

Relays (Solid State)

Physical

Form A

Contact Rating

400mA @ 60V (AC or DC)

On resistance: 2Ω max

Response Time (operate and release)

Operate: 2 ms max, 0.8 ms typical

Release: 0.5 ms max, 0.1 ms typical

Electrical Isolation

500 Vrms, 1 minute

Switchpoint Accuracy

Internal instrument accuracy to alarm

setpoint: ±.005%

Analog Output

Ranges

0 to 20mA, 4 to 20mA, -20 to 0 to +20mA;

user selectable

Accuracy

Internal instrument accuracy: ±.005%; plus ±.05% of full scale range at room temp with 400 ohm load; ±0.1% over temp range and load range. Unit is factory calibrated. Can be re-calibrated using TACHLINK.

Resolution

Step size: 610 nanoamps per lsb. 16 bit D/A

Linearity

±0.02% typical

Loop Impedance

100-1000 Ω

Response Time

Input to output 6.55 msec+ 1 msec settle at 1kΩ (worst case) to .1% of final value

Electrical Isolation

500 Vrms continuous

Display (applies to TT & TTplus)

Resolution

Black and White graphics display. 64x128 Pixels.

Accuracy

±.05% of full scale

Communication Protocol

RS485: 19.2kbaud, 8-n-1 protocol, Half duplex,

Tachometer is bus master

Network

- Multiplex up to seven displays plus one integrated display. Displays are addressable.
- With all seven displays at the end of one RJ11 6-4 cable, max length would be 125 ft (38m), limited by voltage drop in cable. Cable must be 1:1 type (not flipped), described as RJ11 6-4 reversed cable. For longer distances the RJ type cable should not be used. With #18 wire max run to a single display is 1000 ft (305m).
- Response time: 1 second update to all displays, PC and RS485

Electrical Isolation

500Vrms to ground continuous

Utility RS485

Full access to TACHLINK, single drop only

Communication Protocol

RS485: 19.2kbaud, 8-n-1 protocol, Half duplex, Tachometer is bus master

Maximum Transmission Distance

8000 ft (2400m)

Electrical Isolation

500Vrms to ground continuous

USB

Full access to TACHLINK,

Version 1.1 / 2.0 compatible

Processing Platform

PIC18F series micro controller

Clock Speed

10MHz, ±50 ppm at room temp

Acquisition Time

Basic instrument acquisition time / period 6.55 ms

Accuracy

Basic instrument accuracy ±.005% (50 ppm)

Resolution

Basic instrument resolution: ±.025% or better