

# Wireless Coast Guard Beacon Receiver



## Wireless real-time Coast Guard Beacon receiver for GMS-2

- RELIABLE, RADIO BASED REAL-TIME CORRECTION SIGNALS
- WIRELESS COMMUNICATION TO GMS-2
- LIGHTWEIGHT, COMPACT AND EASY-TO-USE
- RUGGED FOR ROUGH FIELD USE
- BEACON SIGNALS AVAILABLE WORLDWIDE WITH EXTENSIVE COVERAGE THROUGHOUT THE U.S. AND CANADA

**Get more out of your GMS-2 GPS+ receiver by adding free radio based, real-time Coast Guard Beacon correction signals...**



Topcon's GMS-2 features standard WAAS or EGNOS positional correction augmentation. These satellite based signals provide extensive coverage throughout the US and Europe respectively and provide the GMS-2 with "off-the-shelf" real-time sub-meter signal correction. However WAAS and EGNOS satellite signals can be limited at times, making them susceptible to sporadic or blocked signal reception in shrouded areas such as tree canopies, around tall buildings, or near other large obstructions. Now there's an alternative - Topcon's wireless BR-1. The BR-1 provides access to free radio-based, real-time Coast Guard Beacon correction signals that feature less potential for interference and blockage.

For over 10 years Coast Guard Beacon signals have been providing reliable, real-time data to improve positional accuracies for coastal and inland waterway navigation across the US and Canada. Widely accessible throughout North America, these signals can be used as a viable alternative to WAAS correction signals for data collection, navigation, and other field applications. The advantage? Coast Guard Beacon signals are land-based terrestrial radio signals, much less susceptible to interference and blockage, making them the perfect correction signal alternative for your GMS-2.

Adding a BR-1 to your GMS-2 receiver couldn't be easier. Integrated Bluetooth® wireless communication means no cables or connectors! The wireless BR-1 integrates an internal li-ion battery that provides 15 hours of continuous field use, and is user replaceable and rechargeable. The included protective soft case lets you carry the BR-1 on your belt or backpack strap, and features a clear acrylic window allowing for at-a-glance signal reception/GMS-2 communication verification. Color LED's indicate Bluetooth wireless connection status, battery status, and beacon signal reception. There's even a serial port for flexibility to connect to other GPS receivers or to a PC for firmware updates.



Rechargeable, replaceable battery



Sealed serial and recharge power port



Protective soft case/waist pack

Whether you find yourself out of range of WAAS or EGNOS signals on a regular basis, experience weak or intermittent correction signals, or you're just looking for an alternative to help streamline workflow and eliminate post-processing back in the office, Topcon's new BR-1 Beacon receiver is your answer.



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Specifications subject to change without notice

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**SPECIFICATIONS**

**PHYSICAL**

Size:	W4.4"x D4.0" x H4.8" (W112xD101xH122mm)
Weight:	1.75 lbs. (.79kg) with battery
Power:	8 to 15vDC (operating) 12 to 15vDC (charging)
Operating Time:	No less than 15 hours fully charged
Charging Time:	~3 hours for full charge
Battery:	Lithium-ion 7.4V 2200mAh; repeatable

**ENVIRONMENTAL**

Temperature:	Operating: -4° to 122° F (-20° to +50° C) Storage: -22° to 140° F (-30° to +60° C)
Water and Dustproof:	IP66
Shockproof:	1m (3.28') drop

**INPUT/OUTPUT**

Communications:	Bluetooth wireless, RS232 Serial Port
Bluetooth:	Version: standard 1.2; Class 2; Profile: SPP
Output Protocol:	Baud rate: 300-115200 bps, flow control: RTC/CTS
Interface:	Key: 1 Key – Power On/Off 3 LEDs: Bluetooth wireless connection status, charge level, receiving status

**BEACON RECEIVER**

Channels:	4
Frequency Range:	283.5kHz to 325kHz
Frequency Spacing:	500 Hz
MSK Bit Rate:	Manual or Automatic
Operation Modes:	Manual or Automatic
Demodulation:	Minimum Shift Keying (MSK)
Frequency Offset:	+/-5Hz
Adjacent Channel Rejection:	62dB @f0+/-500Hz

**Topcon's GMS-2 hand-held GIS Mapping System**



- Dual-Constellation Satellite Tracking
- Integrated Digital Camera
- Customized Field Software
- Internal Bluetooth® Wireless Technology
- Ultra Sharp Color TFT Touch Screen

Topcon's GMS-2 is a powerful combination of dual-constellation satellite tracking performance and digital imaging technology that sets new standards for GIS field mapping.

The GMS-2 provides GPS and GLONASS tracking capabilities for meter-level GIS data collection, navigation, or high-accuracy single frequency carrier tracking. Use an optional external antenna for post processed surveying accuracies better than 1cm. It features standard WAAS and EGNOS correction services, or optional Coast Guard Beacon signals, and can even be configured to connect to a regional reference station network using a wireless dial-up enabled cell phone, and much more.

Call your local Topcon dealer for a hands-on demonstration.

Your local Authorized Topcon dealer is:



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