CMG-RTC-0001

REAL TIME CLOCK AND GPS EMULATOR

A high-precision real-time clock for use where GPS receivers are impractical.

The CMG-RTC-0001 is a battery backed, high-precision, thermally-compensated, real-time clock module with simulated GPS output. The clock obtains its initial synchronisation from a GPS receiver and, once locked, starts generating GPS signals, making it suitable for use as a time-source for GPS-synchronised equipment in situations where GPS receivers are impractical.

Key features

- Compact, hand-held unit
- Internal battery allows up to eight days run-time between synchronisation and deployment
- Large, clear, back-lit liquid crystal display provides status information
- Directly compatible with DM24 digitisers and digital instruments
- Simple operation with no controls

Applications

> Locations without GPS signals

> For short and medium term deployments

SPECIFICATIONS

TIMING	
NMEA output sentences	$GPGSA AND $GPZDA
Trained temperature range	-10 °C to +50 °C in 1 °C increments (extrapolated for out-of-range values)
Operating temperature range	10 °C to +60 °C
Accuracy	< 3 x 10^{-8} (< 100 ms per month)
POWER	
Power supply voltage	5 V to 36 V DC
Power consumption without receiver (at 12 V DC)	0.24 W
Battery capacity	1.84 Ah
Battery back-up	7 - 10 days
PHYSICAL / ENVIRONMENTAL	
Length (casing)	150 mm
Length (including connectors	162 mm
Width	80 mm
Depth	45 mm
Material	Polystyrene
Display	21 character, 4 line
Weight	305 g

Images show the CMG-RTC-0001 Real Time Clock and GPS Emulator

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