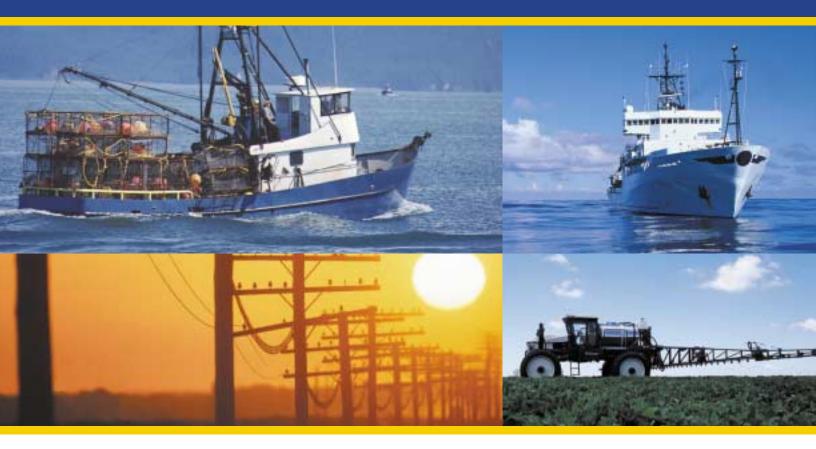
MBX-3S

The most popular commercial-grade Coast Guard Beacon Receiver



MBX-3S

- Dual-channel Coast Guard beacon receiver
- Supplements GPS systems with free differential corrections, enhancing accuracy
- · Fast signal acquisition
- Wide input voltage range for a variety of power sources
- · Low power consumption extends battery life
- Automatic tuning mode for hands-free operation
- Integrated signal splitter outputs GPS signal from combined GPS /differential antennas
- Front-panel interface for easy configuration and status monitoring







MBX-35 The most popular commercial-grade DGPS Beacon Receiver

Receiver Specifications

Channels: 2 independent channels **Channel Spacing:** 500 Hz Frequency Range: MSK Bit Rates: 283.5 to 325.0 Hz 50, 100, 200 bps

Cold Start Time: < I min Warm Start Time: <2 seconds

Demodulation: Minimum shift keying Sensitivity: 2.5 μV/m for 6 dB SNR

Dynamic Range: 100 dB **Frequency Offset:** ±8 Hz (27 ppm)

61 dB f ± 400 Hz RTCM SC-104 **Adjacent Channel Rejection: Correction Output Protocol:** Input Status Protocol: NMEA 0183

Communications

Interface: RS-232C or RS-422 **Baud Rates:** 2400, 4800, 9600

Environmental Specifications

-30°C to +70°C -40°C to +80°C **Operating Temperature:** Storage Temperature: Humidity: 95% non-condensing EMC: EN 60945

EN 50081-1 EN 50082-I

FCC: Part 15, sub-part J, class A digital device

Power Specifications

Input Voltage Range: 9 to 40 VDC Nominal Power: 2.5 W **Nominal Current:** 210 mA

Antenna Voltage Output: 10 VDC (5 VDC optional)

Antenna Input Impedance: 50 Ω

Mechanical Specifications

Dimensions: 150 mm L x 125 mm W x 51 mm H $(5.9" L \times 4.9" W \times 2.0" H)$

0.64 kg (1.4 lb) Weight:

Display: 2-line x 16-character LCD 3-key switch membrane Keypad: **Power Connector:** 2-piń circular locking

Data Connector: DB9-S **Antenna Connector: BNC-S Optional GPS Output Port:** TNC-S

Operating Modes

MBX-3 Mode (Default): RTCM SC-104 correction and NMEA status message output

(Default Mode) **MBX-E Mode:** RTCM SC-104 correction and

NMEA status message output and GPS NMEA message input for position and satellite

status display

NMEA 0183 I/O

- Receiver Automatic and Manual tune command
- Frequency and data rate query
- Receiver performance and operating status queries
- Automatic search almanac queries (proprietary)
- Baud rate selection command
- Receiver tune command
- Force cold start command (proprietary)
- Software upgrade command (proprietary)
- Configuration up-load command (proprietary)

Accessories

Antenna: **Various Power Cables: Various** Antenna Cables: **Various Data Cables: Various**

CSI Beacon **Command Center:**

MS Windows 95® beacon

control software

Pin-out

RS, 232C (DB9 PIN#)

Pin 2 TXD, RTCM SC-104/Status Output Pin 3 RXD, configuration input Pin 5 Signal return

RS-422 (DB9 PIN#)

Pin I TXD +, RTCM SC-104 / Status Output Pin 2 TXD -, RTCM SC-104 / Status Output

Pin 4 RXD -, configuration input

Pin 5 Signal return

Pin 7 RXD +, configuration input





[©] Copyright September 2002, CSI Wireless Inc. All rights reserved. Specifications subject to change without notice CSI Wireless and the CSI Wireless logo are trademarks of CSI Wireless Inc. Made in Canada.