGITAL SWITCHING Capabilities COMPATIBLE WITH BLUECHART 3G AND BLUECHART G3 VISION, BOTH FEATURING NAVIONICS DATAN AND AUTO GUIDANCE² XSV MODELS INCLUDE BUILT-IN Support for the full suite of Garmin Sonar Options



ULTRA HIGH-DEFINITION SONAR



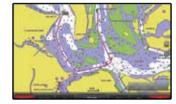
Offers built-in support for the Ultra High-Definition scanning sonar system; no black box needed.

PANOPTIX LIVESCOPE™



Supports all Panoptix[™] sonar, including Panoptix LiveScope[™] System. (Sold separately).

BLUECHART G3 CHARTS



Highly detailed maps and cartography featuring Navionics® data and Auto Guidance technology².

NMEA 2000[®] AND NMEA 0183 NETWORKS



Connect with autopilots, Fusion-Link[™] audio system and engine data.

ADDITIONAL SERIES FEATURES

- Bright, easy-to-use, sunlight-readable displays have more pixels than previousgeneration GPSMAP touchscreens for ultra-sharp visibility from any angle
- Slimline display borders, edge-to-edge glass and reduced unit footprint make for
 easy retrofit in a wider range of dash configurations
- Easily build your marine system from compatible sonar and autopilots to compatible radar, cameras and multimedia – using NMEA 2000[®] and NMEA 0183 network connectivity and the Garmin Marine Network
- Use the exclusive OneHelm[™] feature to connect to many third-party devices for full control of your boat on your chartplotter screen
- Use built-in Wi-Fi® networking to pair with the free ActiveCaptain® app³ for access to OneChart™, smart notifications, software updates and more
- Integrated ANT[®] technology support for use with your compatible quatix[®] marine smartwatches, gWind[™] Wireless 2 transducer, GNX[™] Wind marine instrument and wireless remote controls
- Built-in Garmin SailAssist[™] features, including laylines, race features, set and drift, wind data and more
- Compatible with Force[™] trolling motor for full control of the motor from the chartplotter screen, plus the ability to route to waypoints, follow tracks and more

4N

GPSMAP[°] **1022/1222 SERIES**







010-01740-00 | GPSMAP 1022 010-01740-02 | GPSMAP 1022xsv

010-01741-00 GPSMAP 1222 010-01741-02 GPSMAP 1222xsv

All-in-one networking chartplotter/sonar combos with large, bright screen coupled with a quick and easy-to-use keypad interface with user-programmable keys and a multifunction control knob. Built-in single channel CHIRP sonar, CHIRP ClearVü and CHIRP SideVü scanning sonar and Panoptix[™] support.

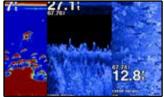


KEYED INTERFACE WITH MULTIFUNCTION CONTROL KNOB

FULLY NETWORKABLE

XSV MODELS INCLUDE BUILT-IN CHIRP TRADITIONAL. CLEARVÜ AND SIDEVÜ SCANNING SONAR

BUILT-IN SONAR



All feature incredibly clear CHIRP Traditional sonar.

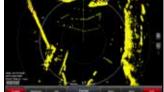
ADDITIONAL SERIES FEATURES

MotionScope[™] technology.

Features a bright screen coupled with a quick and easy-to-use keypad interface

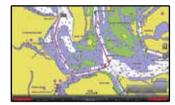
- with user-programmable keys and a multifunction control knob
- Built-in Garmin single-channel CHIRP traditional sonar, 1 kW CHIRP ClearVü and CHIRP SideVü scanning sonar (xsv models)
- Support all compatible Garmin sonar options plus black box sonar systems; view multiple sources simultaneously
- Force Trolling Motor Compatible

FANTOM RADAR



Supports Fantom[™] radar with

BLUECHART G3 CHARTS



Highly detailed maps and cartography featuring Navionics data and Auto Guidance technology¹.

PANOPTIX LIVESCOPE



Supports all Panoptix Sonar including Panoptix LiveScope.

- Network compatible connectivity includes Wi-Fi®, ANT® technology, Ethernet ports, NMEA 2000, HDMI and USB ports, FUSION-Link integration
- Built-in Garmin SailAssist™ feature provides data, displays and prerace guidance needed to gain a competitive edge
- ActiveCaptain® application support

ECHOMAP ULTRA SERIES







010-02111-00 | ECHOMAP Ultra 102sv w/o xdcr 010-02526-01 | ECHOMAP Ultra 102sv w/ GT56

o xdcr 010-02113-00 | ECHOMAP Ultra 122sv w/o xdcr v/ GT56 010-02528-01 | ECHOMAP Ultra 122sv w/ GT56

All the fishing tools are built-in. Chartplotter/sonar combos with keyed-assist touchscreen displays. Built-in CHIRP traditional and Ultra High-Definition ClearVü and SideVü scanning sonar¹. Supports our full line of Panoptix sonars. Compatible with BlueChart 3g and BlueChart g3 Vision, both featuring Navionics[®] data and Auto Guidance technology².

KEYED-ASSIST Touchscreen Display

BUILT-IN CHIRP TRADITIONAL AND Ultra High-definition, clearvü And Sidevü Scanning Sonar¹ COMPATIBLE WITH BLUECHART 3G AND BLUECHART G3 VISION, BOTH FEATURING NAVIONICS DATAN AND AUTO GUIDANCE² SHARE SONAR, Charts, Waypoints AND Routes³

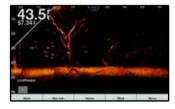


ULTRA HIGH-DEFINITION SONAR



Built-in support for the Ultra High-Definition scanning sonar system, no black box needed.

PANOPTIX LIVESCOPE™



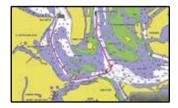
Supports all Panoptix sonar, including the Panoptix LiveScope System and Panoptix LiveScope LVS12.

FORCE[™] TROLLING MOTOR COMPATIBLE



Get full control of the motor from the screen, plus the ability to route to waypoints, follow tracks and more (7" and 9" models only).

BLUECHART G3 CHARTS



Highly detailed maps and cartography featuring Navionics® data.

ADDITIONAL SERIES FEATURES

- Built-in Quickdraw Contours mapping software instantly creates personalized fishing maps on-screen with 1' contours as you fish
- Built-in Wi-Fi[®] connectivity pairs with free ActiveCaptain[®] app for access to OneChart[™] to purchase and download new charts; also receive smart notifications² software updates, Garmin Quickdraw[™] Community data and more
- Network capable with NMEA 2000[®] connectivity and support for heading sensors, autopilots, digital switching and FUSION-Link[™] audio system and more
- Quick-disconnect bail mount

42

¹Available with or without included transducer

²Auto Guidance is for planning purposes only and does not replace safe navigation operations ³With other ECHOMAP Ultra 10" & 12" units, ECHOMAP UHD 7" & 9" units and ECHOMAP Plus 7" & 9" units Wi-Fi is a registered trademark of the Wi-Fi Alliance

ECHOMAP" UHD SERIES









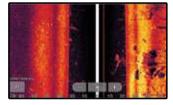
010-02329-00 | ECHOMAP UHD 62cv w/o xdcr 010-02329-01 | ECHOMAP UHD 62cv w/xdcr 010-02333-00 | ECHOMAP UHD 72cv, WW, w/o xdcr 010-02341-00 | ECHOMAP UHD 92sv w/o xdcr 010-02333-01 | ECHOMAP UHD 72cv, WW, w/GT24 010-02522-01 | ECHOMAP UHD 72sv, W/, w/o xdcr 010-02518-01 | ECHOMAP UHD 72sv, WW, w/o xdcr 010-02518-01 | ECHOMAP UHD 72sv, WW, w/GT56

The 6" keyed and 7" and 9" touchscreen chartplotter/sonar combos with keyed assist¹ include or support transducers for Ultra High-Definition ClearVü and SideVü scanning sonar and Garmin CHIRP traditional sonar.

BUILT-IN CHIRP TRADITIONAL AND Ultra High-definition Clearvü And Sidevü Scanning Sonar² SHARE SONAR, WAYPOINTS AND ROUTES WITH OTHER ECHOMAP™ DEVICES NMEA 2000[®] and NMEA 0183 Network support for Autopilot and engine data COMPATIBLE WITH BLUECHART 3G AND BLUECHART G3 VISION, BOTH FEATURING NAVIONICS® DATA AND AUTO GUIDANCE³

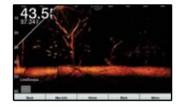


ULTRA HIGH-DEFINITION SONAR



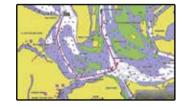
Built-in support for the Ultra High-Definition scanning sonar system, no black box needed.

PANOPTIX LIVESCOPE™



Supports all Panoptix[™] sonar, including Panoptix LiveScope[™] System (7[°] and 9[°] models only).

BLUECHART G3 CHARTS



Highly detailed maps and cartography featuring Navionics[®] data.

FORCE™ TROLLING MOTOR COMPATIBLE



Get full control of the motor from the screen, plus the ability to route to waypoints, follow tracks and more (7" and 9" models only).

ADDITIONAL SERIES FEATURES

- · Quick-release bail mount for fast and easy mobility
- Built-in Wi-Fi[®] connectivity pairs with free ActiveCaptain[®] app for access to OneChart[™] to purchase and download new charts; also receive smart notifications⁴, software updates, Garmin Quickdraw[™]
- · Community data and more

- 7" and 9" models are compatible with Force™ trolling motor for full control of the motor from the chartplotter screen, plus the ability to route to waypoints, follow tracks and more
- 7" and 9" models can share sonar, waypoints and routes with other ECHOMAP UHD 7" and 9" units and ECHOMAP Ultra 10" and 12" units

¹Available with or without included transducer ²CV units support ClearVü sonar only SV units support both ClearVü and SideVü sonars ³Auto Guidance is for planning purposes only and does not replace safe navigation operations ⁴When paired with a compatible smartphone; see Garmin.com/ble

ECHOMAP[®] PLUS 42CV





010-01884-00 | ECHOMAP Plus 42cv w/o xdcr 010-01884-01 | ECHOMAP Plus 42cv. w/xdcr

This compact combo has lots of built-in benefits. Easy-to-install and even easier to use, it has a bright 4.3" display that is easy to read on a sunny day on the water. It features built-in support for Garmin CHIRP traditional sonar that delivers remarkable target separation and CHIRP ClearVü™ scanning sonar for nearly photographic images of what's below the boat. Compatible with BlueChart 3g and BlueChart g3 Vision, both featuring Navionics[®] data and Auto Guidance technology².

SUNLIGHT-READABLE DISPLAY

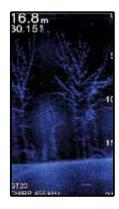
BUILT-IN CHIRP TRADITIONAL AND CLEARVÜ SCANNING SONAR

COMPATIBLE WITH BLUECHART 3G AND BLUECHART G3 VISION

BUILT-IN QUICKDRAW CONTOURS



BUILT-IN SONAR



All feature incredibly real CHIRP traditional and scanning sonar.

QUICKDRAW CONTOURS MAPPING



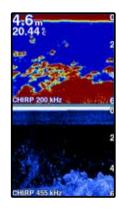
Create and store maps as you fish with 1' contours for up to 2 million acres.

BLUECHART G3 CHARTS



Highly detailed coastal charts featuring Navionics data

COMBO SCREEN



View both traditional CHIRP and CHIRP ClearVii at the same time

ADDITIONAL SERIES FEATURES

- Bright, sunlight-readable 4.3" combo
- Built-in support for Garmin CHIRP traditional sonar plus CHIRP ClearVü™ scanning sonar (transducer sold separately)
- Preloaded worldwide basemap; compatible with BlueChart® g3 and premium BlueChart® g3 Vision coastal charts with integrated Navionics® data and Auto Guidance¹ technology
- Built-in Quickdraw Contours mapping software instantly creates personalized fishing maps on-screen with 1' contours as you fish
- Share waypoints and routes with other ECHOMAP™ or STRIKER™ units







FORCE" TROLLING MOTOR SERIES

Move your fishing to a higher level with force. The Force trolling motor is the most powerful and most efficient 57" freshwater trolling motor available1. Wireless chartplotter connectivity provides navigation, autopilot and anchor lock features. Use the precise anchor lock to hold your boat in the same location while you fish. Force includes a convenient wireless foot pedal that provides instant control and responsiveness yet feels and steers like a cable-steered pedal. See more fish and structure clearly with integrated Ultra High-Definition scanning sonar. It also includes a handheld remote control with a built-in sunlight-readable display. The remote gives you complete control of the trolling motor and simple point-and-go gesture steering.

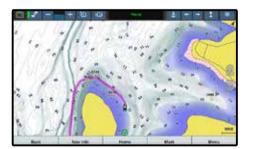
You get the best of all three. The powerful Force trolling motor has the power to move you from spot to spot more quickly and stand up better to winds and currents. Even with all that power, it is also the most efficient trolling motor available so you can count on it to fish all day. And it is still whisper quiet. Its high-efficiency brushless motor operates at either 36 V or 24 V. When running at 24 V, it delivers comparable thrust to our competitors' 36 V motors. The most powerful, most efficient and quiet trolling motor — it's everything you could want in a trolling motor.

Force Trolling Motor 50" - Part no. 010-02024-00 Force Trolling Motor 57" - Part no. 010-02025-00

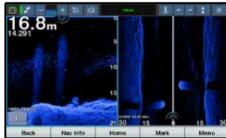




CHARTPLOTTER INTEGRATION



Simple integration with your Garmin chartplotter via a wireless connection makes using the built-in autopilot easy. Create routes to your favorite waypoint, and follow tracks while you fish.



The Force trolling motor comes with an integrated transducer with CHIRP traditional and Ultra High-Definition ClearVü and SideVü scanning sonars with imperceptible sonar noise interference.

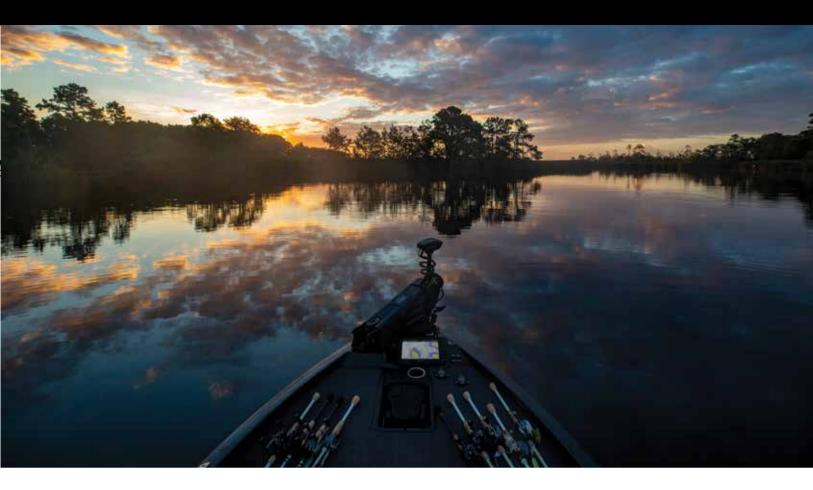
ADDITIONAL SERIES FEATURES

- Includes the power you need to counter winds and currents with the efficiency to fish all day
- Wireless chartplotter integration and built-in autopilot get you to fish, along with anchor lock to stay on them
- Wireless foot pedal provides instant control and responsiveness; feels and steers like a cable-steered pedal
- Includes integrated CHIRP traditional and Ultra High-Definition ClearVü and SideVü scanning sonars with imperceptible sonar noise interference

GARMIN

 Floating remote control gives you full control of the trolling motor and simple point-and-go gesture steering

CARAIN





WIRELESS FOOT PEDAL Part no. : 010-12834-00

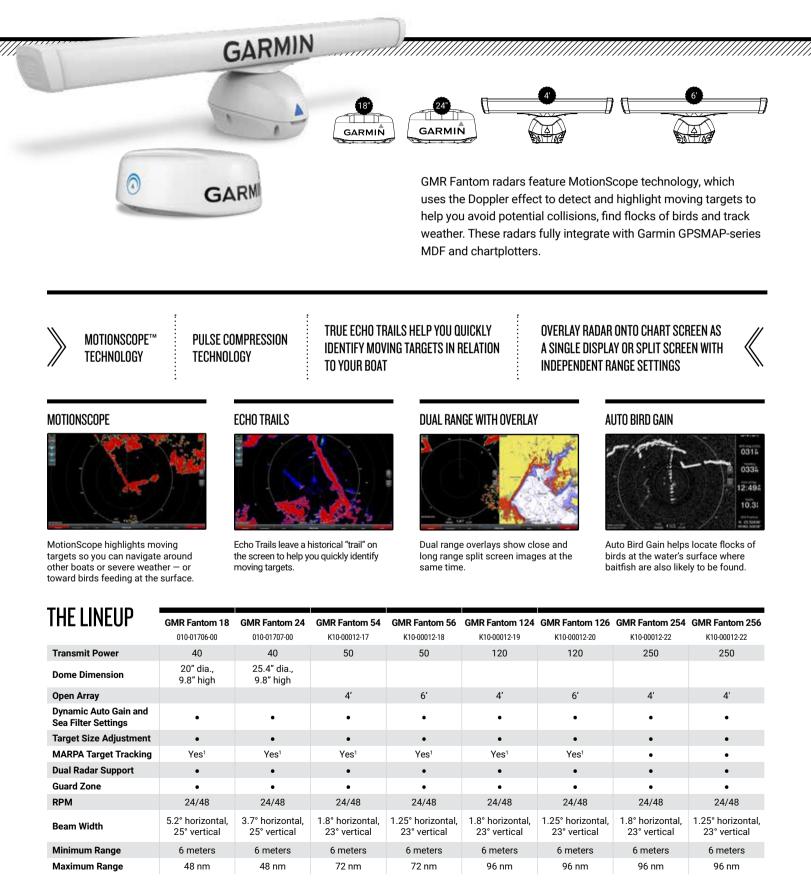
Enjoy the convenience of a wireless foot pedal. It provides instant control and responsiveness yet feels and steers just like a cable-steered pedal. It operates wirelessly using AA batteries, or - if you prefer - it can be hardwire installed.

REMOTE CONTROL Part no. : 010-12833-00

The included handheld remote control with a sunlight-readable, transflective display offers total control of the trolling motor from anywhere on your boat along with unique point-and-go gesture steering capabilities. There are also user-programmable keys on the remote, which you can use for control of your chartplotter. No need to worry if the remote takes a trip overboard, because it's water-resistant, and it floats.

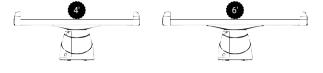


GMR FANTOM[®] RADARS



GMR[®] XHD2 RADARS

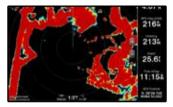
GARMIN



GMR xHD2 open-array radars are designed for serious seafarers of larger yachts and sport fishing boats. Designed for easy installation and use, there are no complex user settings to fuss around with. Just install it and start using. GMR xHD2 radars provide reliable, optimum performance in all conditions.

POWER TO DELIVER EXCELLENT TARGET SEPARATION AND AMAZING IMAGE CLARITY

PULSE EXPANSION



Pulse Expansion maximizes energy on targets to provide a larger target size on the chartplotter.

PULSE EXPANSION MAXIMIZES ENERGY ON TARGET

Echo Trails leave a historical "trail" on

the screen to help you quickly identify

ECHO TRAILS

moving targets.

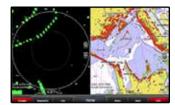
AUTO BIRD GAIN HELPS LOCATE FLOCKS OF BIRDS AND HELPS SIGNAL THE LOCATION OF BIG GAME FISH

四日(1)

OVERLAY RADAR ONTO CHART SCREEN AS A SINGLE DISPLAY OR SPLIT SCREEN WITH INDEPENDENT RANGE SETTINGS

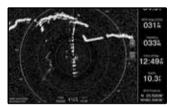


DUAL RANGE WITH OVERLAY



Dual range overlays show close and long range split screen images at the same time.

AUTO BIRD GAIN



Auto Bird Gain helps locate flocks of birds at the water's surface where baitfish are also likely to be found.

THE LINEUP	GMR 424 XHD2 K10-00012-08	GMR 1224 XHD2 K10-00012-11	GMR 1226 XHD2 K10-00012-12	GMR 2526 XHD2 K10-00012-16
4' open array with pedestal	•	•		
6' open array with pedestal			•	•
Transmit Power	4 kW	12 kW	12 kW	25 kW
Dynamic Auto Gain and Sea Filter Settings	•	•	•	•
Target Size Adjustment	•	•	•	•
MARPA Target Tracking ¹	•	•	•	•
Dual Radar Support	•	•	•	•
Guard Zone	•	•	•	•
Dual Range	•	•	•	•
Power Consumption	65 W typical	90 W typical	90 W typical	100 W typical
RPM	24/48	24/48	24/48	24/48
Beam Width	1.8° horizontal, 23° vertical	1.8° horizontal, 23° vertical	1.1° horizontal, 23° vertical	1.1° horizontal, 23° vertical
Minimum Range	20 meters	20 meters	20 meters	20 meters
Maximum Range	72 nm	72 nm	72 nm	96 nm

GMR[®] XHD DOME RADARS







Our 4 kw high-definition GMR xHD dome radars pair ease of use with advanced open-array features. Dual range operation allows fully independent split-screen display of far and close radar views. They're intuitive operation makes modes and settings simple to understand so you can enjoy great performance without a lot of technical know-how.

4 KW HIGH-DEFINITION 18" OR 24" DOME RADAR	48 OR 24 RPM ROTATION SPEEDS		48 NM MAX RANGE SETTING		DUAL RANGE OPERATION		″ \
--	------------------------------	--	-------------------------	--	----------------------	--	--------

9-AXIS HEADING SENSOR Part no: 010-11417-20



Our premium solution for exceptional heading accuracy allows for MARPA tracking and improves radar overlay experience.

With heading output at 10 Hz and accuracy of plus or minus 2 degrees, it ensures your chart orientation and boat heading line match up with reality, even at lower speeds. Your heading information will remain accurate, even in rough sea conditions where your bow is pitching and rolling or - in sailboat applications - when heeled over.

The 9-axis MEMS technology allows installation in nearly any orientation located away from magnetic interference. Built to withstand bilge environments.

THE LINEUP	GMR 24 XHD	GMR 18 XHD	GMR 18HD+
	010-00960-00	010-00959-00	010-01719-00
4 kW Transmit Power	•	•	•
Dual Range	•	•	
Radar Overlay Support	•	•	•
Power Consumption	30 W typical, 48 W max	30 W typical, 48 W max	18.1-24.4 W transmit
Power Input	11-35 V DC	11-35 V DC	11-35 V DC
RPM	24/48	24/48	24
Beam Width	3.7° horizontal, 25° vertical	5.2° horizontal, 25° vertical	5.2° horizontal, 25° vertical
Minimum Range	20 meters	20 meters	20 meters
Maximum Range	48 nm	48 nm	36 nm



GNX[®] 130 AND 120

BOAT SPD GNX[™] 130 Part no: 010-01396-00

Designed for serious sailors who demand guality, precision and total integration. This high-precision glass-bonded 10" or 7" large format instrument creates a beautiful "glass mast" display with superior readability in all conditions, day and night, with no fogging.

HIGH-PRECISION GLASS-BONDED BACKLIT LCD **DISPLAY AVOIDS FOGGING**

DIGITS ARE THE LARGEST DIGITS IN CLASS

GNX™ 120 Part no: 010-01395-00

DISPLAYS MORE THAN 50 SAILING AND BOAT PARAMETERS

ALLOWS SEAMLESS SHARING OF SAILING DATA BETWEEN **GARMIN DEVICES**



Boat speed and VMG



Heading



Depth



True wind angle and true wind speed

GNX KEYPAD Part no: 010-12255-00



Control the GNX 120 or GNX 130 from a distance with this optional push-button keypad interface that can be mounted near the helm. Preset four buttons to dedicated configurations. Even adjust the background lighting of all displays with the touch of a button.

GNX 120 MAST BRACKETS

Part no: 010-12236-00 (2 units), 010-12236-01 (3 units), 010-12236-02 (4 units)



Flat mount the GNX 120 display for a beautiful glass mast look using our carbon fiber mast brackets. Choose from three mast bracket options - 2, 3, or 4 units.

INSTRUMENTS

GNX[™] WIND





A superb addition for all sailboats, GNX Wind features a highvisibility, glass-bonded backlit LCD display with customizable colors. Shows two data fields and a digital wind rose simultaneously to display true and apparent wind data, steering guidance, boat speed and more. It also offers 15 important marine parameters for wind, speed, navigation and customizable profiles and other configurations.

GNX [™] 21 & 20 GNX 20 Part no: 010-01142-00 / GNX 21 Part no: 010-01142-10



Perfectly designed marine instruments for both sailboats and power vessels, they're easy-to-read, clearly showing depth, speed, wind and 50 additional marine and vessel parameters. Preset auto-scroll function automatically cycles between screens.

GMI[™] 20 Part no: 010-01140-00



The GMI 20 has a 4" color screen that displays depth, speed, wind, engine information and over 100 marine and vessel specific parameters based on your preference. Its glass-bonded finish lens resists fogging and increases contrast. Other features include a dedicated race timer that counts both down and up, with an internal beeper.

COMPATIBLE SENSORS AND INSTRUMENTS FOR GMI 20



WIND TRANSDUCERS



Garmin gWind[™] sensors feature a 3-bladed propeller and twinfin design for more accurate True Wind Speed (TWS) in lighter air and more stable True Wind Angle (TWA).

The GND 10 black box interface (part no. 010-01227-00) seamlessly integrates Nexus instruments and sensors with the Garmin family. It converts data between the Nexus Network and NMEA 2000 to provide compatibility between Nexus and Garmin products, including gWind™, gWind™ Wireless and gWind[™] Race transducers. Simple plug-and-play installation between Nexus and NMEA 2000, with USB connectivity, eliminates the need for user setup and system configuration.

WIND[™] TRANSDUCER art no: 010-01227-00



Features twin-fin technology with 3-bladed propeller for more accurate True Wind Speed in lighter air while the twin-fin design gives a more stable True Wind Angle. Includes a GND 10 black box.

GWIND WIRELESS 2 TRANSDUCER



An easy-to-install solution that eliminates running wires through masts up to 50 feet. Accurate wind signals are sent via an ANT® connection directly to a GNX[™] Wind instrument or compatible Garmin GPSMAP[®] series chartplotters¹. Solar panel mounted on the transducer arm provides power to the internal solar-charged battery that lasts 3 years and is easily replaced.

GWIND RACE TRANSDUCER



Designed for racing sailboats, the gWind Race features a 3.3 feet (1 meter) straight pole that raises the transducer above the mast to remove turbulence errors. Includes a GND 10 black box.

INSTRUMENT PACKS

GNX WIRELESS WIND PACK Part no.: 010-01616-10

GNX Wind and gWind Wireless 2.



GNX WIRELESS SAIL PACK 52 Part no.: 010-01616-40

GNX Wind, GNX 20, gWind Wireless 2 and DST810 (depth, speed & temperature).



GNX WIRELESS SAIL PACK 43 Part no.: 010-01616-30

GNX Wind, GNX 20, gWind Wireless 2, GST 43 (speed and temperature), GDT 43 (depth & temperature) and NMEA 2000 adapters.



GNX WIRED SAIL PACK 43 Part no.: 010-01248-60

GNX Wind, GNX 20, gWind, GST 43 (speed and temperature), GDT 43 (depth & temperature) and NMEA 2000 adapters.

GNX WIRED SAIL PACK 52 Part no.: 010-01248-70

GNX Wind, GNX 20, gWind, GND 10 and DST810 (depth, speed & temperature).

GMI WIRED START PACK 52 Part no.: 010-01248-80

GMI 20, gWind, GND 10 and DST810 (depth, speed and temperature).















VHF AND AIS

VHF 315i MARINE RADIO



The 25-watt VHF 315i marine radio with Class D DSC is a modular communication solution. It includes a GHS[™] 11i handset and new active speaker to use as an intercom between up to 3 stations. It's easy to use and integrates seamlessly into the Garmin onboard system.

VHF 215i AIS MARINE RADIO



Marine radio with built in GPS. Displays Automatic Identification System (AIS) on the chartplotter and during an emergency situation, the 25 W transmit power of the VHF 215i AIS gives all fishermen, sailors and cruisers confidence at their fingertips.

VHF 215i MARINE RADIO Part no: 010-02097-01



The 25-watt marine radio with built in GPS with Class D DSC is a modular communication solution. Compatible with the GHS[™] 11i second-station handset and preprogrammed with international marine channel. It's easy to use and integrates seamlessly into the Garmin onboard system.

VHF 115i MARINE RADIO



Communication is critical on the water. With the VHF 115i radio with built in GPS can you stay in contact with the shore and other boats in your area. So, no matter where you are or where you're headed, you'll maintain communication.

GHS[™] III WIRED VHF HANDSET Part no: 010-01759-01



Allows full function of your VHF 215i or VHF 315i radio from a remote location. Simple design includes soft keys, a 2" diagonal dot matrix display and coiled cable that stretches from about 1' to nearly 5'. Rotary/push knob for volume, squelch and channel selection and a dedicated button for access to channels 16/9.

THE LINEUP	VHF 115i	VHF 215i	VHF 215i AIS	VHF 315i
Transmit Power	25 W	25 W	25 W	25 W
Built-in GPS	•	•	•	•1
NMEA 2000®	•	•	•	•
NMEA 0183	•	•	•	•
Digital Selective Calling	Class D	Class D	Class D	Class D
International Frequency Band	•	•	•	•
10 NOAA Weather Channels	•	•	•	•
Hailer horn		•	•	•
Supports GHS 11i		•	•	•

AIS TRANSCEIVERS

AIS[™] 800 Part no: 010-02087-00

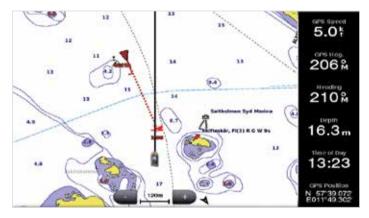
Easy-to-use, the AIS 800 black box transceiver with built-in GPS provides reliable communication and transmits your vessel information to other AIS receivers in your area while receiving AIS target data. With 5 watts of transmit power with Class B/SO, it provides faster positioning reporting than ever before¹.

Garmin AIS 800 has an internal VHF antenna splitter, which allows the VHF and AIS to share a single antenna. It includes a built-in GPS (with connector for optional external antenna) and integrates seamlessly into the Garmin onboard system. The transceiver features NMEA 2000/0183 connectivity for easy integration with compatible chartplotters and multifunction displays.



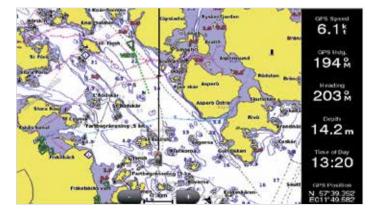
COLLISION WARNINGS

Risks are clearly indicated, which greatly minimises the risk of collision.



CLEAR OVERVIEW

Shows you the surroundings and the vessels around your boat.



IDENTIFICATION

Sends detailed vessel data, allowing easy identification.



SOCIAL SEAMANSHIP

Spot your friends quickly and enjoy direct ship-to-ship communication.





SATELLITE TV DOME POWERED BY KVH®





With 30% greater reception than other systems, you'll enjoy satellite TV reception where few others can provide it. Our GTV5 and GTV6 satellite TV antenna, powered by KVH and available as part of a Garmin bridge package, offers outstanding highperformance tracking and reception as well as compatibility with DIRECTV U.S., DISH Network, Bell TV, Sky Mexico, Sky Italia, Sky U.K. and circular and linear Ku-band services worldwide. This rugged system is ideal for sportfishing boats or boats venturing offshore or to the islands.



SATELLITE TV ANTENNA

WITH 30% GREATER RECEPTION THAN **OTHER SYSTEMS**

SUPPORTS MULTIPLE RECEIVER INSTALLATIONS

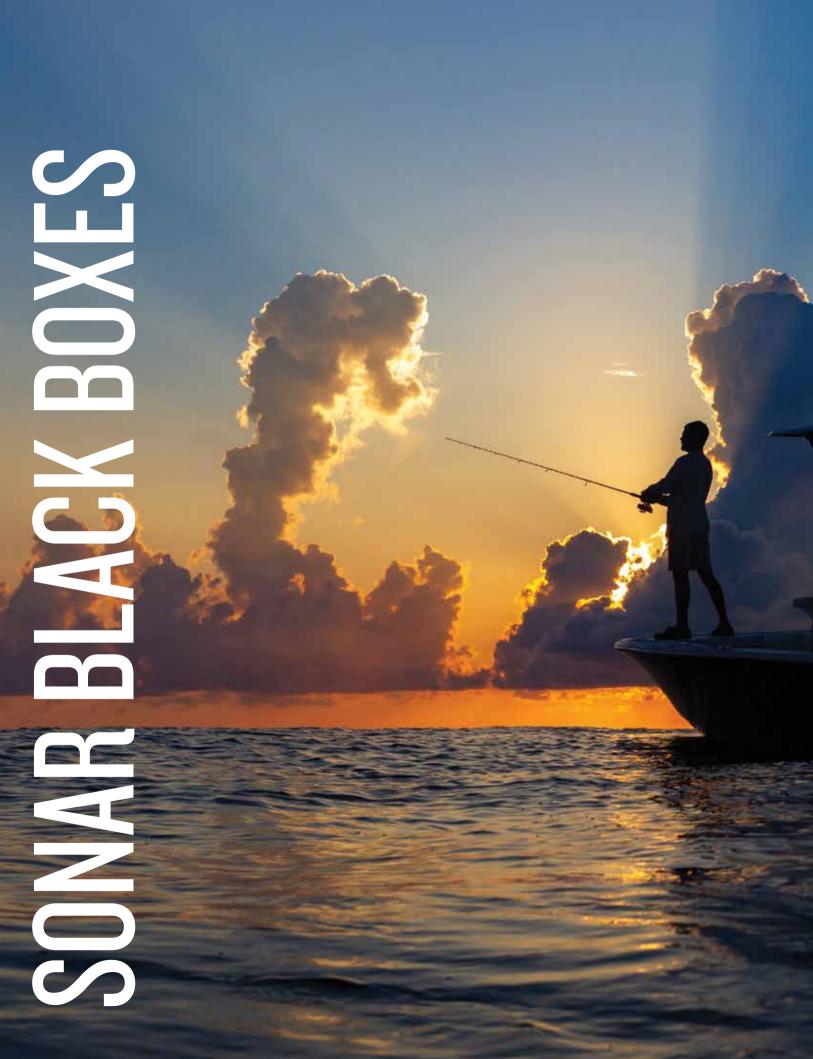
ADDITIONAL SERIES FEATURES

- GTV6 Satellite TV Dome Ultra high-efficiency, 24" (60 cm) diameter antenna features proprietary KVH[®] RingFire[™] technology for stronger signals, wider geographic coverage and better reception
- 18" (45 cm) diameter GTV5 Satellite TV Dome features proprietary KVH $^{\circ}$ RingFire * technology for stronger signals, wider geographic coverage and better reception
- Supports DIRECTV® U.S., DISH Network®, Bell TV, Sky Mexico, Sky Italia, Sky U.K. and circular and linear Ku-band services worldwide
- Supports multiple receiver installations

- Low elevation angle for better tracking in northern latitudes
- Linear Universal Quad LNB configuration offers optional built-in GPS and autoskew
- The TV-Hub, a streamlined IP-enabled antenna control unit, enables automatic satellite switching
- User-friendly interface provides a wizard for easy installation and setup as well as system information at your fingertips from any smartphone, tablet, smart TV or computer



GARMIN.COM 65





SONAR BLACK BOXES

GSD 26 Part no: 010-00958-00



The GSD 26 professional CHIRP sonar module is serious sportfishing technology that takes clear, concise target separation to far greater depths than traditional sonar.

GSD 25 Part no: 010-01159-00



The GSD 25 premium 1 kW CHIRP traditional sonar module is a remote network solution that provides outstanding fish-finding and bottom tracking capabilities with CHIRP ClearVü and CHIRP SideVü scanning sonar.

GSD 24 Part no: 010-00957-00



With up to 2,000 Watts of transmit power and a high-dynamic range receiver, the GSD 24 brings highdefinition, dual-frequency imaging to your compatible Garmin chartplotter.



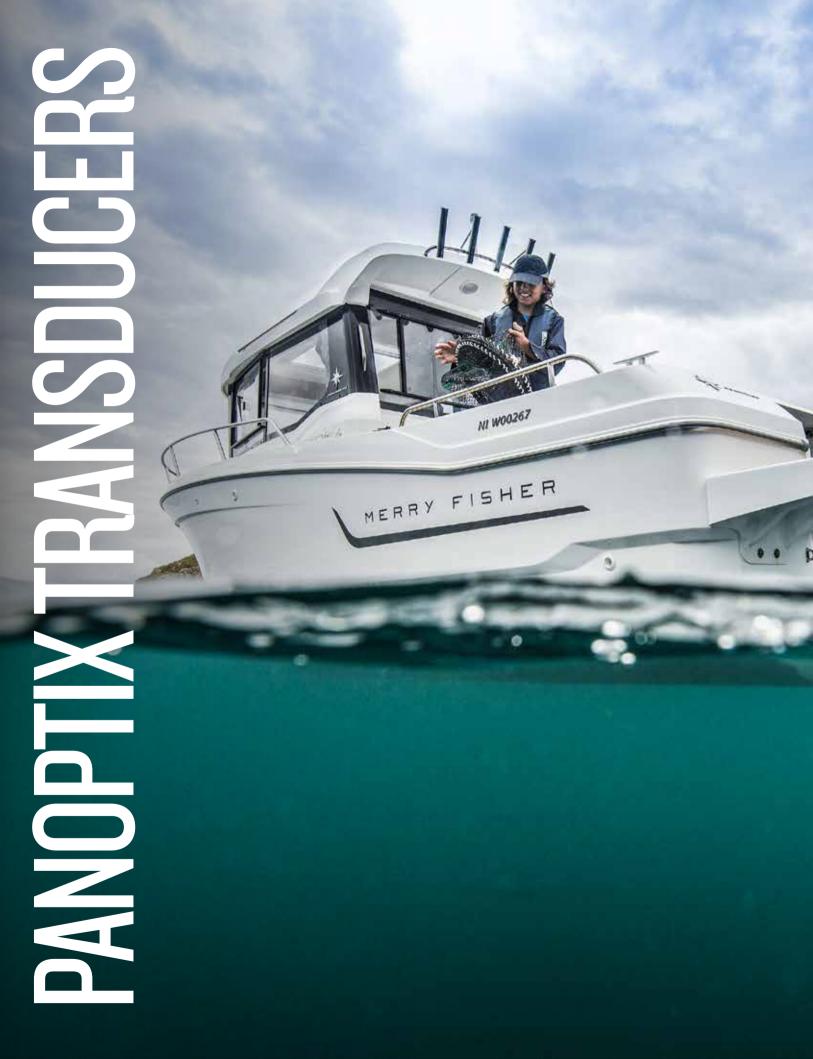
Part no: GCV 20: 010-00958-00, GCV 20 w/ xdcr GTGT34UHD: 010-02055-00



The Garmin GCV 20 Ultra High-Definition black box sonar adds both SideVü and ClearVü with CHIRP scanning sonar technology to your compatible Garmin chartplotter.

THE LINEUP				
	GSD 26	GSD 25	GSD 24	GCV 20
Garmin Marine Network Ports	1	1	1	3
Frequencies Supported	25-210 kHz (dependent on transducer)	Traditional: 50/200, 77/200, 83/200 Single Channel CHIRP: 40-250 Dual Channel CHIRP: 40-250 SideVü/ClearVü: CHIRP 455/800 and CHIRP 260/455 (dependent on transducer)	50/200 kHz	Ultra High-Definition ClearVü: 0.8 MHz (800 kHz), CHIRP range: 760-880 kHz Ultra High-Definition SideVü: 1.2 MHz (1,200 kHz), CHIRP range: 1,060-1,170 kHz
Transmit Power	25-3,000 W rms	1 kW	25-2,000 W rms	500 W rms
ClearVü/Sideü		•		•
Max Depth	10,000 ft (3,048 m)	5,000 ft. (1,524 m)	5,000 ft. (1,524 m)	200' Ultra High-Definition ClearVü 125' to each side Ultra High-Definition SideVü, 250' total, at a maximum depth of 30'
Traditional CHIRP capable	•	•		
Power Input	10-35 V	10-35 V	10-35 V	
Power Usage	100 W maximum	27 W maximum	40 W maximum	
Compass-safe distance	23.6 in. (60 cm)	11.8 in. (30 cm)	15.75 in. (40 cm)	10.2 in. (26 cm)





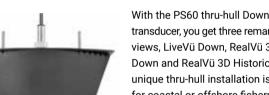
PANOPTIX[®] TRANSDUCERS

PS22-TR TRANSDUCER Part no: 010-01945-00



Panoptix[™] PS22-TR transducer lets vou see all around your boat and below it in real time - with LiveVü Forward and LiveVü Down. Just mount it to the shaft or motor barrel of your trolling motor.

PS60 THRU-HULL DOWN Part no: 010-01406-00



transducer, you get three remarkable views. LiveVü Down. RealVü 3D Down and RealVü 3D Historical. The unique thru-hull installation is ideal for coastal or offshore fishermen with larger boats.

PS5I-TH WITH FRONTVÜ Part no: 010-01753-00



PS3I FORWARD Part no: 010-01284-0



PS21-TM FORWARD

PS31 Forward allows you to see the bottom, structure and fish in front of

Multibeam thru-hull transducer with

premium FrontVü forward-looking

aground by displaying the bottom

ahead of your boat in real time on your compatible chartplotter.

sonar. Helps you avoid running

vour boat - in real time: even while stationary. You get three impressive views, LiveVü-, FrontVü- and RealVü 3D Forward. Both transom and trolling motor mount is included.



PS30 DOWN

no: 010-01284-00

PS30 Down allows you to see baitfish and large target fish swimming around under your boat - in real time; even while stationary. You get three different views, LiveVü Down, RealVü 3D Down and RealVü 3D Historical.

The PS21 transducers allows you to see fish swimming and attacking your lure with LiveVü Forward and to see obstructions for collision avoidance with FrontVü - up to 100 feet away.

PANOPTIX LIVESCOPE SCANNING SONAR SYSTEM Transom/Trolling Motor Mount - Part no: 010-01864-00

Thru-Hull Mount - Part no: 010-02233-00

Includes a compact GLS 10 sonar black box with LVS32 transducer and simple plug-and-play Garmin Marine Network connector to easily install and seamlessly integrate with your compatible Garmin chartplotter¹. Available with trolling motor and transom mount transducer options.

PANOPTIX LIVESCOPE LVS12 TRANSDUCER Part no: 010-02143-00

Full capabilities are available with the Panoptix LiveScope System. The Panoptix LiveScope™ LVS12 transducer provides an economical solution for your GPSMAP® 8400xsv or ECHOMAP™ Ultra chartplotter - without the need for a black box. With 30-degree forward and 30-degree down real-time scanning sonar views.



¹Compatible with GPSMAP 8400, GPSMAP 7400, 1022/1222, GPSMAP 723/923/1223, 722/922/1222 Plus and 722/922/1222 Touch, ECHOMAP Ultra, ECHOMAP UHD & ECHOMAP Plus 72cv/72sv and 92sv chartplotter/sonar combo series.





STRIKER[®] VIVID SERIES









010-02550-01 | STRIKER Vivid 4cv w/GT20 010-02551-01 | Stril 010-02551-02 | Stril

552-01 | Striker Vivid 7sv w/GT20 010-02554-01 | Striker Vivid 9sv w/GT52 553-01 | Striker Vivid 7sv w/GT52 010-02554-02 | Striker Vivid 9sv w/o xdcr 522 00 | Striker Vivid 7sv w/GT52

See fish and structure in colorful detail with the easy-to-use STRIKER[™] Vivid Series fishfinders. Available in screen sizes ranging from 4" to 9", these devices feature high-contrast color palettes with support for traditional and scanning sonar capabilities to make it easier to see what's beneath the surface. Built-in high sensitivity GPS lets you mark your favorite fishing spots and easily navigate back to them.

w/GT20

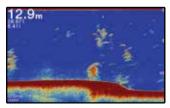
FEATURED — STRIKER PLUS 7SV



BRIGHT, SUNLIGHT-READABLE Screen with vivid scanning Sonar Color Palettes AVAILABLE WITH TRANSDUCER FOR Chirp Traditional, Clearvü and Sidevü Scanning Sonar BUILT-IN GPS LETS YOU MARK Waypoints, create routes And view boat's speed INCLUDES BUILT-IN Quickdraw Contours Mapping



CHIRP TRADITIONAL



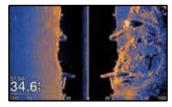
Crisp, clear CHIRP traditional sonar.

CLEARVÜ SCANNING SONAR



See images of what's under your boat.

SIDEVÜ SCANNING SONAR



Get incredibly clear images of what's off to either side of your boat.

QUICKDRAW CONTOURS MAPPING



Create and store maps as you fish with 1' contours for up to 2 million acres.

THE LINEUP STRIKER STRIKER STRIKER STRIKER STRIKER STRIKER STRIKER 4 Plus 4 Vivid 4cv Vivid 7cv Vivid 7sv Vivid 9sv Vivid 5cv 010-01550-01 010-01870-01 010-02550-01 010-02551-01 010-02552-01 010-02553-01 010-02554-01 **Built-in GPS Quickdraw Contours** • • • • Garmin CHIRP Traditional¹ CHIRP ClearVü¹ • • CHIRP SideVü¹ Built-in Wi-Fi® . ActiveCaptain® App Compatible¹ Transducer and Mounts Included

STRIKER[®] CAST



010-02246-02 | STRIKER Cast, GPS 010-02246-00 | STRIKER Cast, Non GPS

Why guess where to find fish? See exactly where they're hiding with the durable STRIKER[™] Cast series castable sonars. Just download the STRIKER Cast app, pair your mobile device with the sonar, and go fishing in minutes. Cast from shore, dock or watercraft, and reel back in to locate and display fish, wirelessly streaming sonar up to 200' to your smartphone or tablet.

STREAMS LIVE SONAR

PAIR WITH STRIKER CAST APP, For Ios and Android

UP TO 200' SONAR RANGE

10+ HOURS BATTERY LIFE¹





Wirelessly stream sonar to view fish and structure up to 200' in any direction via the STRIKER[™] Cast app on your smartphone or tablet.

SELECTABLE MODES



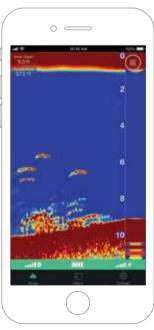
Choose your views from easy-tointerpret traditional 2-D sonar and ice fishing flasher modes, with setting adjustments for gain, range and more.

QUICKDRAW CONTOURS



GPS model offers waypoint marking and Quickdraw Contours, letting you create and save your own fishing maps with 1' contours.

FISH ICONS



Turn on fish icons to view graphic images of fish targets and their depth readings, so you'll know exactly where to drop your line.







GHP" REACTOR 40 AUTOPILOT SERIES



Reactor[®] 40 hydraulic autopilot keeps you on course at cruising speeds, minimizes heading error, reduces power consumption and more, so you can be more comfortable while cruising. Solid-state 9-axis Attitude Heading Reference System (AHRS) sensors provide reliable vessel control in all sea and weather conditions and consistent heading accuracy within 2 degrees.

Our Shadow Drive[®] technology lets you easily take back control of the helm just by turning the wheel — automatically disengaging the autopilot. It's easy to control from your compatible Garmin chartplotter, and Reactor 40 can follow an Auto Guidance¹ path with compatible chartplotters and BlueChart[®] g3 and g3 Vision[®] charts. Flexible mounting options² and quick, easy commissioning make installation easier.

For boats without a good, clean magnetic location to mount the CCU, Reactor 40 also supports heading inputs from third-party NMEA 2000[®] sensors such as GPS compasses.

ADDITIONAL SERIES FEATURES

- 9-axis Attitude Heading Reference System (AHRS) sensors provide reliable vessel control in all sea and weather conditions and consistent heading accuracy within 2 degrees
- Shadow Drive[™] technology automatically disengages the autopilot when you turn the wheel
- Control the autopilot directly from the screen of your compatible chartplotter
- Access Auto Guidance¹ with compatible chartplotters and BlueChart[®] g3 and g3 Vision[®] charts
- Supports third-party heading sensors or GPS compasses via the NMEA 2000 $^{\circ}$ network

ACCESSORIES FOR REACTOR AUTOPILOTS



GHC[™] 20 CONTROL UNIT Part no: 010-01141-00

Control your autopilot with up to three GHC 20 autopilot helm controller units. Compatible with all Garmin autopilots, for both motor- and sailboats.



AUTOPILOT REMOTE Part no: 010-12833-10

The ultimate in onboard freedom and convenience all in the palm of your hand. Bright color display and new gesture controls let you course-correct with ease.



GRF 10 RUDDER SENSOR Part no: 010-11829-00

Pair this GRF 10 rudder feedback sensor with your autopilot to provide rudder position feedback to detect and avoid rudder stops.

GHP[™] REACTOR 40 STEER-BY-WIRE AUTOPILOT

These corepacks bring our GHP Reactor 40 autopilot technology to vessels with select steer-by-wire control systems, including Yanmar[®] Electric Power Steering for the JC10 Joystick system, Teleflex[®] Optimus[™] systems, Yamaha[®] Helm Master[™] systems, Volvo Penta[®] Inboard Performance Systems and ZF[®] 2800 Pod Drive steerings systems.



GHP REACTOR 40 STEER-BY-WIRE STANDARD COREPACK Part no: 010-00705-86 GHP REACTOR 40 STEER-BY-WIRE YAMAHA[®] HELM MASTER[™] COREPACK Part no: 010-00705-87 GHP REACTOR 40 STEER-BY-WIRE VOLVO PENTA® COREPACK Part no: 010-00705-89

ADDITIONAL SERIES FEATURES

- Solid-state 9-axis AHRS, reacts to the sea to hold course, even when the boat is unstable
- Standard corepack: supports steering systems from Yanmar[®] JC10 Joystick system, Teleflex[®] Optimus[™] systems and ZF[®] 2800 system
- · Corepack for Yamaha®: supports Yamaha Helm Master systems
- Corepack for Volvo Penta[®]: supports Volvo Penta IPS and stern drive joystick systems
- Minimizes heading error, course deviation, rudder movement, power consumption, while providing a comfortable ride

- Mounts in any orientation
- NMEA 2000 interface
- Minimal commissioning and calibration takes just five minutes
- Provides advanced features to compatible Garmin chartplotters such as route following, route engage, and Autopilot Virtual Device
- · Connects to up to 3 GHC[™] 20 control units
- · Add optional Autopilot Remote for control anywhere on your boat

GHP[™] REACTOR 40 HYDRAULIC AUTOPILOTS

GHP Reactor 40 hydraulic corepack (pump sold separately) Part no: 010-00705-19 GHP Reactor 40 hydraulic with SmartPump corepack Part no: 010-00705-69

This robust unit gives powerboat users an easy-to-use autopilot system to rely on for navigation. The optional SmartPump features a more powerful, brushless motor-driven pump that is suitable for most users. It offers Intelligent Rudder Rate Technology (IRRT) which adjusts the rudder speed to the speed of your boat to ensure safer and more stable operation.

ADDITIONAL SERIES FEATURES

- · Complete packages designed for hydraulically steered powerboats and sailboats
- Solid-state 9-axis AHRS, reacts to the sea to hold course, even when the boat is pitching and rolling
- Minimises heading error, course deviation, rudder movement, power consumption, while providing a comfortable ride
- Mounts in any orientation
- · Minimal commissioning and calibration takes just five minutes
- One SmartPump[™] fits most hydraulically steered boating applications
- NMEA 2000 interface



- Small, brushless SmartPump[™] delivers better thermal performance, higher reliability, and lower power consumption
- Optimal performance for all steering cylinder sizes from 4 to 17 cubic inches
- Intelligent Rudder Rate Technology (IRRT)
- Patented Shadow Drive[™] technology keeps you in control even when autopilot is engaged
- Provides advanced features to compatible Garmin chartplotters such as route following, route engage, and Autopilot Virtual Device
- · Connects to up to 3 GHC[™] 20 control units

PUMPS

I.2-LITER PUMP KIT Part no: 010-00705-64



2-LITER PUMP KIT

Part no: 010-00705-63





GHP[™] REACTOR 40 MECHANICAL AUTOPILOT

GHP Reactor 40 Mechanical/Retrofit/Solenoid Corepack Part no: 010-00705-49

You never know when an extra crew member can come in handy. Maybe the wind picks up, and you have to leave the wheel to raise the sails or pull in fenders. Even in calm conditions, you sometimes need to hand over to someone else. That's where this belowdeck autopilot system comes in, ideally suited for sailboats or powerboats with direct or cable-actuated steering systems.

ADDITIONAL SERIES FEATURES

- · Ideal for sailboats with direct or cable-actuated steering systems
- Retrofit with your existing autopilot actuator or use with one of several Garmin linear actuator options (sold separately)
- Solid-state 9-axis AHRS, reacts to the sea to hold course, even when the boat is
 pitching and rolling
- Minimises heading error, course deviation, rudder movement, power consumption, while providing a comfortable ride
- Mounts in any orientation
- Minimal commissioning and calibration takes just five minutes
- · Engineered from corrosion-resistant components



- NMEA 2000 interface
- Enter your boat's displacement or its planning speed, and Reactor will take into consideration the various steering characteristics that are required
- Provides advanced features to compatible Garmin chartplotters such as route following, route engage, and Autopilot Virtual Device
- · Connects to up to 3 GHC[™] 20 control units
- When used with a Garmin chartplotter with optional BlueChart[®] g3 and 3g Vision[®] charts, the Reactor autopilot can automatically follow an Auto Guidance path
- · Add optional Autopilot remote for control anywhere on your boat

DRIVE UNITS

CLASS A MECHANICAL DRIVE UNIT FOR BOATS UP TO 13 TONNES Part no: 010-11572-00



CLASS B COMPACT HYDRAULIC DRIVE UNIT FOR BOATS UP TO 22 TONNES Part no: 010-12029-00



CLASS B HYDRAULIC DRIVE UNIT FOR BOATS UP TO 36 TONNES Part no: 010-11573-00





GHP[™] COMPACT REACTOR 40 HYDRAULIC AUTOPILOTS

Designed for boats less than 30 feet long to provide relief from manually holding the wheel to maintain course in heavy currents or winds¹. Solid-state 9-axis AHRS technology delivers less heading error, course deviation, rudder movement, power consumption and a more comfortable ride. Easy to install with flexible mounting options and quick, easy commissioning via a compatible chartplotter or GHC 20.



GHP COMPACT REACTOR 40 HYDRAULIC COREPACK WITH GHC 20 AND SHADOW DRIVE™ Part no: 010-00705-08



COREPACK WITH GHC 20

Part no: 010-00705-07

GHP COMPACT REACTOR 40 HYDRAULIC GHP COMPACT REACTOR 40 HYDRAULIC COREPACK Part no: 010-00705-06

ADDITIONAL SERIES FEATURES

- Solid-state 9-axis AHRS, reacts to the sea to hold course, even when the boat is unstable
- Designed for boats boats less than 30 feet long
- Available in 3 pack configurations: GHP Compact Reactor Hydraulic Autopilot with GHC 20 and Shadow Drive™, GHP Compact Reactor Hydraulic Autopilot with GHC 20 and GHP Compact Reactor Hydraulic Autopilot
- Provides an extra set of hands, relief from manually holding the wheel to remain on course in heavy currents or winds
- Easy-to-install CCU provides flexible mounting options and quick, easy commissioning

- NMEA 2000 interface
- · Minimal commissioning and calibration takes just five minutes
- 1 L geared pump supports hydraulic steering cylinders up to 10 cubic inches
- · Provides advanced features to compatible Garmin chartplotters such as route following, route engage, and Autopilot Virtual Device
- Easy to add GHC 20 and Garmin patented Shadow Drive at any time if not initially included
- Add optional Autopilot remote for control anywhere on your boat



¹Not recommended for fishing or applications that require holding heading while trolling or at low speeds. For applications that require precise heading control while trolling or at low speeds, our higher-performance Reactor 40 models are recommended.

REACTOR 40 KICKER AUTOPILOT

Reactor[™] 40 Kicker Autopilot with GHC[™] 20 Display Part no: 010-00705-94 Reactor[™] 40 Kicker Autopilot without GHC[™] 20 Display Part no: 010-00705-94

The Reactor[™] 40 kicker autopilot is specially designed for boats with small gasoline outboard motors up to 20 horsepower. Whether you're going for salmon, trout, walleye or some other species, your Reactor 40 kicker autopilot can help you maintain heading hold and route to keep you on course – even against wind, waves or heavy current. It includes a convenient floating handheld remote control with bright, sunlight-readable display. The Reactor 40 kicker autopilot makes it easy to fine-tune your autopilot throttle setting with the touch of a button and to quickly drop to idle speed when netting a fish. Enjoy easy integration with our included GHC[™] 20 display, compatible Garmin chartplotters or NMEA 2000[®] network-compatible GPS system for a seamless onboard setup.

ADDITIONAL SERIES FEATURES

- Specially designed for boats with small gasoline outboard motors up to 20 horsepower
- Helps maintain heading hold and route to keep you on course even against wind, waves or heavy current
- Includes convenient floating handheld remote control with a bright, sunlight-readable display



- Easily fine-tune autopilot throttle setting with the touch of a button to quickly drop to idle speed when netting a fish
- Easy to install and integrate with our included GHC[™] 20 display, compatible Garmin chartplotters or NMEA 2000[®] network-compatible GPS system







MARINE CAMERAS



Garmin marine cameras add security and heightened awareness to your vessel. They provide an extra set of eyes to monitor areas above or below decks – even in low light – making them perfect for engine rooms. The small size and rugged weatherproof cases allow you to install them nearly anywhere on your boat.

GC[™] 200 MARINE IP CAMERA



MONITOR AREAS ABOVE AND Below Deck in real time HD RESOLUTION Images even in Low light STREAM VIDEO FROM UP TO 4 CAMERAS AT A TIME ON A SINGLE COMPATIBLE CHARTPLOTTER

REVERSE-IMAGE SETTING HELPS WHEN BACKING OUT OF TIGHT LOCATIONS SUCH AS CROWDED MARINAS SHARE VIDEO Across Multiple Compatible Chartplotters



Compact wireless camera streams high-quality video to your compatible chartplotter and any other chartplotter on the same network. Effective in total darkness, it's perfect for the engine room. Easy to install and hardwired for power, the camera is ready to use with one-button setup.

GC[™] 12 MARINE CAMERA Part no: 010-02122-00

Small and discreet, this camera delivers excellent quality images. Use it in multiple areas above or below decks, and view on one chartplotter or across multiple networked compatible chartplotters. It can help you back out of a crowded marina or keep an eye on your dark engine room.

THE LUNCTON			
THE LINEUP	GC 12 Maine Camera	GC 200 Marine IP Camera	GC 100 Marine Camera
Boat monitoring camera	•	•	•
Low-light vision	•	•	•
Versatile mounting options	•	•	•
Rugged housing	•	•	•
Water rating	IPX7	IPX7	IPX7
Video Resolution	976(H) x 582(V)	Up to 1920 x 1080P1	720p
One-button startup			•
Pair multiple camera		•	•
Connection to Chartplotter	Analog	IP	Wi-Fi®
Hardwired Power	12V	12V and POE	12V

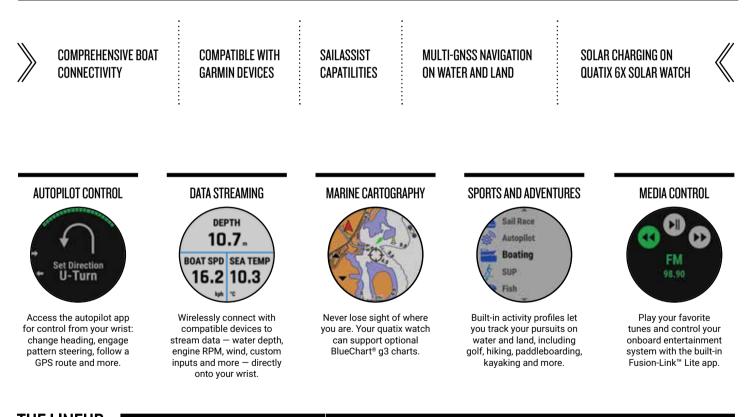




QUATIX® 6 SERIES



The quatix 6 series of multisport GPS smartwatches is specifically designed to help make the most of your time on the water. Each model connects with compatible Garmin chartplotters and other devices¹ to offer autopilot control, data streaming, sail racing assistance, Fusion-Link[™] entertainment control and much more. The quatix 6X Solar edition adds a solar-charging lens that uses the sun's energy to extend battery life. So you can spend more time enjoying full control of your boat from your wrist.



THE LINEUP	quatix 6 010-02158-91	quatix 6 Titanium 010-02158-95	quatix 6X Solar 010-02157-31
Bezel and Band	Stainless steel with blue silicone band	Titanium with titanium band	Titanium with titanium band
Lens Material	Corning [®] Gorilla [®] Glass DX	Sapphire crystal	Power Glass [™] Solar Charging Lens
Connectivity	Bluetooth®, ANT+®, Wi-Fi®	Bluetooth®, ANT+®, Wi-Fi®	Bluetooth [®] , ANT+ [®] , Wi-Fi [®]
Battery Life	Smartwatch Mode: up to 2 weeks GPS/HR mode: up to 24 hours UltraTrac [™] mode: up to 60 hours without wrist heart rate	Up to 14 days in smartwatch mode, 36 hours in GPS mode and up to 48 days in battery saver watch mode.	Up to 21 days (plus 3 days*) in smartwatch mode, 60 hours (plus 6 hours**) in GPS mode and up to 80 days (plus 40 days*) in battery saver watch mode.
Water Rating	10 ATM	10 ATM	10 ATM

HANDHELDS

GPS 73 AND GPSMAP $^{\circ}$ 78 series handhelds

Boaters and watersport enthusiasts everywhere swear by GPSMAP 73 and 78 handhelds. They float! The 78 series features bright 2.6" LCD color displays with built-in worldwide basemaps and a special MOB (man overboard) button. The GPS 73 includes SailAssist features, including virtual starting line, heading line, countdown timers and tack assist.







GPSMAP 78

GPSMAP 73

.

GPSMAP 78s

GPSMAP[®] 276CX

All-terrain navigator with advanced GPS and GLONASS reception tracks your position in challenging environments. It has a large, sunlight-readable 5" screen plus built-in barometric altimeter and 3-axis compass. The GPSMAP 276CX also comes preloaded with a worldwide basemap and free 1-year BirdsEye Satellite Imagery subscription. Advanced mapping, connectivity and flexible mounting options are available; and it's water-rated to IPX7.



THE LINEUP	GPSMAP 73 010-01504-00	GPSMAP 78 010-00864-00	GPSMAP 78s 010-00864-01	GPSMAP 86s 010-02235-01	GPSMAP 86i 010-02236-01
Easy-to-use Handheld	•	•	•	•	•
Floats	•	•	•	•	•
SailAssist	•				
Back-lit Buttons	•	•	•	•	•
Color Screen		•	•	•	•
Worldwide Basemap		•	•	•	•
Ability to Add Maps		•	•	•	•
Waypoints/Favorites/Locations	1,000	2,000	2,000	10,000	10,000
Routes	50	200	200	250	250
inReach® Satellite Technology ¹					•
Memory/History		1.7 GB	1.7 GB	16 GB	16 GB
Battery Life	18 hours	20 hours	20 hours	40 hours	35 hours
Compass			Tilt-compensated 3-axis	Tilt-compensated 3-axis	Tilt-compensated 3-axis
Barometric Altimeter			•	•	•

¹Satellite subscription required • Wi-Fi is a registered trademark of the Wi-Fi Alliance.

NOTICE: Some jurisdictions regulate or prohibit the use of satellite communications devices. It is the responsibility of the user to know and follow all applicable laws in the jurisdictions where the device is intended to be used.

GARMIN.COM

HANDHELDS

GPSMAP® 86 SERIES HANDHELDS

Cast off confidently with GPSMAP® 86 handheld series - Premium, floating handhelds with a sunlight-readable 3" colour display. GPSMAP 86i and 86s both support optional BlueChart g3 charts with integrated Navionics® data. Wireless connectivity makes these handhelds a virtual extension of your onboard marine system, displaying boat data from compatible chartplotters and instruments.

They also function as a remote control for convenient operation of your Garmin autopilot and FUSION® marine products. GPSMAP 86i allow you to stay in touch anywhere with inReach® satellite communication capabilities¹, two-way text messaging and interactive SOS. Share your position using GPS-based location tracking.





GPSMAP 86s

GPSMAP 86i





INREACH® MINI MARINE BUNDLE

The inReach Mini Marine bundle puts the rugged, compact inReach Mini satellite communicator on your boat for interactive SOS, two-way messaging and basic navigation via the global Iridium network¹. The screw down mount, 12-volt power cable and wireless connectivity to compatible chartplotters let you add peace of mind to your adventures without taking up space on your helm. Off its mount, the internal, rechargeable lithium battery provides up to 50 hours of battery life in 10-minute tracking mode.



¹Satellite subscription required • NOTICE: Some jurisdictions regulate or prohibit the use of satellite communications devices. It is the responsibility of the user to know and follow all applicable laws in the jurisdictions where the device is intended to be used. Other Garmin maps not compatible with this device.



GRID 20 REMOTE INPUT DEVICE Part no: 010-02011-00 (Portrait), 010-02011-01 (Landscape)



The easy-to-use remote input device provides access and control of your entire Garmin marine System. It features a 360-degree joystick with a rotary knob and push-to-select button for easy chartplotter menu/setting navigation and fine control even in the worst conditions. You can designate 4 favorite keys to restore your system to a previously saved configuration.

STEADYCAST[™] HEADING SENSOR Part no: 010-11417-10



SteadyCast heading sensor is a simple, easy-to-install solution that provides fast calibration and premium heading accuracy. It aligns your boat bow to its actual orientation so you know where you are casting according to your chartplotter screen. It's accurate even at low speed and effective in rough water.

GARMIN USB CARD READER



Save space on your helm with the compact, water-resistant SD[™] card reader. It holds two full-size SD cards for quick access to charts, software updates and ActiveCaptain[®] data.

Featuring a 2"x 2" footprint, flush mounting and USB connection to the back of your chartplotter, this card reader easily integrates into a crowded dash or elsewhere at the helm.

GPS 24XD RECEIVER



Explore coastal waters with the GPS 24xd position receiver and antenna. Get precise location to within 1 meter with dual-frequency band GPS and heading accuracy even at slow speeds with magnetic heading sensors. System-compatible antenna versions are available for both NMEA 2000[®] and NMEA 0183.

9-AXIS HEADING SENSOR Part no: 010-11417-20



Our premium solution for exceptional heading accuracy allows for MARPA tracking and improves the radar overlay experience.

With heading output at 10 Hz and accuracy of plus or minus 2 degrees, it ensures your chart orientation and boat heading line match up with reality, even at lower speeds. Your heading information will remain accurate, even in rough sea conditions where your bow is pitching and rolling or - in sailboat applications - when heeled over.

The 9-axis MEMS technology allows installation in nearly any orientation located away from magnetic interference. It's built to withstand bilge environments.





MFD Chartplotters

GPSMAP 8424

GPSMAP 8422

GPSMAP 8417







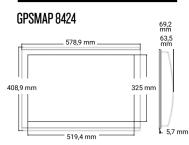
Display size (diagonal)	24"	22"	17"	
Display type and resolution (pixels)	WUXGA - 1920 x 1200	FHD - 1920 x 1080	WUXGA - 1920 x 1200	
Touch- or keyed panel	Multitouch	Multitouch	Multitouch	
GPS receiver	10 Hz GPS/GLONASS, external	10 Hz GPS/GLONASS, external	10 Hz GPS/GLONASS, external	
Standard GPS antenna	External	External	External	
Number of waypoints	5000	5000	5000	
Number of routes	100	100	100	
J1939 Support	Yes	Yes	Yes	
Garmin SmartMode™	Yes	Yes	Yes	
Digital Switching support	Yes	Yes	Yes	
NMEA 2000 compatible	Yes	Yes	Yes	
NMEA 0183 compatible	Yes	Yes	Yes	
Garmin Marine Network compatible	Yes	Yes	Yes	
Preloaded map	Worldwide Basemap	Worldwide Basemap	Worldwide Basemap	
BlueChart [®] g3 Vision [®] compatible	Yes	Yes	Yes	
Auto Guidance	Yes	Yes	Yes	
ActiveCaptain [™] support	Yes	Yes	Yes	
Sailing Features	Yes	Yes	Yes	
Wi-Fi [®] and ANT [™] wireless connectivity	Yes, built-in	Yes, built-in	Yes, built-in	
GRID [™] 20 (Garmin Remote Input Device) compatible	Yes	Yes	Yes	
FLIR® and Axis® IP camera support	Yes	Yes	Yes	
FUSION-Link [™] support	Yes	Yes	Yes	
Video input	1 BNC composite 1 HDMI (HDCP compliant)	1 BNC composite 1 HDMI (HDCP compliant)	1 BNC composite 1 HDMI (HDCP compliant)	
Video output	1 HDMI	1 HDMI	1 HDMI	
AIS and DSC support	Yes	Yes	Yes	
Sonar module support	Yes	Yes	Yes	
Supported frequency (sonar)	Dependent on optional sonar module	Dependent on optional sonar module	Dependent on optional sonar module	
Transmit power	Dependent on optional sonar module	Dependent on optional sonar module	Dependent on optional sonar module	
Panoptix [™] support	Yes	Yes	Yes	
Data card slots	2 SD™ cards (requires optional card reader)	2 SD [™] cards (requires optional card reader)	2 SD [™] cards (requires optional card reader)	
Water rating	IPX 7	IPX 7	IPX 7	
Mounting options	Flat or Flush	Flat or Flush	Flat or Flush	
Power supply	10-35 V	10-35 V	10-35 V	
Typical current draw at 12 Vdc:	6.1 A	3.9 A	2.8 A	
Connections	Built-in wireless connectivity, NMEA 2000: 1 port, NMEA 0183: 4 in and 2 out, Marine network: 4 ports, USB: 1 port, Video in: 1 BNC composite and 1 HDMI (HDCP compliant), Video out: 1 HDMI, J1939: 1 port	Built-in wireless connectivity, NMEA 2000: 1 port, NMEA 0183: 4 in and 2 out, Marine network: 4 ports, USB: 1 port, Video in: 1 BNC composite and 1 HDMI (HDCP compliant), Video out: 1 HDMI, J1939: 1 port	Built-in wireless connectivity, NMEA 2000: 1 port, NMEA 0183: 4 in and 2 out, Marine network: 4 ports, USB: 1 port, Video in: 1 BNC composite and 1 HDMI (HDCP compliant), Video out: 1 HDMI, J1939: 1 port	

Chartplotters and Co

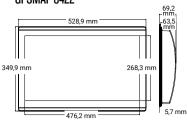
Chartplotters	GPSMAP 8410	GPSMAP 8410xsv	GPSMAP 8412	GPSMAP 8412xsv	GPSMAP 8416	GPSMAP 8416xsv
and Combos						
			s.L			
Display size (diagonal)	10"	10"	12"	12"	16"	16"
Display type and resolution (pixels)	WUXGA - 1920 x 1200	WUXGA - 1920 x 1200	FHD - 1920 x 1080	FHD - 1920 x 1080	FHD - 1920 x 1080	FHD - 1920 x 1080
Touch- or keyed panel	Multitouch	Multitouch	Multitouch	Multitouch	Multitouch	Multitouch
GPS receiver	10 Hz GPS/GLONASS/Galileo	10 Hz GPS/GLONASS/Galileo	10 Hz GPS/GLONASS/Galilec	10 Hz GPS/GLONASS/Galileo	10 Hz GPS/GLONASS/Galileo	10 Hz GPS/GLONASS/Galileo
Standard GPS antenna	Internal (input for external)	Internal (input for external)	Internal (input for external)	Internal (input for external)	Internal (input for external)	Internal (input for external)
Number of waypoints	5000	5000	5000	5000	5000	5000
Number of routes	100	100	100	100	100	100
J1939 Support	Yes	Yes	Yes	Yes	Yes	Yes
NMEA 2000 compatible	Yes	Yes	Yes	Yes	Yes	Yes
NMEA 0183 compatible	Yes	Yes	Yes	Yes	Yes	Yes
Garmin Marine Network compatible	Yes	Yes	Yes	Yes	Yes	Yes
Preloaded map	Worldwide Basemap	Worldwide Basemap	Worldwide Basemap	Worldwide Basemap	Worldwide Basemap	Worldwide Basemap
Auto Guidance	Yes	Yes	Yes	Yes	Yes	Yes
ActiveCaptain [™] support	Yes	Yes	Yes	Yes	Yes	Yes
SailAssist	Yes	Yes	Yes	Yes	Yes	Yes
Wi-Fi [®] and ANT [™] wireless connectivity	Yes	Yes	Yes	Yes	Yes	Yes
GRID [™] 20 (Garmin Remote Input Device) compatible	Yes	Yes	Yes	Yes	Yes	Yes
Wireless remote compatible	Yes	Yes	Yes	Yes	Yes	Yes
FLIR® camera support	Yes	Yes	Yes	Yes	Yes	Yes
FUSION-Link [™] support	Yes	Yes	Yes	Yes	Yes	Yes
Video input	1 HDMI	1 HDMI	1 HDMI	1 HDMI	1 HDMI	1 HDMI
Video output	1 HDMI	1 HDMI	1 HDMI	1 HDMI	1 HDMI	1 HDMI
AIS and DSC support	Yes	Yes	Yes	Yes	Yes	Yes
Sonar module support	Yes	Yes	Yes	Yes	Yes	Yes
Supported sonar frequencies		40kHz-250kHz CHIRP, 260/455/800/1200kHz CHIRP scanning (ClearVu and SideVu)		40kHz-250kHz CHIRP, 260/455/800/1200kHz CHIRP scanning (ClearVu and SideVu)		40kHz-250kHz CHIRP, 260/455/800/1200kHz CHIRP scanning (ClearVu and SideVu)
Transmit power		1 kW traditional, 1 kW CHIRP		1 kW traditional, 1 kW CHIRP		1 kW traditional, 1 kW CHIRP
Panoptix [™] support	Yes	Yes	Yes	Yes	Yes	Yes
Quickdraw Contours	Yes	Yes	Yes	Yes	Yes	Yes
Data card slots	2 micro SD	2 micro SD	2 micro SD	2 micro SD	2 micro SD	2 micro SD
Water rating	IPX 7	IPX 7	IPX 7	IPX 7	IPX 7	IPX 7
Mounting options	Bail, Flush or Flat	Bail, Flush or Flat	Bail, Flush or Flat	Bail, Flush or Flat	Bail, Flush or Flat	Bail, Flush or Flat
Power supply	10-32 V	10-32 V	10-32 V	10-32 V	10-32 V	10-32 V
Typical current draw at 12 Vdc:	2.0 A	2.7 A	2.4 A	3.1 A	3.5 A	4.2 A
Connections	Build-in wireless connectivity, NMEA 2000: 1 port, J1939, NMEA0183: 1 port, Marine Network: 2 ports, Video in: 1 BNC, 1 HDMI, Video out: 1 HDMI, USB	Build-in wireless connectivity, NMEA 2000: 1 port, J1939, NMEA0183: 1 port, Marine Network: 2 ports, Video in: 1 BNC, 1 HDMI, Video out: 1 HDMI, USB	Build-in wireless connectivity NMEA 2000: 1 port, J1939, NMEA0183: 1 port, Marine Network: 2 ports, Video in: 1 BNC, 1 HDMI, Video out: 1 HDMI, USB	Build-in wireless connectivity, NMEA 2000: 1 port, J1939, NMEA0183: 1 port, Marine Network: 2 ports, Video in: 1 BNC, 1 HDMI, Video out: 1 HDMI, USB	Build-in wireless connectivity, NMEA 2000: 1 port, J1939, NMEA0183: 1 port, Marine Network: 2 ports, Video in: 1 BNC, 1 HDMI, Video out: 1 HDMI, USB	Build-in wireless connectivity, NMEA 2000: 1 port, J1939, NMEA0183: 1 port, Marine Network: 2 ports, Video in: 1 BNC, 1 HDMI, Video out: 1 HDMI, USB

Combos

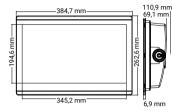
Compos	GPSMAP 1222xsv/1222 & GPSMAP 1022xsv/1022	GPSMAP 1223xsv/1223 & GPSMAP 923xsv/923 & GPSMAP 723xsv/723	ECHOMAP Ultra 102sv and 122sv	ECHOMAP UHD 92sv	ECHOMAP UHD 72cv and 72sv	ECHOMAP UHD 62cv & ECHOMAP Plus 42cv
			2112			💷
Display size (diagonal)	12" (1222xsv/1222) 10" (1022xsv/1022)	12" (1223xsv/1223) 9" (923xsv/923) 7" (723xsv/723)	10" (102sv/102) 12" (122sv/122)	9"	7"	6,2" (62cv) 4,3" (42cv)
Display type and resolution (pixels)	WXGA - 1280 x 800 (1222xsv/1222) WSVGA - 1024 x 600 (1022xsv/1022)	WXGA - 1280x800 (1223xsv/1223) WXGA - 1280x720 (923xsv/923) WSVGA - 1014x600 (723xsv/723)	1280 x800	WVGA - 800 x 480	WVGA - 800 x 480	WVGA - 800 x 480 (62cv) QVGA - 272 x 480 (42cv)
Touch- or keyed panel	Keyed	Multitouch	Keyed Assist Multotouch	Keyed Assist Multotouch	Keyed Assist Multotouch	Keyed
GPS receiver	10 Hz GPS/GLONASS, internal	10 Hz GPS/GLONASS, internal	10 Hz	5 Hz GPS/GLONASS, internal	5 Hz GPS/GLONASS, internal	5 Hz GPS/GLONASS, internal
Standard GPS antenna	Internal (input for external)	Internal (input for external)	Internal (input for external)	Internal (input for external)	Internal (input for external)	Internal (input for external)
Number of waypoints	5000	5000	5,000	5000	5000	5000
Number of routes	100	100	100	100	100	100
NMEA 2000 compatible	Yes	Yes	Yes	Yes	Yes	Yes (62cv)
NMEA 0183 compatible	Yes	Yes	Yes	Yes	Yes	Yes
Garmin Marine Network compatible	Yes	Yes	Yes, with other 7" and 9" ECHOMAP UHD models and ECHOMAP Ultra models only	Yes, with other 7" and 9" ECHOMAP UHD models and ECHOMAP Ultra models only	Yes, with other 7" and 9" ECHOMAP UHD models and ECHOMAP Ultra models only	No
Preloaded map	Worldwide Basemap	Worldwide Basemap	Worldwide Basemap	Worldwide Basemap	Worldwide Basemap	Worldwide Basemap
BlueChart [®] g3 Vision [®] compatible	Yes	Yes	Yes	Yes	Yes	Yes
Auto Guidance	Yes	Yes	Yes	Yes	Yes	Yes
ActiveCaptain [™] support	Yes	Yes	Yes	Yes	Yes	Yes (62cv)
SailAssist	Yes	Yes	Yes	Yes	Yes	Yes (62cv)
Wi-Fi [®] wireless connectivity	Yes	Yes	Yes	Yes	Yes	Yes (62cv)
ANT [™] wireless connectivity	Yes	Yes	Yes	No	No	No
GRID [™] 20 (Garmin Remote Input Device) compatible	Yes	Yes	No	No	No	No
Wireless remote compatible	Yes	Yes	No	No	No	No
FLIR [®] camera support	Yes	Yes	No	No	No	No
FUSION-Link [™] support	Yes	Yes	Yes	Yes	Yes	Yes (62cv)
Video input	1 BNC	1 BNC Video Output: 1 HDMI 1243xsv/1243	No	No	No	No
AIS and DSC support	Yes	Yes	Yes	Yes	Yes	Yes
Traditional HD ID 77/200	Yes (xsv)	Yes (xsv)	Yes	Yes	Yes	Yes
Traditional HD ID 50/200	Yes (xsv)	Yes (xsv)	Yes	Yes	Yes	Yes
Traditional CHIRP	Yes (xsv)	Yes (xsv)	Yes	Yes	Yes	Yes
CHIRP ClearVü	Yes (xsv)	Yes (xsv)	Yes	Yes	Yes	Yes
CHIRP SIdeVü	Yes (xsv)	Yes (xsv)	Yes	Yes	Yes	No
Dual Channel CHIRP	No	No	No	No	No	No
Ultra High-Definition scanning sonar	No	Yes	Yes	Yes	Yes	No
Optional sonar support	Yes	Yes	Yes	No	No	No
Internal Sonar Sharing	Yes (xsv)	Yes (xsv)	Yes, with other 7" and 9" ECHOMAP UHD models and ECHOMAP Ultra models only	Yes, with other 7" and 9" ECHOMAP UHD models only	Yes, with other 7" and 9" ECHOMAP UHD models only	No
Transmit power	1 kW traditional, 1 kW CHIRP (xsv)	1 kW traditional, 1 kW CHIRP (xsv)	600 W	Up to 500 W (RMS)	Up to 500 W (RMS)	Up to 500 W (RMS)
Panoptix [™] support	Yes	Yes	Yes	Yes	Yes	No
Preloaded Quickdraw Contours software	Yes	Yes	Yes	Yes	Yes	Yes
Data card slots	2 SD [™] cards	2 MicroSD [™] cards	2 MicroSD [™] cards	1 MicroSD [™] card	1 MicroSD [™] card	1 MicroSD [™] card
	IPX 7	IPX 7	IPX7	IPX 7	IPX 7	IPX 7
Water rating						
Mounting options	Bail or Flush	Bail, Flush or Flat	Bail or Flush	Bail or Flush	Bail or Flush	Bail or Flush
Power supply Typical current draw at 12 Vdc:	10-32 V 2.5 A	10-32 V 2.2 A (1223xsv/1223) 1.8 A (923xsv/923)	10-20 V 2.2 A (102sv) 2.5 A (122sv)	10-20 V 1.95 A	10-20 V 1.8 A	10-20 V 1.5 A
Connections	Built-in wireless connectivity, NMEA 2000: 1 port, NMEA 0183: 1 port, Marine Network: 2 ports, Video in:1 BNC	1.5 A (723xsv/723) Built-in wireless connectivity, USB: port, NMEA 2000: 1 port, NMEA 0183: 1 port, Marine Network: 2 ports (1223xsv/1223), 1 port (923xsv/923 & 723xsv/723), Video in:1 BNC J1939 (1223xsv/1223)	NMEA 2000: 1 port, NMEA 0183: 1 in and 1 out Marine Network: 2 ports, for Internal Sonar Sharing (Ultra, UHD 72 and 92 only) and Panoptix	Built-in wireless connectivity, NMEA 2000: 1 port, NMEA 0183: 1 in and 1 out Marine Network: 1 port, for Internal Sonar Sharing (72 and 92 only) and Panoptix	Built-in wireless connectivity, NMEA 2000: 1 port, NMEA 0183: 1 in and 1 out Marine Network: 1 port, for Internal Sonar Sharing (72 and 92 only) and Panoptix	Built-in wireless connectivity (62cv) NMEA 2000: 1 port (62cv), NMEA 0183: 1 in and 1 out



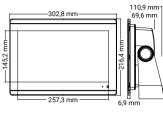
GPSMAP 8422



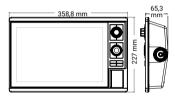
GPSMAP 8416/8416XSV



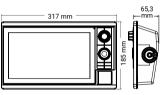
GPSMAP 8412/8412XSV



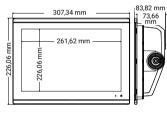
GPSMAP 1222 SERIES



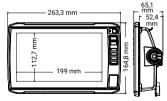
GPSMAP 1022 SERIES



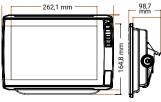
GPSMAP 1223/1223XSV



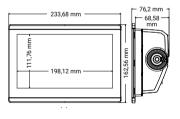
ECHOMAP UHD 92SV



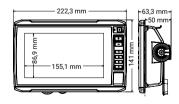
ECHOMAP ULTRA 122SV



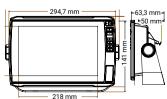
GPSMAP 923/923XSV



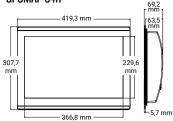
ECHOMAP UHD 72CV & 72SV



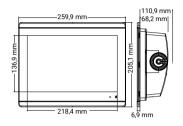
ECHOMAP ULTRA 102SV



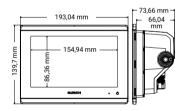




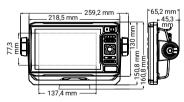
GPSMAP 8410/8410XSV



GPSMAP 723/723XSV



ECHOMAP UHD 62CV

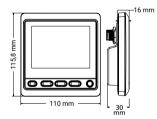


ECHOMAP PLUS 42CV

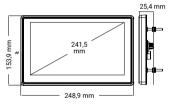


Instruments	GMI 20 & GHC 20 Autopilot Control	GNX Wind, GNX 20 & GNX 21	GNX 120	GNX 130
	286		6.38 BOAT SPD kt	6.38 BOAT SPD kt
Bonded display	Yes	Yes	Yes	Yes
Display type	LCD	21-Inverted LCD, monochrome 20-Standard LCD, monochrome	Inverted LCD, monochrome	Inverted LCD, monochrome
Physical size (WxH)	110 x 115 x 30 mm (4.33" x 4.53" x 1.18")	110 x 115 x 30 mm (4.33" x 4.53" x 1.18")	180mm x 115mm (7.11" x 4.54")	248mm x 153mm (9.80" x 6.04")
Weight	247 g (8.71 oz)	230 g	380 g	820 g
Digit height	49mm \ 1.93"	35mm \ 1.43" (GNX20/21)	51mm \ 2.0"	72mm \ 2.8"
LCD size (diagonal)	102mm \ 4.0"	102mm \ 4.0"	159mm \ 6.3"	236mm \ 9.3"
LCD % of total size	39%	40%	53%	53%
Number of big digits	3	3	4	4
Functions per page	1 to 4	1 to 3	1 to 3	1 to 3
Total data fields	50+	50+	50+	50+
Background colors	RGB	RGB	RGB	RGB
Sunlight visible	Yes	Yes	Yes	Yes
Display update rate	1Hz	Up to 8Hz	Up to 8Hz	Up to 8Hz
Operating temp	-15°C to 70°C \ 5°F to 158°F	-15°C to 70°C \ 5°F to 158°F	-15°C to 70°C \ 5°F to 158°F	-15°C to 70°C \ 5°F to 158°F
Power consumption	3W (Max light)	350mW (no backlight) 450mW (no backlight)	360mW (no backlight) 400mW (no backlight)	360mW (no backlight) 400mW (no backlight)
Voltage range	9-16 V (from NMEA 2000)	9-16 V (from NMEA 2000)	9-16 V (from NMEA 2000)	9-16 V (from NMEA 2000)

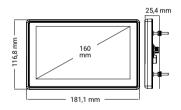
GHC/GMI 20 & GNX 20/21/WIND



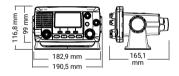




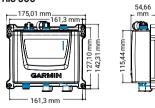
GNX 120



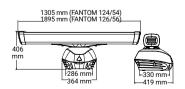
VHF SERIES



AIS 800



GMR FANTOM SERIES



GMR XHD2 SERIES



GMR DOME SERIES



AIS л Миг

AIS and VHF	AIS 800	VHF 115i	VHF 215i	VHF 215i AIS	VHF 315i
		1 🗠	1 2	1 2	■!
Display size, diagonal		2.5"	3.2"	3.2"	2" (GHS 11i)
Adjustable backlighting		Yes	Yes	Yes	Yes (GHS 11i)
Class D DSC with Distress and Position Polling		Yes	Yes	Yes	Yes
Transmitter power output	5W / 2W	25W / 1W	25W / 1W	25W / 1W	25W / 1W
Dedicated Channel 16 button		Yes	Yes	Yes	Yes (GHS 11i)
ATIS compatible		Yes	Yes	Yes	Yes
NMEA 0183 interface	Yes	Yes	Yes	Yes	Yes
NMEA 2000 interface	Yes	Yes	Yes	Yes	Yes
Supports GHS 11i			Yes	Yes	Yes, up to 3, 1 included
Intercom (requires GHS 11i)			Yes	Yes	Yes
Hailer/Foghorn compatible			Yes	Yes	Yes
Internal GPS receiver	Yes	Yes	Yes	Yes	Yes
Internal GPS antenna	Yes	Yes	Yes	Yes	
External GPS options	Antenna	Antenna NMEA 2000 NMEA 0183	Antenna NMEA 2000 NMEA 0183	Antenna NMEA 2000 NMEA 0183	Antenna NMEA 2000 NMEA 0183
AIS receiver	Yes			Yes	
AIS transponder	Class B/SO				
Integral VHF antenna splitter	Yes				

Radars	GMR Fantom 254/256	GMR Fantom 124/126	GMR 56 / 54	GMR 2526 / 1226 xHD2	GMR 2524 / 1224 / 424 xHD2	GMR Fantom 24 / 18	GMR 24 xHD / 18 xHD	GMR 18HD+
	C.	- Common	-	-1	-0-	GARM	MIN	MIN
Transmit Power	120W	120W	120W	25kW / 12kW / 6kW	25kW / 12kW / 6kW / 4kW	40W	4kW	4kW
Dimensions (diameter)	1928 mm (Fantom 126) 1328 mm (Fantom 124)	1928 mm (Fantom 126) 1328 mm (Fantom 124)	1928 mm (Fantom 56) 1328 mm (Fantom 54)	1923 mm	1310 mm	645 mm (Fantom 24) 508 mm (Fantom 18)	645 mm (24 xHD) 508 mm (18 xHD)	508 mm
Rotation Speed (revolutions/min)	24 & 48	24 & 48	24 & 48	24 & 48	24 & 48	24 & 48	24 & 48	24
Weight	23,6 kg (Fantom 126) 21,3 (Fantom 124)	23,6 kg (Fantom 126) 21,3 (Fantom 124)	23,6 kg (Fantom 56) 21,3 (Fantom 54)	29 kg	28,1	9,5 kg (Fantom 24) 7,7 kg (Fantom 18)	9,5 kg (24 xHD) 7,7 kg (18 xHD)	7,7 kg
Horizontal beamwidth	1.25° (Fantom 126) 1.8° (Fantom 124)	1.25° (Fantom 126) 1.8° (Fantom 124)	1.25° (Fantom 56) 1.8° (Fantom 54)	1.1°	1.8°	3.7° (Fantom 24) 5.2° (Fantom 18)	3.5° (24 xHD) 5.2° (18 xHD)	5.2°
Vertical beamwidth	23°	23°	23°	23°	23°	25°	25°	25°
Maximum/Minimum range		96NM / 6 m (Fantom 126) 72NM / 6 m (Fantom 124)	96NM / 6 m (Fantom 56) 72NM / 6 m (Fantom 54)	96 NM / 20 m (2526) 72 NM / 20 m (1226)	96 NM / 20 m (2524) 72 NM / 20 m (1224/424)	48 NM / 6 m	48 NM / 20 m	36 NM / 20 m
Waterproof according to standard	IPX6	IPX6	IPX6	IPX6	IPX6	IPX7	IPX7	IPX7
Power supply	10-32 V	10-32 V	10-32 V	10-32 V	10-32 V	10-32 V	11 - 35V	10.5-35 V
Power consumption (typical)	80 W	80W	80W	100W (25kW), 90W (12kW), 65W (6kW)	100W (25kW), 90W (12kW), 65W (6kW), 55W (4kW)	18.1-24.4 W (dependent on range setting)	30W	33.5W
Power consumption (standby)	10 W	10W	10W	20W	20W	3W	12W	14W
Temperature range	-15 to 55C	-15 to 55C	-15 to 55C	-15 to 55C	-15 to 55C	-15 to 55C	-15 to 70C	-15 to 60C
Guard zone with alarm	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cable length	15 m	15 m	15 m	15 m	15 m	15 m	15 m	15 m
Polarization	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal
Trails	Heading-corrected, Adjustable	Heading-corrected, Adjustable	Heading-corrected, Adjustable	Adjustable	Adjustable	Heading-corrected, Adjustable	Adjustable	Adjustable
Dual Range	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No

Fishfinders

Image: set of the	risiiiiiueis	STRIKER Vivid 9sv	STRIKER Vivid 7cv/sv	STRIKER Vivid 5cv	STRIKER Vivid 4cv
Display Resolution800 x 480 WVGA800 x 480 WVGA800 x 480 WVGA400 x 320 HVGAInternal High-sensitivity GPSYesYesYesYesBuilt-in Quickdraw9YesYesYesYesBuilt-in Quickdraw19 YesYesYesNoNoBuilt-in Quickdraw19 YesYesYesNoNoBuilt-in Quickdraw19 YesYesYesYesYesBuilt-in Quickdraw19 YesYesYesYesYesDual Frequency (50/200 KHz)YesYesYesYesYesDual Beam (77/200 KHz)YesYesYesYesYesDual Beam (77/200 KHz)YesYesYesYesYesCHIRP SideVüYesYesYesYesYesIncluded TransducerCfirst/Winde CHIRP/ (ClearVÜ/SideVüCfirst/Winde CHIRP/ (ClearVÜ/SideVüS00 W Trad S00 W ClearVÜ300 W ClearVÜFrequencies Supported (KHz)King YesS000 W Trad S00 W ClearVÜS000 W Trad S00 N ClearVÜ300 W ClearVÜMaximum Depth Capabilities5000S000S000 YesS000 f(raditional) 250 ft (ClearVÜS000 YesS000Warp Sont Supported (KHz)YesYesYesYesYesWarp Tompstr CapabilitiesS000S000S000S000 YesS000 f(raditional) 250 ft (ClearVÜS000 YesWarp Tompstr CapabilitiesS000YesYesYesYesYesWarp Tompstr Capabilities <th></th> <th></th> <th></th> <th></th> <th></th>					
Internal High-sensitivity GPSVesVesVesBuilt-in QuickdrawMYesMYesMYesMYesBuilt-in QuickdrawMYesMYesMYesMYesBuilt-in Wi-Fi*MYesMYesMYesMYesBuilt-in Wi-Fi*MYesMYesMYesMYesDual Frequency GV/200 KHz)MYesMYesMYesMYesDual Bear (77/200 KHz)MYesMYesMYesMYesCHIRP SideVüMYesMYesMYesMYesCHIRP SideVüMYesMYesMYesMYesIncluded TransducerGTS2HW-TM (High Wide KHRP/ ClearVü/SideVü)GT2D-TM (CHIRP/ClearVi)GT2D-TM (CHIRP/ClearVi)GT2D-TM (CHIRP/ClearVi)Frequencies Supported (KHz)High-Wide CHIRP (S500 W frad) 3500 W ClearVüS500 W Trad S500 W ClearVüS500 W ClearVü (d55/800 KHz)S000 W Trad S000 W ClearVüMaximum Depth Capabilities800 fi (traditional) 250 fi (ClearVi)S500 M (traditional) 250 fi (ClearVi)S500 M (traditional) 250 fi (ClearVi)S500 M (traditional) 250 fi (ClearVii)WaypointsMS00 fi (traditional) 250 fi (ClearVii)S500 M (traditional) 250 fi (ClearVii)S500 M (traditional) 250 fi (ClearVii)MYesWater Temperature Log/Graph GPS SpeedYesYesYesYesGPS SpeedYesYesYesYesYesGPS SpeedYesYesYesYesYesGPS SpeedYesYesYesYesYesGPS Speed <th>Display Size (diagonal)</th> <th>9.0"</th> <th>7.0"</th> <th>5.0"</th> <th>4.0"</th>	Display Size (diagonal)	9.0"	7.0"	5.0"	4.0"
Built-In QuickdrawYesYesYesYesBuilt-In Wi-FIPYesYesNoNoBuilt-In Wi-FIPYesYesNoNoCHIRP Traditional SonarYesYesYesYesDual Frequency (50/200 kHz)YesYesYesYesDual Frequency (50/200 kHz)YesYesYesYesDual Beam (77/200 kHz)YesYesYesYesCHIRP SideViYesYesYesYesCHIRP SideViYesYesN/AN/AIncluded TransducerCfS2HW-TM (ClearViJ) (ClearViJ)GT2O-TM (CHIRP/ClearViJ)GT2O-TM (CHIRP/ClearViJ)Transit Power - Included TransducerS250 W Trad (S500 W ClearVi, SideViJ)S000 W Trad S000 W Trad S000 W ClearViJS000 W Trad S000 W ClearViJFrequencies Supported (kHz)High-Wide CHIRP (ClearViJ)CHIRP (77/200 kHz) (ClearViJ)CHIRP 77/200 kHz) (S500 W ClearViJ (S500 kHz)CHIRP 77/200 kHz) (S00 W ClearViJ (S500 kHz)Maximum Depth Capabilities with Included Transducer'S000 (Traditional) 250 ft (IclearViJ) S00 ft (Icditional) 250 ft (IclearViJ) S00 ft (Icditional) 250 ft (IclearViJ) S00 ft (Icditional) 250 ft (IclearViJ) S00 ft Icditional) 250 ft (IclearViJ) 250	Display Resolution	800 x 480 WVGA	800 x 480 WVGA	800 x 480 WVGA	480 x 320 HVGA
Built-in Wi-Fi [®] YesNoNoCHIRP Traditional SonarYesYesYesYesDual Frequency (50/200 kHz)YesYesYesYesDual Beam (77/200 kHz)YesYesYesYesDual Beam (77/200 kHz)YesYesYesYesCHIRP ClearViiYesYesYesYesCHIRP Side ViiYesNANANAIncluded TransducerGTS2HW-TMGT2D-TM (CHIRP/ClearVii)GT2D-TM (CHIRP/ClearVii)GT2D-TM (CHIRP/ClearVii)Transmit Power - Included Transducer3250 W Trad500 W Trad 3500 W ClearVii SideViiS00 W Trad S00 W Trad300 W Trad 300 W Trad 300 W ClearViiFrequencies Supported (kHz)High-Mide CHIRP (150-240 kHz)CHIRP (77/200 kHz) (150-240 kHz)CHIRP (77/200 kHz) (ClearVii SideVii)CHIRP (77/200 kHz) (ClearVii SideVii)Maximum Depth Capabilities with Included TransducerS000 (f (raditional) 250 fi (IclearVii)2,300 fi (raditional) 250 fi (IclearVii)2,300 fi (raditional) 250 fi (IclearVii)1,750 fi (raditional) 250 fi (IclearVii)Vadible Alarms User DataSharing Cable Compatible (Ser DataSharing Cable Compatible (Fis Ser Die Ser Die<	Internal High-sensitivity GPS	Yes	Yes	Yes	Yes
CHIRP Training Dual Frequency (50/200 kHz)YesYesYesYesDual Frequency (50/200 kHz)YesYesYesYesYesDual Beam (77/200 kHz)YesYesYesYesYesDual Beam (77/200 kHz)YesYesYesYesYesCHIRP TsideViuYesYesYesYesYesCHIRP SideViuYesN/AN/AN/AN/AIncluded TransducerCfi20-TM (High Wide CHIRP/ ClearVU) SideViuCfi20-TM (CHIRP/ClearVi)Cfi20-TM (CHIRP/ClearVi)Gf120-TM (CHIRP/ClearVi)Transmit Power - Included TransducerS500 W TradS500 W TradS500 W TradS00 W TradTransmit Power - Included TransducerS500 W TradS500 W TradS00 W TradS00 W TradTransmit Power - Included TransducerS500 W TradS500 W TradS00 W TradS00 W TradTransmit Power - Included TransducerS500 W TradS500 W TradS00 W TradS00 W ClearViiTransmit Power - Included Transducer'S500 W TradS500 W TradS00 W ClearViiS00 W ClearViiVicher VicisdeViiS500 KHz)ClearVii (455/800 kHz)ClearVii (455/800 kHz)ClearVii (455/800 kHz)With Included Transducer'S500 T (ClearVii)S200 ft (Icalitional) 250 ft (ClearVii)S200 ft (Icalitional) 250 ft (ClearVii)S500 T (So00 W TradWaypointsS000 T (Traditional) 250 ft (ClearVii)S000 T (So00 W TradS000 W TradS000 W TradWaypointsS000 ft (Traditional) 250 ft (ClearVii)S	Built-in Quickdraw	Yes	Yes	Yes	Yes
Number Dual Frequency G0/200 kHz)YesYesYesDual Beam (77/200 kHz)YesYesYesYesCHIRP ClearVüYesYesYesYesCHIRP SideVüYesN/AN/AN/AIncluded TransducerGTS2HW-TM (Hith/Wide CHIRP/ ClearVü/SideVü)GT20-TM (CHIRP/ClearVü)GT20-TM (CHIRP/ClearVü)GT20-TM (CHIRP/ClearVü)Transmit Power - Included Transducer350 W Trad 350 W ClearVü/SideVü)S00 W Trad S00 W Trad S00 W TradS00 W Trad S00 W ClearVüFrequencies Supported (kHz)250 Ht/GtarVü S00 K1 (ClearVü)S00 ft (raditional) 250 ft (ClearVü S00 K Hz)S00 ft (raditional) S00 ft (raditional) 250 ft (ClearVü S00 K Hz)S00 ft (raditional) S00 ft (raditional) S00 ft (raditional) 250 ft (ClearVü S00 ft (raditional) 250 ft (ClearVü S00 ft (raditional) 250 ft (ClearVü S00 ft (raditional) S00 f	Built-in Wi-Fi®	Yes	Yes	No	No
Dual Beam (77/200 kHz)YesYesYesYesCHIRP ClearViiYesYesYesYesCHIRP SideViiYesN/AN/AN/AIncluded TransducerGT52HWTM (EdraVii) SideVii)GT20-TM (CHIRP/ClearVii)GT20-TM (CHIRP/ClearVii)GT20-TM (CHIRP/ClearVii)Transmit Power - Included Transducer250 W Trad 350 W ClearVii SideVii500 W Trad 500 W ClearVii300 W Trad 300 W Trad 500 W ClearViiFrequencies Supported (kHz)High-Wide CHIRP (ClearVii) SideViiCHIRP (77/200 kHz) ClearVii (455/800 kHz)CHIRP (77/200 kHz) ClearVii (455/800 kHz)CHIRP 77/200 kHz ClearVii (455/800 kHz)Maximum Depth Capabilities with Included Transducer'B800 ft Iraditional) 250 ft (ClearVii)2,300 ft (traditional) 250 ft (ClearVii)2,300 ft (traditional) 250 ft (ClearVii)Waypoints5.0005.0005.0005.000Audible AlarmsYesYesYesYesWater Temperature Log/GraphYesYesYesYesGPS SpeedYesYesYesYesYes	CHIRP Traditional Sonar	Yes	Yes	Yes	Yes
CHRP ClearVüMenMenMenCHRP SideVüYesYesN/AIncluded TransducerGTS2HW-TM (High Wide CHIRP/ ClearVü/SideVü)GT20-TM (CHIRP/ClearVü)GT20-TM (CHIRP/ClearVü)Transmit Power - Included Transducer250 W Trad 350 W ClearVü/SideVü500 W Trad 500 W TradGT00-TM (CHIRP/ClearVü)Frequencies Supported (kHz)High-Wide CHIRP (150-240 kHz)CHIRP (77/200 kHz) ClearVü/SideVü (455/800 kHz)CHIRP (77/200 kHz) ClearVüCHIRP 77/200 kHz) ClearVüMaximum Depth Capabilities with Included Transducer'800 ft (traditional) 250 ft (ClearVü) 500 ft (traditional) 250 ft (ClearVü) 500 ft (traditional) 250 ft (ClearVü)2,300 ft (traditional) 250 ft (ClearVü)2,300 ft (traditional) 250 ft (ClearVü)Waypoints05,0005,0005,0005,000Audible AlarmsYesYesYesYesWater Temperature Log/GraphYesYesYesYesGPS SpeedYesYesYesYes	Dual Frequency (50/200 kHz)	Yes	Yes	Yes	Yes
CHIRP SideVüYesN/AN/ACHIRP SideVüYesN/AN/AN/AIncluded TransducerCf52HW-TM (High Wide CHIRP/ ClearVü/SideVü)Cf20-TM (CHIRP/ClearVü)Cf20-TM (CHIRP/ClearVü)Cf20-TM (CHIRP/ClearVü)Transmit Power - Included TransducerS05 W Trad 350 W ClearVü/SideVüS00 W Trad 500 W TradS00 W Trad 500 W ClearVüS00 W Trad 300 W ClearVüFrequencies Supported (kHz)High-Wide CHIRP (150-240 kHz) (150-240 kHz)CCHIRP (77/200 kHz) ClearVü/SideVü (455/800 kHz)CCHIRP (77/200 kHz) ClearVüCHIRP 77/200 kHz ClearVüCHIRP 77/200 kHz ClearVüMaximum Depth Capabilities with Included Transducer'800 ft (traditional) 250 ft (ClearVü) 500 ft (traditional) 250 ft (ClearVü)2,300 ft (traditional) 250 ft (ClearVü)1,750 ft (traditional) 250 ft (ClearVü)WaypointsMode 100 ft def 250 ft (ClearVü)YesMesMesUser Data Sharing Cable Compatibe Water Temperature Log/GraphYesYesYesYesGPS SpeedYesYesYesYesYesYes	Dual Beam (77/200 kHz)	Yes	Yes	Yes	Yes
Included TransducerGT52HW-TM (High Wide CHRP/ ClearVü/SideVü)GT20-TM (CHRP/ClearVü)GT20-TM (CHRP/ClearVü)Transmit Power - Included Transducer350 W Trad 350 W ClearVü500 W Trad 500 W ClearVü300 W Trad 300 W ClearVüFrequencies Supported (kHz)High-Wide CHIRP (150-240 kHz) ClearVü/SideVüS00 W Trad 500 W ClearVü300 W ClearVüMaximum Depth Capabilities with Included Transducer'800 ft (traditional) 250 ft (ClearVü2,300 ft (traditional) 250 ft (ClearVüCHIRP 77/200 kHz) ClearVü (455/800 kHz)CHIRP 77/200 kHz) ClearVü (455/800 kHz)Maximum Depth Capabilities with Included Transducer'800 ft (traditional) 250 ft (ClearVü2,300 ft (traditional) 250 ft (ClearVü1,750 ft (traditional) 250 ft (ClearVüMaximum Depth Capabilities with Included Transducer'800 ft (traditional) 250 ft (ClearVü2,300 ft (traditional) 250 ft (ClearVü1,750 ft (traditional) 250 ft (ClearVüWaypoints50005000500050005000Judible AlarmsYesYesYesYesWater Temperature Log/GraphYesYesYesYesGPS SpeedYesYesYesYesYes	CHIRP ClearVü	Yes	Yes	Yes	Yes
Included Transducer(High Wide CHIRP/ ClearVU/SideVU)G12U-FM (CHIRP/ClearVU)G12U-FM (CHIRP/ClearVU)G12U-FM (CHIRP/ClearVU)Transmit Power - Included Transducer350 W Trad 350 W ClearVU/SideVU500 W Trad 500 W ClearVU300 W Trad 300 W ClearVUFrequencies Supported (kHz)High-Wide CHIRP (150-240 kHz) ClearVU/SideVU ClearVU/SideVU ClearVU/SideVU ClearVU/SideVU ClearVU/SideVU (455/800 kHz)CHIRP (77/200 kHz) ClearVU (455/800 kHz)CHIRP 77/200 kHz) ClearVU (455/800 kHz)CHIRP 77/200 kHz) ClearVU (455/800 kHz)Maximum Depth Capabilities with Included Transducer'800 ft (traditional) 250 ft (ClearVU) 500 ft Left/Right (SideVU)2,300 ft (traditional) 250 ft (ClearVU) 500 ft Left/Right (SideVU)300 W ClearVU S00 ft (traditional) 250 ft (ClearVU) 500 ft Left/Right (SideVU)300 ft (traditional) 250 ft (ClearVU) 500 ft ClearVU300 ft (traditional) 250 ft (ClearVU) 500 ft ClearVU300 ft (traditional) 250 ft (ClearVU) 500 ft ClearVU300 ft (traditional) 250 ft (ClearVU)<	CHIRP SideVü		N/A	N/A	N/A
Included Transducer350 W ClearVü/SideVü500 W ClearVü500 W ClearVü300 W ClearVüFrequencies Supported (kHz)High-Wide CHIRP (150-240 kHz) ClearVü/SideVü (455/800 kHz)CHIRP (77/200 kHz) ClearVü (455/800 kHz)CHIRP 77/200 kHz ClearVü (455/800 kHz)CHIRP 77/200 kHz ClearVü (455/800 kHz)Maximum Depth Capabilities with Included Transducer'800 ft (traditional) 250 ft (ClearVü) 500 t Let/Right (SideVü) 500 ft (clearVü) 500 ft (clearVü) 500 ft (clearVü)2,300 ft (traditional) 250 ft (ClearVü)2,300 ft (traditional) 250 ft (ClearVü)1,750 ft (traditional) 250 ft (ClearVü)Waypoints5,0005,0005,0005,0005,0005,000Number Capabilities User Data Sharing Cable CompatibeYesYesYesYesWater Temperature Log/GraphYesYesYesYesYesYesGPS SpeedYesYesYesYesYesYes	Included Transducer	(High Wide CHIRP/			
Frequencies Supported (kHz)(150-240 kHz) ClearVii/SideVii (455/800 kHz)CHIRP (77/200 kHz) ClearVii (455/800 kHz)CHIRP 77/200 kHz ClearVii (455/800 kHz)Maximum Depth Capabilities with Included Transducer'800 ft (traditional) 250 ft (ClearVii) 500 ft Left/Right (SideVii) 500 ft Left/Right (SideVii)2,300 ft (traditional) 250 ft (ClearVii)2,300 ft (traditional) 250 ft (ClearVii)Waypoints5,0005,0005,0005,000Audible Alarms9999User Data Sharing Cable Compatible Water Temperature Log/GraphYes99Yes9Yes99GPS SpeedYes9YesYes					
Maximum Deptr Capabilities with Included Transducer1250 ft (ClearVii)250 ft (ClearVii)1,750 ft (Raditional) 250 ft (ClearVii)Waypoints5,0005,0005,0005,000Audible AlarmsYesYesYesUser Data Sharing Cable Compatible Water Temperature Log/GraphYesYesYesGPS SpeedYesYesYesYes	Frequencies Supported (kHz)	(150-240 kHz) ClearVü/SideVü			
Audible AlarmsYesYesYesSprate Sharing Cable CompatibleYesYesYesWater Temperature Log/GraphYesYesYesGPS SpeedYesYesYesYes		250 ft (ClearVü)			
User Data Sharing Cable CompatibleYesYesYesWater Temperature Log/GraphYesYesYesYesGPS SpeedYesYesYesYes	Waypoints	5,000	5,000	5,000	5,000
Water Temperature Log/Graph Yes Yes Yes GPS Speed Yes Yes Yes Yes	Audible Alarms	Yes	Yes	Yes	Yes
GPS Speed Yes Yes Yes	User Data Sharing Cable Compatible	Yes	Yes	Yes	Yes
	Water Temperature Log/Graph	Yes	Yes	Yes	Yes
Flasher Yes Yes Yes	GPS Speed	Yes	Yes	Yes	Yes
	Flasher	Yes	Yes	Yes	Yes

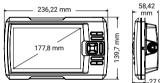
STRIKER VIVID 9SV

STRIKER VIVID 4CV

88 C

GSD 24

204



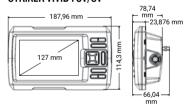
40,64 m -- 63,5 mm

VOUDDUDDUD

58.4 mm



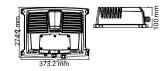
STRIKER VIVID 7CV/SV



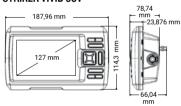
GWIND/GWIND WIRELESS 2



GSD 26



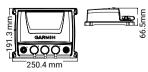
STRIKER VIVID 5CV



GWIND RACE



GCV 10 AND GSD 25





gWind

	Diff	1		(C INC)
Unit dimensions, WxHxD	610 x 345 mm	H=1180 mm	610 x 345 mm	170 x 90 x 50 mm
Weight	260 g	320 g	350 g	196 g
Cable length	25 m	25 m	N/A	NMEA 2000 (2m) Nexus network (5m)
Waterproof	IPX6	IPX6	IPX6	IPX6
Temp range	From -15°C to 70°C			
Voltage range	9-16V	9-16V	N/A	9-16V
Power usage	0.33W	0.33W	Solar powered	0.85W
Compass safe distance	N/A	N/A	N/A	0.1m
Accuracy angle	Better than ±1.5°	Better than ±1.5°	Better than ±1.5°	N/A
Speed	Better than ±3%	Better than ±3%	Better than ±3%	N/A
NMEA 2000 Load Equivalency Number (LEN)	N/A	N/A	N/A	4
Wireless connectivity	No	No	Yes	No

gWind Race Transducer

gWind Wireless 2 Transducer

GND 10

gWind Transducer

Sonar Modules	GSD 24	GSD 25	GSD 26	GCV 10	GCV 20
Physical size (WxHxD)	275 x 82 x 204 mm	192 x 66 x 251 mm	363 x 100 x 274 mm	192 x 66 x 251 mm	192 x 66 x 251 mm
White line	Yes	Yes	Yes	No	No
Waterproof according to standard	IPX7	IPX7	IPX7	IPX7	IPX7
Ultrascroll	Yes	Yes	Yes	No	No
Compatible with Dual Frequency transducers	Yes	Yes	Yes	No	No
Autogain technology	Yes	Yes	Yes	Yes	Yes
Power supply	10-35 V	10-35 V	10-35 V	10-35 V	10-35 V
Power consumption	2-29 W	2-29 W	5-94 W	10.5 W	10.5W
Max. depth1	5000 ft	ClearVü: 750 ft SideVü: 500 ft Traditional: 5,000 ft	10 000 ft	ClearVü: 750 ft SideVü: 500 ft	ClearVü: 750 ft SideVü: 500 ft
Fish symbol ID	Yes	Yes	Yes	No	No
Frequency	Traditional: 50/200, 77/200, 83/200 kHz	Traditional: 50/200, 77/200, 83/200 kHz Single Channel CHIRP: 40-250 kHz Dual Channel CHIRP: 40-250 kHz SideVii/ClearVii CHIRP: 455/800 kHz CHIRP: 260/455 kHz	Traditional: 50/200, 77/200, 83/200 kHz Single Channel CHIRP: 40-250 kHz Dual Channel CHIRP: 40-250 kHz	SideVü/ClearVü CHIRP: 455/800 kHz CHIRP: 260/455 kHz	SideVü/ClearVü CHIRP: 455/800/1200 kHz
Max. transducer angle Dual Frequency	45/10°	45/10°	45/10°	n/a	n/a
Depth Controlled Gain	Yes	Yes	Yes	No	No
See Thru compatible	Yes	Yes	Yes	No	No
Output power	Up to 2 kW	Up to 1 kW	Up to 3 kW	500 W	500 W
Garmin Marine Network compatible	Yes	Yes	Yes	Yes	Yes

Cameras GC12 Marine Camera GC200 Marine IP Camera GC100 Marine Camera Video Resolution 976(H) x 582(V) Up to 1920 x 1080P1 720p Up to 30 Meters Low-light vision Up to 10 Meters Up to 3 Meters IPX7 IPX7 IPX7 Water rating One-button startup • Pair multiple camera • ٠ Composite Video Ethernet Wi-Fi® **Connection to Chartplotter** 12V and POE (9-18VDC or PoE) Hardwired Power 12V (9-18VDC) 12V (10-30VDC) **Compass Safe Distance** 6 1/8" (155 mm) 4" (100 mm) Operating temperature -10 to 501 (from 14 to 1221) -20 to 601 (from -4 to 1401) -20 to 601 (from -4 to 1401) Viewing angle, DxHxV(°) 95.0° x 69.0° x 52.0° 123° x 99° x 74° 183° x 160° x 90° 205 g 520 g 50 g Weight Unit dimensions 5.1 x 4.4 cm (2.0" x 1.7") 8.9 x 8.3 cm (3.5" x 3.25") 5.0 x 4.0 x 2.8 cm (2.0" x 1.6" x 1.1") Power consumption 80mA (IR Off), 170mA (IR On) 210mA (IR Off), 370mA (IR On) 10 W

Handhelds	quatix 6	GPSMAP 276Cx	GPS 73	GPSMAP 78/78s	inReach Mini Marine Bundle	GPSMAP 86i	GPSMAP 86s
and Wearables	Q						
Number of waypoints	1,000	10,000	1,000	2,000	500	10,000	10,000
Internal map memory	32 MB	8.0 GB	No	1.7 GB	No	16GB	16GB
Number of routes	30	250	50	200	20	250	250
Basemap, preprogrammed map	Yes	Worldwide basemap	No	Worldwide basemap	No	Worldwide basemap	Worldwide basemap
Additional map options	BlueChart g3	Bluechart g3, City Navigator, topo, topo 24k	No	Bluechart g3, City Navigator, Topo maps - and Prime outdoor maps	No	Bluechart g3, City Navigator, Topo maps- and Prime outdoor maps	Bluechart g3, City Navigator, Topo maps- and Prime outdoor maps
Battery life	6: 28 days (expedition GPS activity); up to 36 hours (GPS mode); up to 14 days (smartwatch mode) 6X Solar: 46 days plus 10 days' (expedition GPS activity); up to 60 hours	up to 16 hours (lithium-ion); up to 8 hours (AA batteries)	18+ hours on 2 AA batteries (not included)	20 hours (2 AA)	up to 90 hours at 10-minute tracking (default) up to 35 hours at 10-minute tracking with 1-second logging up to 24 days at 30-minute tracking power save mode up to 1 year when powered off	35 hours in 10-minutes tracking mode Up to 200 hours (Expedition mode)	Up to 40 hours (Standard mode) Up to 200 hours (Expedition mode)
Display size	6: 1.3" (33.02 mm) 6X Solar: 1.4" (35.56 mm)	5" diagonal	2.6" diagonal	2.6" diagonal	1.3" diagonal	3" diagonal	3" diagonal
Display type	Transflective MIP color	TFT (Transflective)	TFT (Transflective)	TFT (Transflective)	sunlight-readable, monochrome, transflective memory-in-pixel (MIP)	Transflective, 65K colour TFT	Transflective, 65K colour TFT
Area calculation	Yes	Yes	Yes	Yes	No	Yes	Yes
Display resolution pixels (HxW)	6: 260 x 260 6X Solar: 280 x 280	800 x 480	160 x 128	240 x 160	128 x 128	240 x 400	240 x 400
Standard GPS antenna	EX0 [™] antenna	Internal	Internal	Integral quad helix	Integral quad helix	Quad helix	Quad helix
Bluetooth®	BLUETOOTH® ANT+®, Wi-Fi®	Bluetooth / WiFi	No	No	Yes	Yes	Yes
TracBack function	Yes	Yes	Yes	Yes	No	Yes	Yes
Number of track points	10,000	20,000	10,000	10,000	10,000	10,000	10,000
Weight	6: 83 g 6X Solar: 82 g	450 g (litium), 415 g (AA)	232,4 g	218 g	100 g	272 g	272 g
Alarm	Yes	Yes	Yes	Yes	No	Yes	Yes
Waterproof according to standard	10 ATM	IPX7	IPX7	IPX7	IPX7	IPX7	IPX7
Physical size in mm (HxWxD)	6: 47 x 47 x 14.7 6X Solar: 51 x 51 x 14.9	191 x 94 x 43 mm	157 x 69 x 30 mm	152 x 66 x 30 mm	51.7 x 99.0 x 26.1 mm	178 x 68 x 44 mm	178 x 68 x 44 mm
Separate Serial & USB interfaces	No	Yes	Yes	Yes	No	Yes	Yes
Storage of cartography	No	microSD memory card	No	microSD memory card	No	microSD memory card	microSD memory card
Backlit display	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Input for external antenna	No	Yes	No	Yes	No	No	No
WAAS/EGNOS compatible	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Integral electronic compass	Yes	Yes	No	Yes (78s)	No	Yes	Yes
Integral barometric altimeter	Yes	Yes	No	Yes (78s)	No	Yes	Yes
Automatic route calculation	No	Yes, with City Navigator	No	Yes, with City Navigator	No	Yes (with optional mapping for detailed roads)	Yes (with optional mapping for detailed roads)
Calendar for hunting/fishing times	No	Yes	Yes	Yes	No	Yes	Yes
Solar & lunar calendar	Yes	Yes	Yes	Yes	No	Yes	Yes
Area waypoints	Yes	Yes	Yes	Yes	No	Yes	Yes
Tidal information	Yes	Yes	No	Yes	No	Yes	Yes
Power supply (external)	No	8-36 V	8-36 V	8-36 V	Indluded bare wire cable: 10-30V Unit: 5 V Micro USB	Indluded bare wire cable: 10-30V Unit: 5 V Micro USB	Indluded bare wire cable: 10-30V Unit: 5 V Micro USB
Waypoint icons	No	Yes	Yes	Yes	No	Yes	Yes
NMEA compatible	No	Yes (NMEA 0183)	Yes (NMEA 0183)	Yes (NMEA 0183)	No	Yes (NMEA 0183)	Yes (NMEA 0183)
Camera	No	No	No	No	No	No	No
Picture viewer	No	No	No	Yes	No	Yes	Yes
Floats	No	Yes	Yes	Yes	No	Yes	Yes

Autopilot Compatibility

Steering Type	Vessel Size/Type and Overall Use	Recommended Core Pack	Drive Unit Type	Components Included in Core Pack	Required Components not Included in Core Pack
Hydraulic	Premium, recommended option for most hydraulic steering installations, including Verado [®] , power assist and total cylinder volumes up to 24 cubic inches	Reactor™ 40 Hydraulic Core Pack with SmartPump™ v2	SmartPump v2	Reactor 40 SmartPump v2 Shadow Drive	
Hydraulic	Low-cost option and single-cylinder applications with cylinder volumes from 6 to 14 cubic inches	Reactor 40 Hydraulic Autopilot	GHP 1.2L Pump	Reactor 40 ECU 10 Shadow Drive GHC 20	010-00705-64: GHP 1.2L Pump
Hydraulic	Low-cost option for dual-cylinder applications with total cylinder volumes from 10 to 24 cubic inches	Reactor 40 Hydraulic Autopilot	GHP 2.0L Pump	Reactor 40 ECU 10 Shadow Drive GHC 20	010-00705-63: GHP 2.0L Pump
Hydraulic	Cruising applications only; for single engine outboard vessels less than 30' long for cylinder sizes up to 10 cubic inches	Compact Reactor™ 40 with Pump, GHC 20™ and Shadow Drive Technology Pack	1.0L Pump	Reactor 40 Compact ECU 1.0L Pump Shadow Drive, GHC 20	
Hydraulic	Cruising applications only; for single-engine outboard vessels less than 30' long for cylinder sizes up to 10 cubic inches	Compact Reactor 40 Hydraulic Autopilot with GHC 20 Pack	1.0L Pump	Reactor 40 Compact ECU 1.0L Pump Shadow Drive	
Hydraulic	Cruising Applications only, for single-engine outboard vessels less than 30' long for cylinder sizes up to 10 cubic inches	Compact Reactor 40 Hydrauilic Autopilot Starter Pack	1.0L Pump	Reactor 40 Compact ECU 1.0L Pump	
Hydraulic	Hydraulic steering vessels with non-Garmin drive units	Reactor 40 Mechanical/ Solenoid/Retrofit Corepack	Third Party Drive Unit	Reactor 40 ECU 12 GHC 20	Third-party drive unit 010-11533-00: Actuator Motor Cable 010-11829-00: GRF 10 Rudder sensor or 010-11532-00 + third party rudder sensor
Hydraulic	Verado hydraulic steering	Reactor™ 40 Hydraulic Core Pack with SmartPump™ v2 or Reactor 40 Hydraulic Autopilot	Smartpump v2 or 1.2L Pump	See kit for details	010-11202-02: Reactor Verado Apater Kit For use with 1.2L Pump: Third party adapter 1/4" NPT to ORB fitting
Mechanical Steering	Total vessel displacements from 48,000 to 79,000 pounds	Reator 40 Mechanical/ Solenoid/Retrofit Core Pack	Class B Linear Actuator	Reactor 40 ECU 12 GHC 20	010-11573-00: Class B linear actuator; has rudder feedback included
Mechanical Steering	Total vessel displacements up to 48,400 pounds	Reator 40 Mechanical/ Solenoid/Retrofit Core Pack	Class B Compact Linear Actuator	Reactor 40 ECU 12 GHC 20	010-12029-00: Class B linear actuator; has rudder feedback included
Mechanical Steering	Total vessel displacements up to 28,500 pounds, with very low backdrive force required	Reator 40 Mechanical/ Solenoid/Retrofit Core Pack	Class A Linear Actuator	Reactor 40 ECU 12 GHC 20	010-11572-00: Class A linear actuator; has rudder feedback included
Mechanical Steering	Sailboats with non-Garmin drive units	Reator 40 Mechanical/ Solenoid/Retrofit Core Pack	Third-party Drive Unit	Reactor 40 ECU 12 GHC 20	Third-party drive unit 010-11533-00: Actuator Motor Cable 010-11829-00: GRF 10 Rudder sensor or 010-11532-00 + third party rudder sensor
Steer by Wire	SeaStar Optimus	Reactor 40 Steer-by-wire Standard Core Pack		Reactor 40 GHC 20	
Steer by Wire	ZF Pod Drive	Reactor 40 Steer-by-wire Standard Core Pack		Reactor 40 GHC 20	
Steer by Wire	Yanmar	Reactor 40 Steer-by-wire Standard Core Pack		Reactor 40 GHC 20	
Steer by Wire	Yamaha Helm Master	Reactor 40 Steer-by-wire Core Pack for Yamaha Helm Master	Gateway Included	Reactor 40 Autopilot Gateway GHC 20	
Steer by Wire	Volvo IPS or Sterndrive	Reactor 40 Steer-by-wire Core Pack for Volvo-Penta	Gateway Included	Reactor 40 Autopilot Gateway GHC 20	
Solenoid	Constant running hydraulic pump systems with solenoid autopilot control	Reator 40 Mechanical/ Solenoid/Retrofit Core Pack	Third-party Solenoid Required	Reactor 40 ECU 12 GHC 20	010-11533-10: Solenoid Cable 010-11829-00: GRF 10 rudder sensor or 010-11532-00 plus third-party rudder sensor
Cable Steer	Most cable steered vessels	Reator 40 Mechanical/ Solenoid/Retrofit Core Pack	Third-party 12VDC Brushed Motor Actuator Required	Reactor 40 ECU 12 GHC 20	010-11533-00: Actuator Motor Cable 010-11829-00: GRF 10 rudder sensor or 010-11532-00 plus third-party rudder sensor
Auxillary Gas Engine (Kicker)	<20HP auxiliary gas engines from most major manufacturers	Reactor 40 Kicker	Steering Actuator Included	CCU, ECU 14, Steering Actuator Throttle Actuator Wireless Remote	



TIME TO USE YOUR GARMIN MARINE ELECTRONICS

To make using and understanding your Garmin electronics as easy as possible, we offer several online resources where you can watch informative videos that show our newest products in action. You can find videos that clearly explain and demonstrate everything from installation and set-up to step-by-step "How To Use" guidance that will help you get the most enjoyment and best performance from your Garmin electronics.

facebook.com/Garmin



twitter.com (@garmin)



MORE SERVICE

Of course, if you don't find the answers or help you need from our video resources, we also provide a quick link to an extensive list of Frequently Asked Questions on a variety of topics that have been brought up by other Garmin Owners.

support.garmin.com

QUESTIONS?

If you still haven't received the answer or explanation you need, then you can always contact one of our knowledgeable representatives by email or phone.



Garmin (Europe) Ltd Liberty House Hounsdown Business Park Southampton SO40 9LR United Kingdom

UK and Ireland Product Support Calls from outside UK: +44 870 850 1242 Calls within UK: 0808 238 0000



support.garmin.com

EMEA OFFICES AND DISTRIBUTORS

Country: Algeria Armenia Austria Azerbaiian Bahrain Belarus Belgium Bulgaria Croatia Bosnia Cyprus Czech Rep Denmark Egypt Egypt Estonia Finland France Georgia Germany Greece Hungary Iceland Irag Israel Italy Jordan Kazakhstan Kuwait Latvia Lebanon Lithuania Mauretania Malta Moldova Morocco Netherlands Norway Oman Poland Portugal Qatar Romania Russia Saudi Arabia Slovakia Sri Lanka Slovenia South Africa Spain Sweden Switzerland Tunisia Turkey UAE Ukraine United Kingdom Uzbekistan Yemen

Company: Kant International **Globalgis LLC** Garmin Austria Intelligent Systems AZ LLC H Aldehaen Boats W.L.L. Amnitex Ltd Garmin Belux GeoTrade Garmin Croatia C.A Petrides Ltd Garmin Czech Garmin Denmark **Delta Communications** Suez Electronics Eng & Trd Garmin Poland Garmin Nordic Finland Oy **Garmin France** Geoland Ltd Garmin Deutschland **Digital Tracer Electronics S.A** Navi-Gate Kft. **RS** Import Almasaha Company Ronlight Health Ltd Garmin Italia SpA Navcom International **Bassar Electronics Ltd** Seas & Deserts Group Garmin Poland Azzi Sport Marine S.A.R.L Garmin Poland Dahi Freres Medcomms Ltd Navi Solutions Soreman Garmin Nederland BV Garmin Norway **Bahwan Projects & Telecoms** Garmin Poland Garmin Portugal Jassim Ahmed Al Lingawi Garmin Romania Navicom AMIT Conan s.r.o Techinnovators (PVT) Ltd Garmin Slovenia Garmin Southern Africa (Pty) Ltd Garmin Iberia Garmin Sweden Bucher & Walt SA VMD Baytekin Teknik Cihazlar Tic Ltd Sti AMIT Navionika Co Ltd Garmin UK MGM LLC Jamal Brek Al-Tamimi For Trading

Phone:

GARMIN.COM