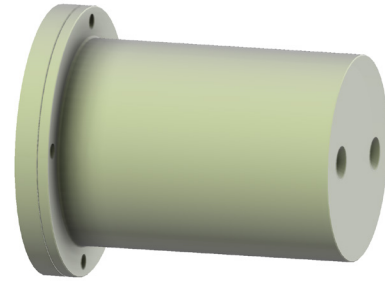


High-Speed End of Shaft Telemetry

Model T8

- Eight channel package
- Proven to 24,000 revolutions per minute
- No components to wear out or maintain
- Configurable for strain gauge or thermocouple



Description

The *T8 High-Speed End of Shaft Telemetry* system is designed to quickly and effectively transmit type K thermocouple signals from a high-speed instrumented shaft. The signals are digitally transmitted with error checking via RF Telemetry, providing stable and accurate measurements free of drop-outs or signal spikes.

The *T8's* compact, bearing free housing was specifically designed to minimize size and weight to allow for long term, high-speed testing. The system has no wear components and requires no periodic maintenance. The *T-series* has been proven at 24,000 rpm, and an upper speed limit has not been established.

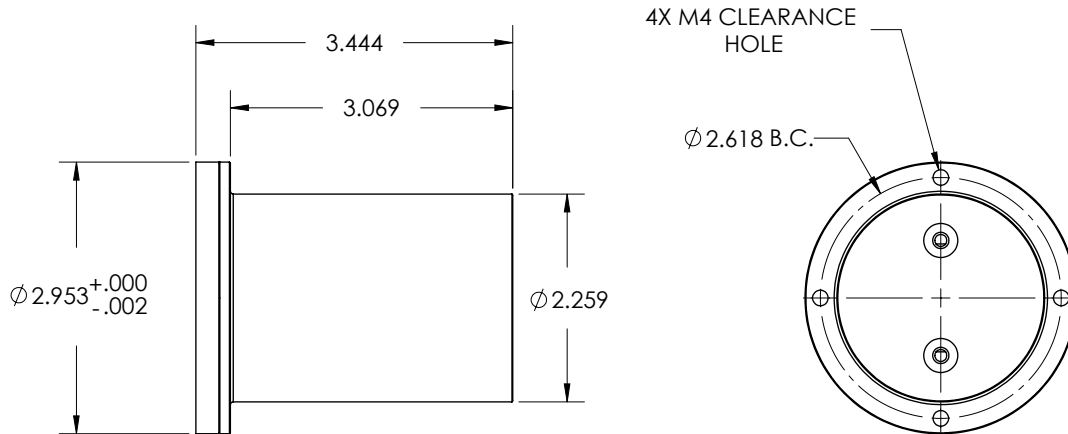
The *T-series* is inductively powered. Install the Primary Inductive Coil 3 mm to 5 mm (approximately) away from the *T8* unit and it will provide power to the rotating telemetry unit. The receiving antennas are connected to the telemetry receiver which provides ± 10 V analog output for each channel. Other induction options are available upon request.

Specifications

PARAMETER	SPECIFICATION
TRANSMITTER	
Data transmission method	2.4 GHz FSK
Analog channels	8 full strain gauge bridges or thermocouples
ADC resolution	16-bit, no missings codes
Data bandwidth	DC to 1000 Hz
Operating temperature	-40 °C to +125 °C (-40 °F to +257 °F)
Power requirement	6 Vdc to 9 Vdc / 65 mA
RECEIVER	
Output at full Scale	± 10 V
DAC output resolution	16-bit, resolving down to 0.305 mV
Data filter cutoff selections	100 Hz, 1 kHz at -3 db
Channel filter type	2-pole Bessel
Current output per channel	± 35 mA
Operating temperature	-40 °C to +70 °C (-40 °F to +158 °F)
RF antenna connector	reverse polarity SMA
Power requirement	9 Vdc to 36 Vdc / 2.5 A
Dimensions (L x W x H)	180 mm x 89 mm x 64 mm (7.0 in x 3.5 in x 2.5 in)
SYSTEM GENERAL	
RF channels available	16

High-Speed End of Shaft Telemetry

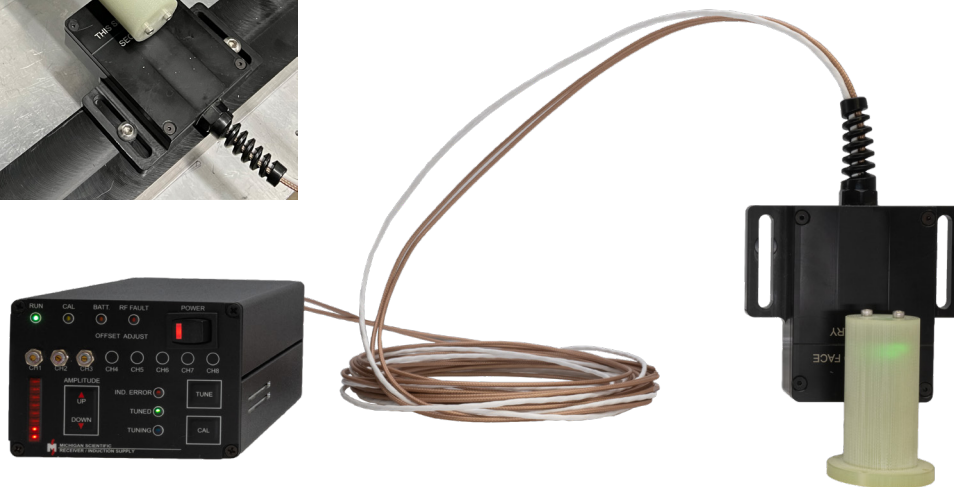
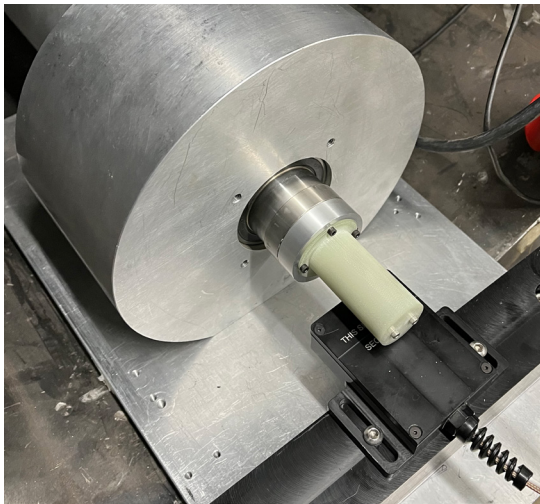
Drawings



DIMENSIONS ARE INCHES

Installation Example

*Images show T3 model



8500 Ance Road
Charlevoix, MI 49720
Tel: 231-547-5511
Fax: 231-547-7070
04-2-24
Rev. A

MICHIGAN SCIENTIFIC
corporation
<http://www.michsci.com>
Email: miscinfo@michsci.com

321 East Huron Street
Milford, MI 48381
Tel: 248-685-3939
Fax: 248-685-5406