



QUADRANS

IMO GRADE SURFACE GYROCOMPASS
AND ATTITUDE REFERENCE SYSTEM



QUADRANS

IMO GRADE SURFACE GYROCOMPASS AND ATTITUDE REFERENCE SYSTEM

QUADRANS is a fully strap-down fiber-optic gyrocompass and attitude reference system. IMO and IMO-HSC certified, it provides all the necessary data for demanding navigation and control applications at a fast rate and with precise time-stamping. Thanks to its low weight and small size, its low power consumption and its Ethernet/serial connectivity it can be integrated with ease on any platform.

Based on state-of-the-art fiber-optic gyroscope technology, **QUADRANS** provides a full range of navigation needs, without any compromise on performance and without requiring any maintenance during its service life.

FEATURES

- Small compact and plug and play system
- Complete gyrocompass
- Unique strap-down technology fiber-optic gyroscope (FOG)
- Ethernet, web-based man-machine interface (MMI)
- IMO certification

BENEFITS

- Plug and play
- Fast settling time
- Maintenance free
- Easy integration
- High reliability

PERFORMANCE

- | | |
|--------------------------------------|--------------------------|
| • Heading accuracy ⁽¹⁾⁽²⁾ | 0.23 deg secant latitude |
| • Roll/pitch accuracy ⁽¹⁾ | 0.1 deg |
| • Setting time | < 30 mn (all conditions) |

(1) RMS values

(2) Secant latitude -1/cosine latitude

OPERATING RANGE / ENVIRONMENT

- | | |
|---------------------------------|------------------------------------|
| • Operating/storage temperature | -20°C to 55°C / -40°C to 80°C |
| • Heading/roll/pitch | 0 to +360 deg / ±180 deg / ±90 deg |



APPLICATIONS

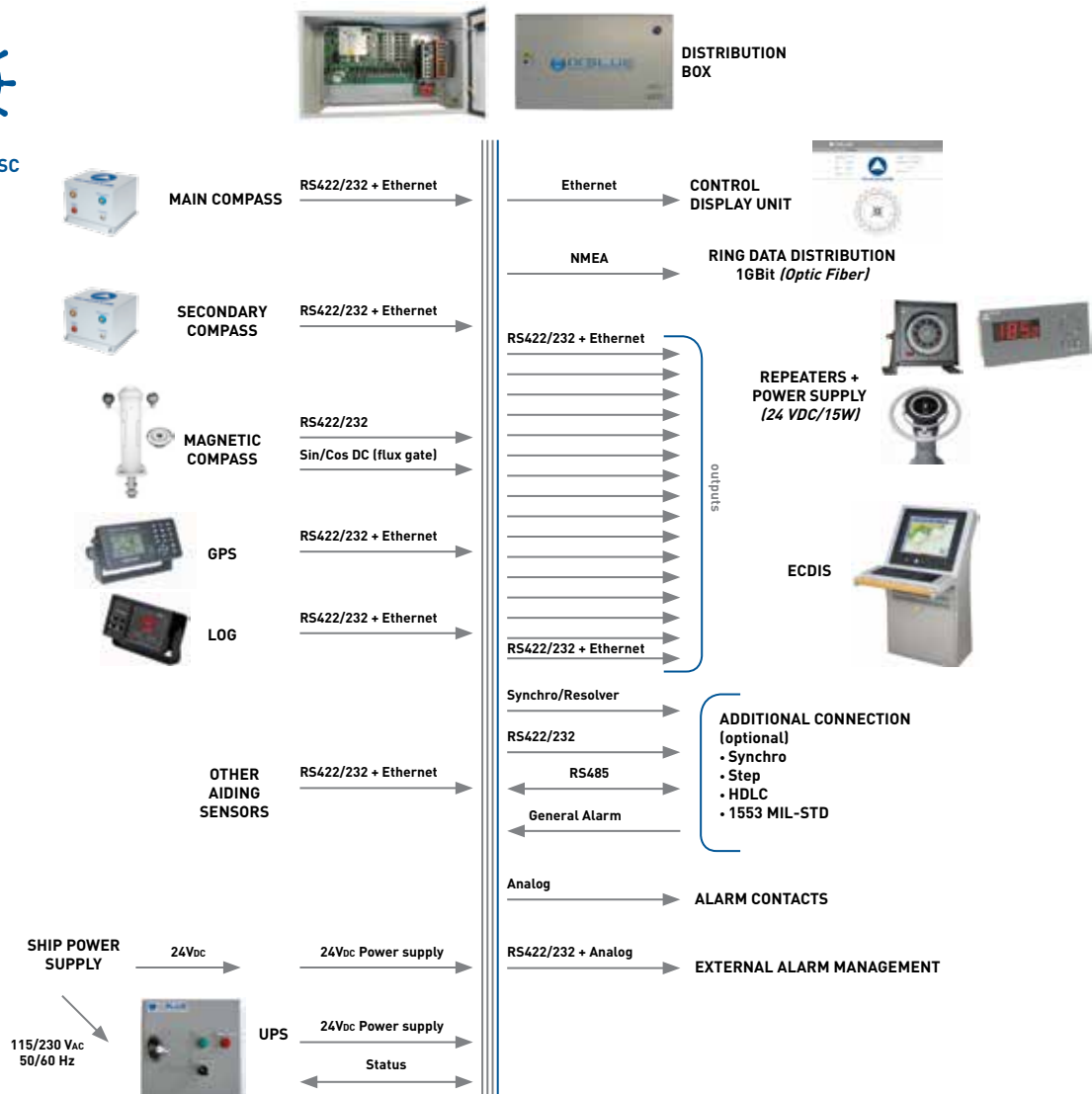
- Container ships • Cargo • Bulk • Cruise ships • Ferries • Yachts • Drilling ships
- Fishing • Research vessels • Survey vessels • Scientific • Seismic • Marine construction
- Workboats • Tugs • Ro-Ro • Fast patrol boats • DP operating vessels

QUADRANS

INTERFACES AND NAVIGATION ANCILLARIES



IMO & IMO-HSC
Certified



QUADRANS

INTERFACES AND NAVIGATION ANCILLARIES

DISTRIBUTION BOX

The distribution box is a multi-functional system; the navigation information can be made available on a standard Ethernet network NMEA, a serial NMEA or synchro/resolver (embedded board optional).

The interface box can be connected with 1, 2 or 3 referenced systems, gyrocompasses (1, 2 or 3), and a magnetic compass (1) to improve accuracy or for safety reasons.

The switch-over unit collects information from the sensors and distributes the navigation data to the equipment on the vessel; several modes are selectable (manual or auto). An optional external box can be connected for other interfaces (synch, step, HDLC, analog...). The system delivers the information and can be controlled with a display panel by web MMI.

- Environment level: IP66
- Dimensions: W = 600 mm, H = 380 mm, D = 210 mm
- Metal cabinet with optional shock springs, wall-mounted
- EMC Glands
- Large space budget for cable connection inside the box
- Power-led indicator
- Storage temperature -40 to 80 °C
- Operating temperature -20 to 55 °C

DISPLAY

- Panel PC, Windows@7 embedded
- Display: 12-inch touch screen
- Dimmer
- Power supply: 24 VDC
- Environment level: IP65
- Dimensions: W = 337 mm, H = 293 mm, D = 84 mm
- Flush-mounted

REPEATERS



Steering Repeater



Digital Heading Repeater



Navigation data Repeater

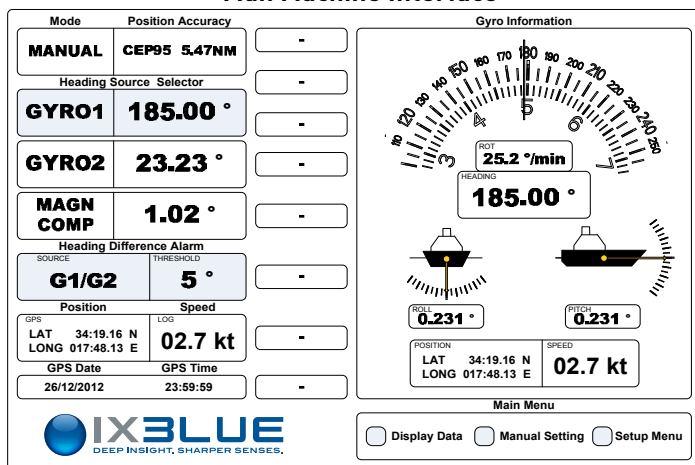


Bearing Repeater

QUADRANS

INTERFACES AND NAVIGATION ANCILLARIES

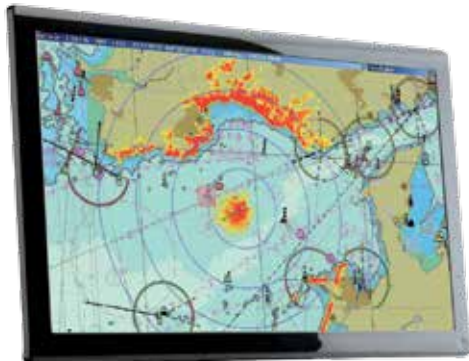
Man Machine Interface



USER INTERFACE

- Directly Ethernet compatible
- Easily installation and operation
- Defining the installation parameters
- Defining the set-up parameters
- Monitoring the system
- Performing maintenance

GECDIS-C AND GECDIS-W



iXBlue's GECDIS is an IMO compliant ECDIS solution, benefiting from **iXBlue** unique know-how in the field of navigational aid systems.

Dedicated to navigator's safety and efficiency, GECDIS offers comprehensive key features for a wide range of vessels, from shipping (ECDIS) to military applications (WECDIS).



EMEA: +33 1 30 08 88 88 • AMERICAS: +1 781 937 8800 • APAC: +65 6747 4912

www.ixblue.com

