

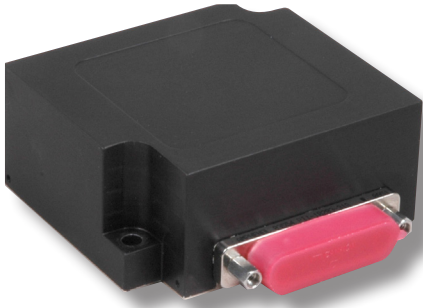
# CC1071

Digital Cryocooler Controller

P/N: 3271071-0101

# COBHAM

The most important thing we build is trust



The CC1071 Digital Cryocooler Controller is a state of the art design utilizing DSP processor technology enabling numerous programmable features while achieving improved response time and temperature stability. It offers advanced capabilities that will support current and emerging IR system level requirements. The CC1071 is also equipped with an RS422 digital interface that enables communication with on-board computers and other systems via the platform data bus enabling Prognostic Health Monitoring data to be communicated. The CC1071 is also extremely rugged and is

designed to survive in the harshest military environments.

## Applications

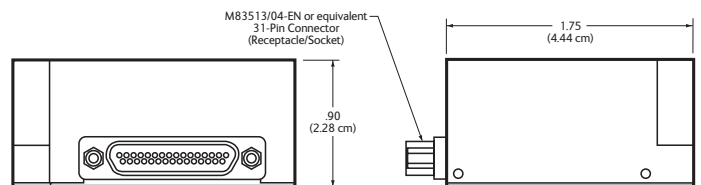
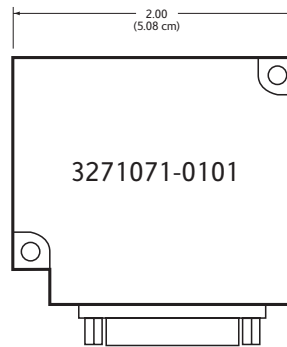
The CC1071 is ideally suited for operating Cobham linear cryocoolers that are used in the world's highest performance IR systems. Its tremendous flexibility makes it a good choice to operate any brand linear cryocooler and for any application requiring programmable power ramps, temperature compensation factors, and drive frequency.

## Features

- DSP based microprocessor technology
- RS422 communications interface
- Supports prognostic health monitoring protocols
- Nuclear event shutdown circuitry
- Digital and analog temperature feedback
- IEEE-12207 compliant software
- MIL-704F compliant

## Specifications

Weight:	3.2 oz max (0.09 kg)
Operating range:	-40 °C to 85 °C continuous
Efficiency:	> 90%
Cooler drive frequency:	Programmable (40 - 80 Hz)
Temperature stability:	+ 0.1 K at each ambient + 0.5 K over operating temperature range
Input voltage:	17 to 32 VDC (28 V nominal)
Output voltage:	0 to 17 V RMS sine wave
Output power:	90 W maximum
MTBF:	40,000 h minimum
Diode current source:	1 mA (100 uA also available)
Electrical interface:	31 Socket micro-d receptacle



CAGE Code 99251

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