

The Garmin Marine Network™

For boaters who want the ultimate in nautical information management, the Garmin Marine Network is the long-anticipated missing link. This proprietary high-speed data system seamlessly connects multiple plug-and-play marine components—to bring GPS position data, charting, weather, sonar, radar and/or other selected inputs right to the boater's fingertips.

The 100-megabit Garmin network is completely waterproof and is anchored by the GPSMAP 3010C and GPSMAP 3006C chartplotters with built-in network links. These multifunction displays (MFDs) automatically detect any and all peripherals once they're connected.

And the same network cabling is used for both unit-to-unit and unit-to-network connections. So it's easy to connect additional displays or remote sensors such as Garmin's GDL™ 30/30A for XM Satellite Weather and XM Satellite Radio service, the GSD™ 20 for sonar, Garmin radar and other emerging marine technologies.

Boaters can connect a GPS antenna and one remote sensor directly to the MFD, or with the addition of the GMS™ 10 Network Port Expander, multiple MFDs and sensors can be tied into a shipwide network. Each networked MFD can be configured independently, with customizable page fields. And two composite video inputs on each unit allow for live-cam monitoring of remote areas of the boat.

The Garmin Marine Network lets you link your GPSMAP 3000 series chartplotter/MFD into the XM WX Satellite Weather service—for near real-time overlays of animated NEXRAD Radar (and other graphical information) on your BlueChart™ navigation display. The GDL30A enables XM Radio service for audio entertainment in addition to XM WX Satellite Weather Service.

Key network components



GPSMAP™ 3006C & 3010C
With their large-format 256 color screens, high-speed processors, powerful 12-channel GPS receivers, and multifunction display versatility, the Garmin GPSMAP 3006C and 3010C are the anchor components of the Garmin Marine Network.

Whether you choose the crisp 6.4-inch diagonal LCD screen on the GPSMAP 3006C—or the larger 10.4-inch display on the 3010C—you'll get incredible contrast and detailing, even in direct sunlight. Tough enough to withstand rain, sunlight, saltwater spray and plenty of other elements, the cases are fully gasketed and waterproof to IPX7 standards. And their slimline design makes for easy installation in cabin bulkheads or open cockpits.

Compatible with MapSource® BlueChart™, these versatile multifunction displays (MFDs) are powered by a high-speed processor and graphics controller for fast redraw of charts and weather graphics. Best of all, their proprietary Garmin "plug-and-play" networking capability allows users to access a broad spectrum of optional marine navigation data, radar, sonar, video inputs, satellite weather, and other external sensor information.

- 10.25" W x 6.5" H x 3.25" D (3006C unit)
- 6.4" diagonal screen (3006C)
- 13.1" W x 8.8" H x 3.25" D (3010C unit)
- 10.4" diagonal screen (3010C)
- 640 x 480 pixel VGA
- 2 composite video inputs
- 1 VGA PC monitor out
- High-speed RSC processor
- Optional remote control
- Accepts two data cards



GMR™ 20/40 Marine Radar
Steering clear of trouble just got easier—with Garmin's new GMR 20/40 series marine radars. Combining power, range and high-definition targeting with easy-to-use navigation features, these X-band digital color radars come with automated tuning and simple "plug-and-play" installation. Unlike competitive designs, which require a dedicated display/processor unit, all Garmin radar processing is contained in the remote antenna/canister. The result: greater efficiency and redundancy, since any chartplotter on the network can display and control the radar. Both units offer chart overlay capability for easier orientation. And to aid in hazard avoidance, the units also offer MAAPRS target tracking. The GMR 20 is a 2 kW radar with 24 nm range. The GMR 40 offers 4 kW output and a 36 nm range. Both units feature sleek, 28-inch low-profile radomes with an industry-leading 3.6° beamwidth for the clearest target definition at all ranges and in all weather conditions.

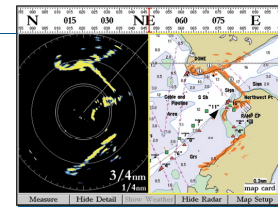
- 24 RPM antenna sweep
- Max. Range: GMR 20—24 nm; GMR 40—35 nm
- Min. Range: 20 meters
- Weight: 25 lb. (radome); 8 lb. (cable)
- Waterproof to IPX7 standards



GDL™ 30/30A
Through a partnership with XM Satellite Radio and their XM WX Satellite Weather service, Garmin now makes it possible for live graphical weather data to be accessed directly on the GPSMAP 3010C or 3006C—without the need for a separate PC interface. For the first time ever, mariners using the GDL™ 30 weather data receiver can view the same leading-edge satellite weather data provided to television meteorologists across the United States. The GDL 30 relays the continuous transmission of XM WX Satellite Weather service, including animated NEXRAD weather radar and forecasts, current conditions, surface air pressure, visibility, precipitation, wind data, wave data, storm cell size, speed and direction, and surface temperature—for the boat's current location or along a projected path. Some 20 different types of graphical weather information can be accessed (by U.S. subscribers) and overlaid directly onto the chartplotter display, depending on the XM WX subscription package chosen—Solo, Skipperman, or Master Mariner. In addition to the XM WX Satellite Weather service, subscribers wanting to add XM Satellite Radio entertainment to the package can opt for the GDL 30A receiver, which provides a unique audio interface with the 3010C and 3006C—allowing for connection to an onboard stereo system. Over 130 channels of XM Satellite Radio service with sports, news, talk, commercial-free music and more can be delivered via the GDL 30A for an additional monthly fee.

- 7.3" W x 2.2" H x 6.7" D unit
- Waterproof to IPX7 standards
- Simple plug-and-play installation
- Unit weight approximately 2.7 lbs
- Pole mount antenna, 30-ft. cable included

In addition to overlay mode, a split screen view allows simultaneous display of mapping alongside standard radar weather.



As the diagram shows, multiple MFD's and sensors can be seamlessly networked via the Garmin GMS™ 10 Network Port Expander, which is fully waterproof and offers simple plug and play connectivity.



GSD™ 20

A remote "slab box" sonar unit designed to integrate with the Garmin Marine Network and its GPSMAP 2010 and 2006 chartplotters, the GSD 20 brings added depth to your view from on deck.

Offering 4,000 watts of power peak-to-peak (500 watts RMS) at 50/200 kHz, the GSD 20 sends sonar data serially (in a Garmin proprietary format) to the networked chartplotter screens onboard. This sonar information can be viewed in either split- or full-screen configurations, allowing users to track bottom trends and surface navigation data at the same time.

Other features include display auto ranging, 2X and 4X auto and manual zoom, selectable fish symbol sizes, and exclusive Garmin See-Thru™ technology that helps separate fish returns from thermoclines and structure.

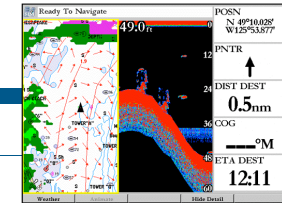
- 4.75" W x 6.75" L unit
- Dual frequency output (50/200 kHz)
- 4,000 watts transmit power peak-to-peak (500 watts RMS)
- 1,500 foot maximum depth



GMS™ 10

The "nerve center" of the Garmin Marine Network is the GMS 10 Network Port Expander. With its robust 100-megabit switch, users can connect multiple MFDs and sensors to their onboard network and gain the benefit of Ethernet-like data transfer speeds up to 10 times faster than some competitive systems.

The GMS 10 is ruggedized for operation in corrosive marine environments. All connections are totally waterproof, and sealed covers keep harmful moisture away from unused data ports. Plug-and-play design means that all peripherals are automatically detected and readily accessible once they're connected to the network. Likewise, owners can easily expand their systems, using the same standard data cable to plug additional units and displays into the GMS 10 network ports.



A useful split-screen display feature lets you combine sonar and chartplotter inputs to view bottom contours and surface navigation data simultaneously.

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Easy network updates

Keeping network software updated can be a time-consuming chore. But not with the Garmin Marine Network™. It's designed with a unique network upgrade solution that makes the whole process virtually automatic.

The user simply prompts the MFD to read the current software version of all components within the network and write them onto a Garmin data card. Then, the user uploads this data via PC to the Garmin website, where the newest software versions are downloaded to the data card. Once that card is re-inserted into the MFD, every system on the network is automatically updated with current software.

Better weather ahead

**XM WX Satellite Weather
XM Satellite Radio Entertainment**

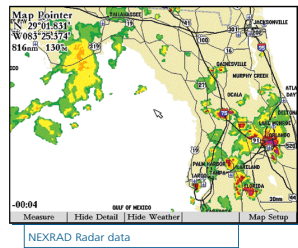
You can't control the weather. But now, with the Garmin Marine Network™, you can have the confidence of knowing what weather lies ahead.

By adding a GDL 30 data link receiver to your network, you're able to access the most comprehensive array of satellite weather data and analysis ever offered to the North American civil marine market. As an option, the GDL 30A model receiver not only provides the same suite of weather products as the GDL 30, but also enables reception of XM Radio entertainment features.

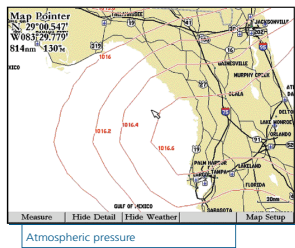
In near real-time, XM WX Satellite Weather delivers location-specific, animated, high-resolution weather data, in chart-overlay form, directly to a subscriber's onboard chartplotter—without the need for a separate PC connection.

Over 20 different types of graphical weather information can be overlaid onto the G5MAP™ 3000 series multifunction color display via the Garmin Marine Network interface (depending on the XM WX marine package selected by the subscriber). The XM WX marine packages— Sailor, Fisherman, and Master Mariner—offer subscribers the same site-specific, analytical weather technology and NEXRAD data that are used by television meteorologists across the country.

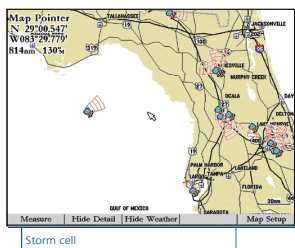
Data for the XM WX Weather service are collected from multiple government agencies and commercial providers, as well as private sources, and then analyzed and processed using proprietary and patented methods. XM WX is the only weather service to have its computer servers co-located in the National Climatic Data Center—a division of the National Oceanic and Atmospheric Administration (NOAA), which is the world's largest archive of active weather data. XM's two powerful S-band geostationary satellites, positioned over the east and west coasts, provide seamless, continuous, redundant coverage across the continental U.S. and out to one hundred miles offshore.



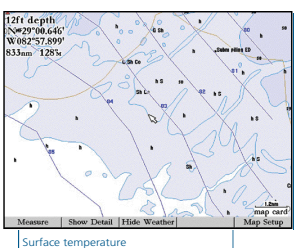
NEXRAD Radar data



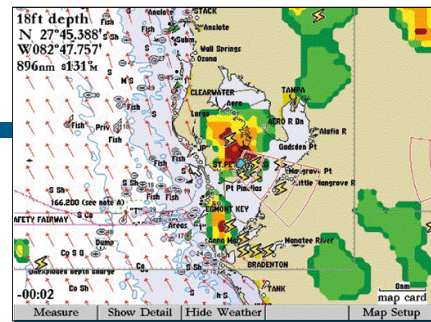
Atmospheric pressure



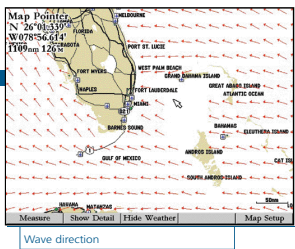
Storm cell



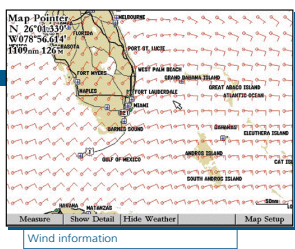
Surface temperature



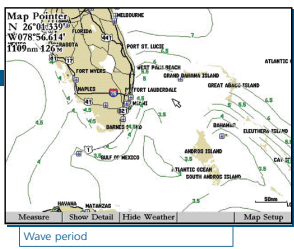
Overlay near real-time NEXRAD Radar (and other graphical information) on top of your BlueChart™ navigation display.



Wave direction



Wind information



Wave period

Display information available with the Garmin Marine Network™ and the XM WX Master Mariner package.

- Current conditions
- City forecasts
- NEXRAD Radar with precipitation
- Type (animated, high resolution)
- Surface air pressure
- Surface analysis
- Height, Low and fronts
- Lightning
- Storm cell size, speed and direction
- Hurricane track
- Visibility forecast
- Wind speed
- Sea surface temperature
- Wind direction
- Wave period
- Wave direction
- Wave height
- Buoy data

Cartography

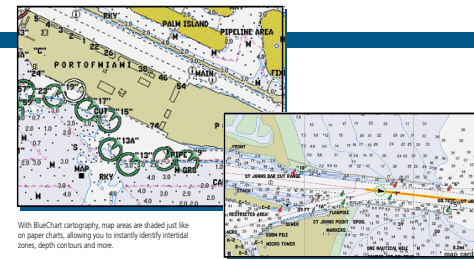
Complete coverage, inland and offshore

Your network navigation system deserves the best in cartography. That's why Garmin has developed our own exclusive marine cartography, BlueChart™, which works in seamless integration with the 3000 series network chartplotter/MFDs featured here. These detailed electronic nautical charts look just like paper charts, when displayed on your Garmin chartplotter. Features include shading between depth contours, spot soundings, navigational aids, wrecks, obstructions, intertidal zones, restricted areas and



more. BlueChart cartography is object-oriented, which means you can pan to an object on the map and instantly view information about that point.

BlueChart cartography is offered in two forms—pre-programmed data cards or MapSource™ CD-ROMs. MapSource CDs contain detailed maps that can be downloaded to blank data cards or directly to units with PC interfaces. A variety of CDs offer enhanced mapping detail that includes offshore cartography, fishing information, island features, topographic maps, locations of services and attractions, and much more.



With BlueChart cartography, map areas are shaded just like on paper charts, allowing you to instantly identify intertidal zones, depth contours and more.

Support

Getting the most out of your Garmin Marine Network™

You've found the ideal way to integrate your weather and navigation information. But even so, you know your system is not complete without one more important feature: Support. Whether you need operational assistance as you work through those new-owner jitters, installation help from one of our worldwide dealers, or maybe there's an interface question you want to bounce off our technical support pros—whatever the need, you can count on Garmin to back you up and keep you on track.

After all, standing behind our products and our customers is what continues to keep us out in front. Because our goal is to make you the most worry-free link in the whole Garmin Marine Network.



Integrated Marine Networking



The Garmin Marine Network™ links multiple components to create a fully integrated nautical data system.