

## powered or portable asset beacon

The Guardian 1600 is designed for the monitoring and recovery of powered and portable assets. The 1600 is weatherproof and includes a motion sensor, high-sensitivity GPS, zone monitoring, configurable alerts, and connections for vehicle power or a 90 day battery pack.

For portable asset tracking applications, the 1600 is an ideal solution for portable items of value, such as lumber, tools, appliances, equipment and conduit. For powered asset tracking applications, the 1600 is suited for monitoring construction equipment, fleet vehicles or passenger vehicles.



## features and benefits

features	benefits
• Motion activated	• Sends an immediate alert if a stationary beacon begins to move
• Motion or time based position reporting	• Provides flexible and cost effective position reporting
• Start/Stop reporting	• Basic position reporting mode for low cost usage
• Scheduled status report	• Sends out an automated status message on an hourly, daily or weekly basis
• Scheduled Hours of Operation	• Provides configurable schedules to manage data usage and alerts
• Zone alert	• Sends an alert when the beacon crosses into or out of a defined area
• Speed alert	• Sends an alert if the beacon exceeds a specified speed threshold
• Low battery alert	• Provides an alert if the batteries are low
• High sensitivity GPS receiver	• Provides a location fix in impaired signal environments
• Internal or external GPS antenna	• Enables flexible installation options
• Weather resistant	• Safe for installation on outdoor equipment*
• Communications via GSM wireless	• Widest available wireless coverage
• SMS data transport	• Reliable and cost effective for low volume usage
• LED status indicator	• Assists with installation and troubleshooting

\* Following installation guidelines provided with beacon

## specifications

### GPS

General:	L1, C/A code
Sensitivity:	Min -136 dBm acquisition
Frequency:	1575.42 MHz
Accuracy:	Horizontal <6 meters (50%) Altitude <11 meters (50%) Velocity 0.06 m/sec Impaired: <18 meters, 95% of the time

### Communications

GSM:	Normal MS-SMS data only
Bands:	850/900/1800/1900 MHz

### Antennas

Cellular:	GSM Internal
GPS:	Internal built-in External optional

### Power Sources

Vehicle adapter module (VAM):	9 to 32 V DC Up to 4 hours battery life when main power is cut
Battery module:	4 AA alkaline batteries (not included) Up to 90 days (10 reports/day, -130 dBm GPS)

### Mechanical/Environmental

Size:	2.99" x 5.78" x 1.44" 76 x 143 x 38mm
Weight:	7.2 oz (205 g) not including batteries 10.5 oz (300 g) with 4 AA alkaline batteries
Operating temperature:	14°F to 131°F (-10°C to +55°C)
Humidity:	5% to 95% non-condensing at 104°F (40°C)
Vibration:	0.008 g <sup>2</sup> /Hz, 5 Hz to 20 Hz 0.05 g <sup>2</sup> /Hz, 20 Hz to 100 Hz -3 dB/octave, 100 Hz to 900 Hz
Housing:	Plastic, weather resistant to wind-driven rain and dust per IP 55 standard (except when used with external GPS antenna)