

RADIO -NAVIGATION

X-Base

Station de base

- PLUG AND PLAY
- INTEGRATED DISPLAY
- SENDS AND RECEIVES SRM AND BINARY MESSAGES REMOTELY
- SYSTEM MONITORING CAPABILITY

Fully compliant IALA Base Station

Authorities are facing increasing traffic volumes in combination with heightened national sensitivity towards marine security. As leading AIS specialist, Nauticast already introduced **ship-to-ship** AIS communication technology, which fulfils international fitting regulations for commercial vessels. From there, the next logical step was the introduction of the X-Base, which provides **ship-to-shore** communication for vessel traffic services. The X-Base is the perfect solution for authorities. It handles bi-directional traffic monitoring data, thereby providing an excellent overview of vessel activity within the competence range. Local operation centers are getting used to the benefit of the wide array of vessel related data which AIS is able to offer. This single information source is a further step

- with its standard interfaces, it is easy to integrate into national and regional network infrastructure systems (e.g. TCP/IP). The X-Base is the missing link between AIS sources and the shore based infrastructure
- designed to interface with existing and future VTS requirements.

Capabilities and features:

- Receipt of all AIS messages within range
- Entry point to VHF communication
- FATDMA functionality
- Integrated channel management
- Remote configuration, monitoring and software update
- Continuous transmission of base station data
- Interface connection to other applications (e.g. ENC's, AIS Services,...)
- Standard TCP/IP network integration

Caractéristiques techniques

Partner PHYSICAL	<ul style="list-style-type: none"> Size in mm / inch (w) 482.6 mm / 19 inch Size in mm / inch (h) 133.3 mm / 5.25 inch / 3HE Size in mm / inch (d) 490 mm / 19.29 inch Weight 8600 g. Operating Temperature +15°C to +35°C
POWER SUPPLY	<ul style="list-style-type: none"> Supply Voltage (galvanic isolated) 24 V DC (-10% +30%). Input Current min. 7 A (24V)
INTERFACES	<ul style="list-style-type: none"> Sensor Input (GPS) 4800 bps or 38400 bps PI Port (In-/Output) in/out 38400 bps Network Port 10 Mbit Remote Service Port (In-/Output) in/out 38400 bps DGPS correction (In- / Output) (RTCM SC 104) in/out 9600 bps, Alarm Circuit CH10 Dry relay contact (see BIIT - Alarm System) Synchronization Port PPS-Input
BUILT IN GPS	<ul style="list-style-type: none"> Receiver Architecture 12 channel differential Tracking Capability 12 satellites sim. Accuracy Horizontal 10m / 2 drms * Accuracy Vertical 15m / 2 drms * GPS Antenna Connector TNC DGPS Accuracy < 5m / 2 drms*) depends on SA
GPS Solutions	<ul style="list-style-type: none"> Beacon interoperability, EGNOS interoperability, WAAS interoperability, OMNISTAR interoperability LongWave interoperability
BIIT – Alarm System	<ul style="list-style-type: none"> Relay breaking capacity: 30V DC 8 A or 250V AC 8 A <p>HARDWARE</p> <p>X-Base Version 1.0.0.x</p>
SPECIFIED STANDARDS	<ul style="list-style-type: none"> IALA A-124 ITU-R M.1371 (Class A) IALA Techn.Clar. of ITU-R M.1371-1 (Ed.1.4) IEC 61993-2 (2002) IEC 61162-1 (2000) NMEA 0183-3 IEC 61162-2 (1998) NMEA 0183-3 ITU-R M.823-2 IEC 61108-1 (1996) IEC 60945 (1996) ITU-R M.825-3 ITU-R M.1084-3
VHF	<ul style="list-style-type: none"> Frequency Range: 156.025 MHz – 162.025 MHz Channel Spacing 12.5 or 25 kHz Number of RF Channels 3 Receiv. / 1 Transm. Number of AIS Receivers 2 Number of DSC Receivers 1 Frequency Error +/- 2.5 ppm
VHF TRANSMITTER	<ul style="list-style-type: none"> Output Power: 2 Watt to 12.5 Watt (adjustable) Receive to Transmit Switching Time < 1 ms Transmit release time < 1 ms Automatic shutdown 1 sec. Channel switching time < 25 ms Attack Time < 1 ms
VHF RECEIVER	<ul style="list-style-type: none"> Max. Useable Sensitivity < -110 dBm -Co-channel Rejection > -8 dB (25 kHz); > -12 dBm (12.5 kHz) Adjacent Channel Selectivity > 70 dB (25 kHz); > 60 dB (12.5 kHz) Inter-modulation Rejection > 65 dB Spurious Response Rejection > 70 dB, Blocking > 84 dB