

CMG-CD24



Compact three-channel digitiser

The Guralp Systems CMG-CD24 is a compact, cost effective three-channel digitiser, designed for ultra-low power applications. Data can be transmitted in real-time over RS232 or, optionally, Ethernet or WiFi. Alternatively, data can be stored in on-board flash and quickly retrieved to a directly connected FireWire disk.

Key Features:

- 24-bit sigma-delta analogue to digital converters
- Multiple sample rates from 1 to 1,000 Hz
- Low power: < 1W from 10V–28V DC
- ±10V balanced differential input lines
- Lightweight and waterproof
- RS232 output in GCF format
- Up to 16 Gb internal storage
- Military-specification bayonet connectors
- Event-driven triggers optimise storage usage in long-term, unattended deployments and reduce bandwidth requirements when telemetered.



Specifications

CMG-CD24



Input range	<i>±10 Volts differential</i>
Nominal Sensitivity	<i>0.9 µV/count</i>
Standard output format	<i>24-bit</i>
Noise-free resolution (NPR) at 20 samples per second	<i>> 132 dB r.m.s. (> 22 bits)</i>
Digital signal processor	<i>TMS3200 at 144 Mhz</i>
Clock synchronisation	<i>External GPS receiver</i>
Output rate	<i>User selectable - 1 to 1000 samples per second</i>
RS232 baud rate	<i>User selectable</i>
Operating temperature range	<i>-10 to +65 °C</i>
Case material	<i>Die-cast aluminium</i>
Internal thermometer accuracy	<i>±0.33 °C (30 °C) ±0.5 °C (10..50 °C) ±1.0 °C (-10..75 °C)</i>
Internal thermometer linearity	<i>±0.5 °C</i>
Internal thermometer resolution	<i>0.0625 °C</i>
Dimensions (excluding connectors)	<i>160 x 160 x 90mm</i>
Weight	<i>1.95kg</i>
Voltage requirements	<i>10 - 28 Volts DC</i>
Current at 12 V DC with GPS	<i><50 mA (without Ethernet or Wi-Fi)</i>
Calibration controls	<i>Common signal & enable lines exposed on sensor connector</i>

