

CBM2000 Series Powered Remote Monitoring Unit

Condition Based Monitoring (CBM) Device Supporting Remote Monitoring Applications

The CBM2000 is a highly capable Remote Monitoring Unit for Cellular networks (2G or 3G and future 4G CatM1) with a variety of inputs and outputs. The CBM2000 supports Flexi-Card slot providing endless integration and expansion options.

The CBM2010 expands on the base module CBM2000 with the addition of Iridium Satellite communications which allows the CBM2010 to continue to send data when the cellular network is not available.

Safety requirements for lone or remote workers such as location, communication, duress, accident, breakdown and emergency response are covered by the state-of-the-art CBM2010 3G/Iridium Hybrid option. Your workforce remains connected and can be pro-actively monitored anywhere.

The CBM2000 and CBM2010 support interfacing to the PC2 and PC3 range of controllers via a serial interface.

Features and benefits

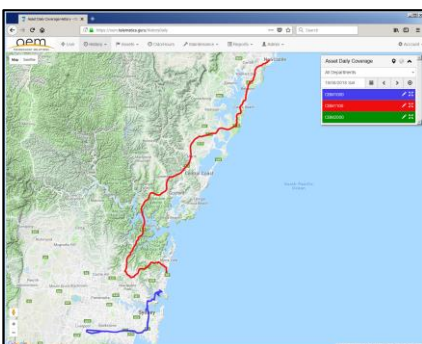
- 24/7 Asset Location
- Cellular data when in coverage
- Iridium Satellite when out of cellular coverage (CBM2010 only)
- Input Power 8-45VDC
- Internal Backup Battery
- 5 x DI's
- 2 x DO's
- Serial Interface
- Configure over-the-air (OTA)
- Switch from "locate" to "track" over-the-air
- Integrated 3 axis accelerometer
- Temperature Monitoring
- 50K records data logging capacity

Applications

- Remote Monitoring and Control via I/O and Communications interfaces
- Powered Asset Tracking
- Vehicle and Wagon Tracking
- Yard Geo-fencing Monitoring and Alerting
- Trailers and Mobile Assets
- Run Hour and Distance Monitoring
- Anchoring and Security of Assets
- The Custom Message Communication from PC2 and PC3 Controllers

Ordering Information

- Part Numbers:
040-0171 (CBM2000 Cellular)
040-0172 (CBM2010 Cellular/Satellite)



Specification

Description	CBM2000 - Cellular Powered Remote Monitoring Unit	CBM2010 - Cellular + Iridium Satellite Powered Remote Monitoring Unit
Power Requirements	Voltage: 8-45VDC Current: 15mA average (battery fully charged), 135mA average (battery charging)	
Sleep Current	< 1mA	
Back up Battery	The standard 800mAh LiPo backup battery allows the G100 to operate when external power is removed for up to 4 days, depending on the amount of movement.	
Environmental	-20°C to +60°C	
Cellular Connectivity	Network: 2G/3G HSDPA (future 4G LTE CatM1)	
	SIM: Standard (2FF) cellular SIM	
	GSM Antenna: Internal cellular antenna tuned by RF laboratories to ensure optimal performance	
Auto-APN	Analyse SIM and detect APN from pre-loaded list. Multi-APN on board for roaming	
GPS Tracking	GPS Module:	High sensitivity assisted GPS receiver, 72 channel
	GPS/GLONASS:	Concurrent GPS/GLONASS
	GPS Antenna with LNA:	Internal antenna. Boosted by low-noise amplifier (LNA) allows operation in "urban canyons" and container stacks
Adaptive Tracking	Adaptive-Tracking technology enables accelerometer and GPS data to be used intelligently to work out if it is moving and send frequent updates, as well as to scale the update rate down to once per day if the asset is stationary in order to preserve battery life	
Digital Inputs	1 x Ignition line 4 x digital inputs with configurable pull-up / pull-down	
Digital Outputs	2 x switched ground digital outputs	
Communications Ports	1 x 3 wire RS232 Interface, 1 x iButton (1 wire)	
Iridium Satellite	N/A	Auto-switch Cellular/Iridium
Flexi-Card Expansion	The CBM2000 has one FlexiCard slot, allowing the device to be upgraded to support the Iridium satellite option	
Temperature Sensor	The on board temperature sensor is accurate to +/- 5°C.	
Internal Memory	Flash memory can store 50,000 records	
3D Accelerometer	The 3 axis accelerometer allows the device to "sleep" in an ultra-low power state yet still wake up when movement occurs	
Enclosure	Snap-Clip ABS Plastic Housing	
Size	125mm (L) x 65mm (W) x 30mm (H)	
Weight	250g	
Terminations	24 Pin Molex Plug/Socket Connector	
Part Number	040-0171	040-0172

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