

# CMG-RTM-0003



## Real-time clock and GPS emulator

The Guralp Systems CMG-RTM is a battery backed, high-precision, thermally-compensated, real-time clock module with simulated GPS output. It 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 CMG-DM24 digitisers and digital instruments

Simple operation with no controls



# Specifications

CMG-RTM-0003



## Physical

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

## Electrical

Power supply input voltage	5 V to 36 V DC
Power supply input current (without receiver connected)	20 mA at 12 V DC
Battery capacity	1.84 Ah
Battery backup	7 - 10 days

## 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	$<3 \times 10^{-8}$ (<100 ms per month)

