



## MobileMapper Beacon

### DIFFERENTIAL CORRECTION RECEIVER WITH BLUETOOTH WIRELESS TECHNOLOGY

MobileMapper™ Beacon compliments the Thales Navigation mobile mapping family of products by improving real-time positioning accuracy with broadcast DGPS corrections. This differential receiver with Bluetooth® wireless technology provides access to standard RTCM SC-104 DGPS corrections broadcast by beacon networks around the world.

Advanced signal processing allows the MobileMapper Beacon to deliver reliable DGPS data from beacon broadcasts, even in noisy environments. MobileMapper Beacon works with any GPS receivers that supports RTCM. Used together with MobileMapper CE, MobileMapper Beacon may be configured through a simple Windows® CE application, which enables automatic or manual tuning of the receiver and monitoring of operational and performance status.

Powered by four AA batteries, MobileMapper Beacon is compact and conveniently fits into a belt-mounted holster for easy, hands-free portability. MobileMapper Beacon employs an internal H-field antenna to provide superior signal reception in challenging environments, and integrated Bluetooth wireless technology to offer users cable-free connectivity to MobileMapper CE and other devices featuring Bluetooth wireless technology.

Compact, rugged and affordable, MobileMapper Beacon offers the most demanding GPS users cable-free convenience and reliability in the field.



# MOBILEMAPPER BEACON

## TECHNICAL SPECIFICATIONS

### Receiver Characteristics

- Channels: 2 independent channels
- Frequency input: 283.5 to 325.0 kHz
- Channel spacing: 500 Hz
- Modulation: Minimum shift keying (MSK)
- MSK data rates: 100 and 200 bps
- Dynamic range: 100 dB
- Selectivity: > 60 dB at 400 Hz offset
- Operation modes: manual and automatic
- Internal antenna: H-field

### Communication Characteristics

- Data output: RTCM SC-104
- Serial RS232 support
- Port settings: 4800 baud, 8 data bits, 1 stop bit, no parity
- Bluetooth wireless technology
  - Bluetooth specification: 1.1
  - Bluetooth power class: 1
  - Profile: Standard serial port

### Physical Characteristics

- Size: 4.75" W x 4.95" L x 4.95" H  
(12.07 cm W x 12.57 cm L x 12.57 cm H)
- Weight: 0.58 kg (1.27 lbs) including 4 AA alkaline batteries, no pouch

### User Interface

- Power Button - On/Off push-button
- LED indication: Power - red, beacon lock - green, Bluetooth connection - Blue
- Advanced configuration setup and diagnostics via DGPS Configuration (MobileMapper CE software utility)

### Power Characteristics

- Input Voltage: 4.0 to 6.0 VDC
- Batteries: 4 AA batteries, alkaline or NiMH
- Battery life: 8 hours continuous at 0° C
- Nominal current: 130 mA
- RF Connector: SMA socket
- Antenna Impedance: 50 ohms

### Environmental Characteristics

- Environmental Protection: IEC-529 IPX5
- Operating Temperature: -30° C to +70° C operating, excluding battery effects
- Storage Temperature: -40° C to +80° C, excluding batteries
- Humidity: 100% condensing, ingress protection to IPX5

### Standard Accessories

- 2 battery clips
- Pouch
- 4 AA batteries
- PC interface cable
- Printed manual

### Optional Accessories

- External H-field loop DGPS beacon antenna 3.3 VDC
- External RF cable (SMA to TNC)

### Thales Navigation

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