

Chart without AIS

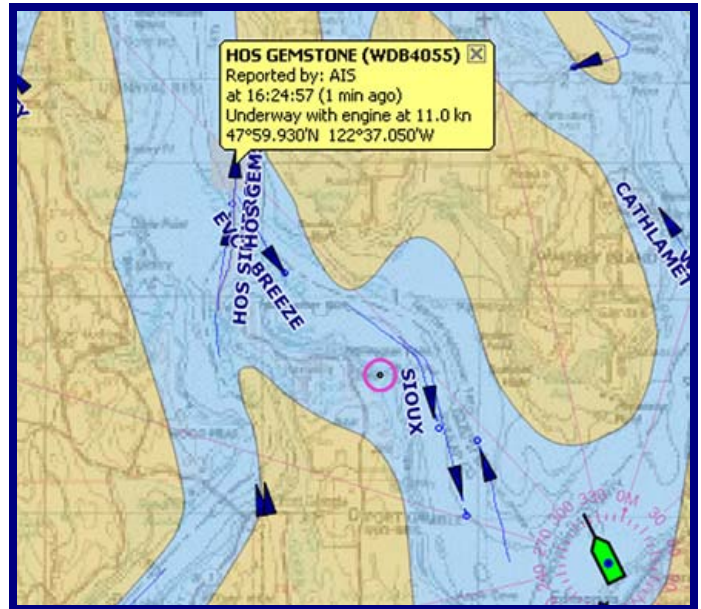


Chart with AIS



Not shown to scale. B  
Chart plotter sold separately.

The **RADARPLUS® AIS-BX** is a

- ⇒ Low Cost
- ⇒ Robust
- ⇒ Easily Activated

Class B AIS transponder, including:

- ⇒ Dual AIS Receivers
- ⇒ Class B AIS Transmitter
- ⇒ 16-channel GPS

Transmitting and receiving vessel name, call sign, position and more, the **RADARPLUS® AIS-BX** is a comprehensive tracking system.

- **Transmit Your Position**  
Be seen by other AIS fitted vessels, including the U.S. Coast Guard, Search and Rescue Operations and most commercial ships.
- **Standard NMEA Interface**  
Interface with any NMEA compatible GPS plotter or suitably configured PC.
- **Water Resistance**  
An IP65 rated aluminum case ensures that the AIS-BX is able to operate in harsh environments.
- **Online Activation\***  
\*Assign or register your MMSI number and activate your transponder online at [www.shinemicro.com](http://www.shinemicro.com), or contact us to receive the forms via email or fax.

## PRODUCT FEATURES

### Physical

- Dimensions: 6.75 x 4.40 x 1.90 in. (L x W x H)
- Weight: ≤ 4 lb.

### Power

- 12V DC (9.6-15.6V)
- Average Power Consumption: 4W nominal (approx. 350 mA at 12V)
- Peak Power Consumption: 18W during transmit (approx. 1.5A at 12V)

### GPS Receiver (Internal)

- IEC 61108-1 Compliant
- 16 Channel
- Receives message 17 for differential corrections to GPS from a transmitting base station

### Electrical Interfaces

- RS232 38.4K baud bi-directional
- RS422 NMEA 38.4K baud bi-directional

### Connectors

- VHF Antenna Connector: BNC female
- GPS Antenna Connector: TNC female
- RS232/RS422/Power: DB15 female

### VHF Transceiver

- Transmitter x 1
- Receiver x 2 (one shared between AIS/DSC)
- Frequency: 156.025 to 162.025 in 25 KHz steps
- Output Power: 33dBm (2 watts) ± 1.5dB
- Channel Bandwidth: 25KHz
- Channel Step: 25KHz
- Modulation Modes:

- 25KHz GMSK (AIS, TX and RX)
- 25KHz AFSK (DSC, RX only)

#### Bit Rate:

- 9600 b/s ± 50 ppm (GMSK)
- 1200 b/s ± 30 ppm (FSK)

#### RX Sensitivity:

- Sensitivity: -107dBm @ 20% PER
- Co Channel: 10dB
- Adjacent Channel: 70dB
- IMD: 65dB
- Blocking: 84dB

### Environmental

- IEC 60945 (Cat C)
- Operating Temperature: -25°C to +55°C

### Compliant with the following standards:

- IEC 62287-1  
IEC standard, Class B shipborne equipment
- IEC 60945 Edn 4.0  
IEC standard, environmental requirements
- ITU-RM.1371-1  
Universal AIS technical characteristics
- IEC 61162-1 Edn 2.0  
IEC standard, digital interfaces part 1
- IEC 61162-2 Edn 1.0  
IEC standard, digital interfaces - part 2
- IEC 61108-1  
IEC standard, GPS receiver equipment
- ITU RR AP18eWRC2000  
Radio regs., appendix 18, table of frequencies in the VHF maritime mobile band
- ITU R M.493-9  
Digital Selective Calling (DSC) system for use in the maritime mobile service
- ITU R.M 825-3  
Characteristics of a transponder system using DSC for use with VTS and ship-to-ship identification

For more information about AIS, please visit  
[www.shinemicro.com](http://www.shinemicro.com)

Shine Micro offers no guarantees or warranties nor accepts any responsibility or liability whichever may arise through use of the product. The product is supplied, installed, and used entirely at the end-users own risk.