QUAD TRON, INC.

303 Camars Drive
Warminster, PA 18974

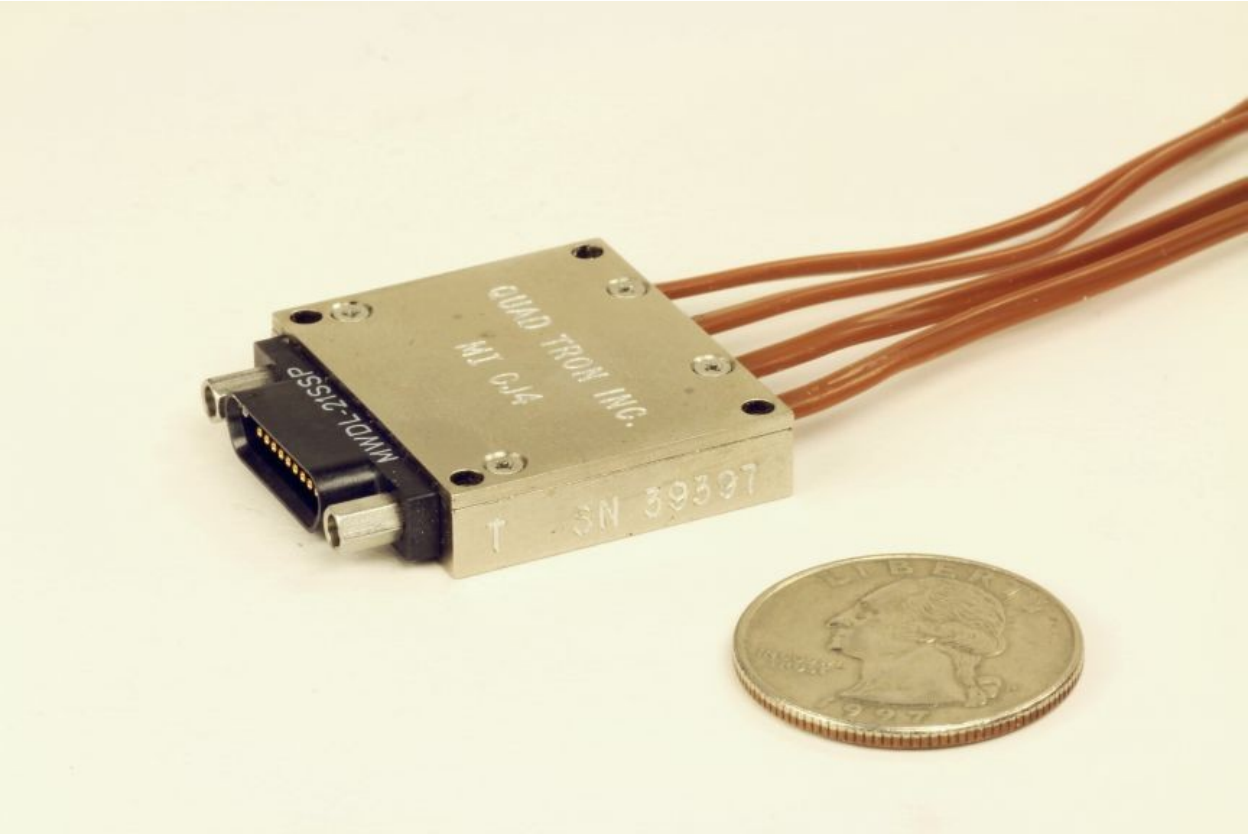
Phone: (215) 441-9303
Fax: (215) 441-9305
www.quadtron.com
Email: quadtron.inc@gmail.com

MICRO PCM ENCODER SERIES

MODEL MI_CJ4

4 CHANNEL THERMOCOUPLE COLD JUNCTION DIGITAL COMPENSATION BLOCK

The MI_CJ4 module provides 4 channels of digital Thermocouple Cold Junction compensation and is used with the MI_TC and MI_TC_ADD8 Modules.



The MI_CJ4 uses 4 digital thermometers, and outputs the four digital cold junction temperatures in SPI format, offering the following advantages:

1)Digital Format.

2)Thermometers power down, so as not to cause self heating errors.

3)Thermocouple types can be easily changed since the cold junction temperature is provided, not Cold Junction voltage.

4)The cold junction temperature errors are corrected by table lookup.

5)The thermometers are located very close to the actual cold junction since the devices are miniature.

Electrical Specifications:

Temperature Resolution:	0.03125° C
Temperature Readings:	4 Sensors / 13 Bits, SPI Format
Type:	Thermocouple Types J, K, B, E, N, R, S, or T

Environmental:

Operating Temperature:	-40°C to +85°C
Storage Temperature:	-55°C to +125°C
Humidity:	Relative humidity of 85% for two hours at 65°C
Altitude:	Unlimited
Vibration:	20g's RMS from 5 to 2000Hz in each major axis
Acceleration:	Constant acceleration of 100g's in each axis
Shock:	100g's for 10m second in each major axis

Mechanical:

Size:

	inches	mm
Length	1.25	31.75
Width	1.052	26.72
Height	0.264	6.71

Weight 9 g (without thermocouple leads)

Engraving: MI_ CJ4_TYPE (TYPE=J, K, B, E, N, R, S, or T)

MI_CJ4 PINOUT:

CONNECTOR: GLENAIR, MWDL-21SS

MATE:

To mate to the MI_TC module, use Quad Tron cable part #: CBL_CJ4_TC, which is pre-wired up to 18 inches to MI_TC mate.

To mate to the MI_TC_ADD8 module, use Quad Tron cable part #: CBL_CJ4_TC8, which is pre-wired up to 18 inches to MI_TC_ADD8 mate (requires 2 MI_CJ4 Blocks).

PIN	FUNCTION	PIN	FUNCTION
1	DGND	12	3.3VD
2	NC	13	NC
3	TC4-	14	TC3-
4	TC4+	15	TC3+
5	TC2-	16	TC1-
6	TC2+	17	TC1+
7	NC	18	NC
8	CS_N_CJ3	19	CS_N_CJ4
9	SCLK	20	DIN
10	CS_N_CJ2	21	CS_N_CJ1
11	DOUT		