

# ComNav®

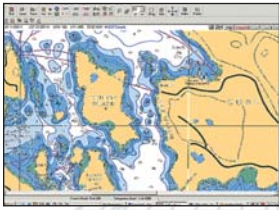


## Class A AIS Transceiver Voyager X3 Automatic Identification System

### See and be Seen Enhanced Security at Sea

- Single integrated design
- NMEA 2000 standard for marine networking (available via software update in late 2010)
- Advanced technological design for enhanced performance & reliability
- Display graphically AIS data target overlay on standard radars and multifunction chart displays
- Wireless exchange — Navigation status between vessels and shore traffic monitoring centers
- Monitor vessels of Class A and Class B over standard VHF data transmissions
- Port traffic management — using Class A and Class B data to identify and control vessel movements
- Automatically transmit safety related messages reducing search and rescue times
- Rotary encoder for quick selection and data entry using two soft keys
- Easily upgradeable through PC software via RS232 — 9 way D type connector
- Built in 16 Channel GPS receiver with antenna
- High contrast mono-chrome LCD for clear presentation of data
- Audio Alarm buzzer for safety alerts
- Approval pending: FCC and USCG standard in USA, Wheel Mark/MED, IEC certified in Canada
- International certification to IEC61993-2 and inland waterways standards
- 1 Year warranty
- Worldwide service

For U.S. Sales: This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained.



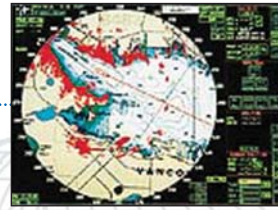
### Safety

AIS improves safety on water through enhanced navigation awareness and reduces search and rescue times.



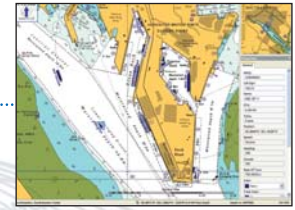
### Security

AIS helps to identify and track vessels and improve border security. Improve coast guard response time by transmitting precise navigation data.



### Vessel Monitoring

AIS enables automatic control and intruder or vessel movement alerts within designated areas.



### Port Vessel Traffic Management

AIS enables port traffic management by using precise tracking and identification data.

## SPECIFICATIONS:

**Operating Voltage:** 12 to 24 VDC

**Power Consumption:** 10 watts average, 4.75A peak at 12VDC

**NMEA0183 Interface:** 38.4k baud bi-directional

**RS232 Interface:** 38.4k baud bi-directional

**Operating Temperature:** -15°C to +55°C

## CONNECTIONS

**VHF Antenna connector:** S0-239 (UHF)

**GPS Antenna connector:** TNC

**RS232 Data connector:** 9 way D type

**IEC61162 interfaces & alarm relay:**

Via 50 way D-type junction box.

**Power connector:** LTWBB-04PMMS-LC7001

**NMEA 2000 connector:** LTWBD-05PMMS-LC7001

## VHF TRANSCEIVER

**Transmitter:** Single

**Receivers:** Three (two AIS and one DSC channel 70)

**Frequency Range:** 156.025MHz – 162.025MHz

**Channel Bandwidth:** 25KHz

**Power Output:** 41dBm +/- 1.5dB

**Modulation:** 25KHz GMSK / 25KHz AFSK

**Data Rate:** 9600 bps GMSK & 1200 bps FSK

**RX Sensitivity:** <-107dBm @ 20% PER

**Compliance Pending:** FCC, USCG, Type EU, IEC, CE, RoHS

## Standards and Approvals:

IEC60945 Edn. 4.0 Environmental requirements

IEC61993-2 Class A Shipborne equipment

IECIEC61162-1/2 Edn.2.0 Digital interfaces

EC61108-1 GPS Receiver equipment

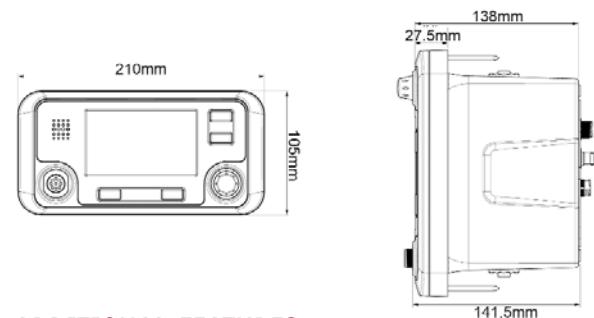
ITU-RM.1371-3 Universal AIS Technical Characteristics

NMEA2000 Standard for marine networking



**DIMENSIONS:** 210mm x 105mm x 138mm / 8.3" x 4.2" x 5.4" W x H x D

**WEIGHT:** 1.6kg



## ADDITIONAL FEATURES:

- Auto configuration and set up software
- Data display for MMSI, vessel name, call sign, vessel type, etc.
- Auto configuration for safety related message
- GPS display of position, COG and SOG
- GPS diagnostics and satellite signal bar chart
- Key status indicators
- Shows Transponder software and firmware version
- Displays receiver and transmitter statistics
- Displays Class A, Class B, base station and A to N target data
- Real time display for serial data output
- Ability to log data to file

# ComNav®



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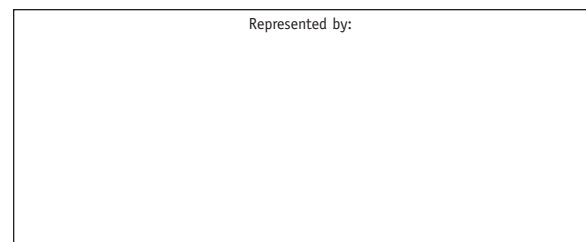
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Specifications subject to change without notice