DESCRIPTION

The Trusted™ Processor Interface Adaptor T812X provides easy access to the communications ports of the Trusted™ TMR Processor in the Trusted™ Controller Chassis for Peer to Peer communications, DCS and other links, networked PCs etc. The Adaptor also supports fault/fail and diagnostics connections to the Processor, and connection facilities for IRIG B time Synchronisation facilities, as well as enabling the user of Modbus Master facilities on the T8151 Communication Interface Card.

The Adaptor comprises a printed circuit board (PCB) on which the communications ports are mounted. The PCB also supports two 48-way DIN41612 E-type connectors which enables the Adaptor to be plugged into the Trusted™ TMR Processor Module input/output (I/O) connectors (Active and Standby) at the rear of the Trusted™ Controller Chassis. The communications ports available from the Adaptor are RS485 (Port 1) and RS422/485 (Ports 2 and 3). The Ports are accessed via Phoenix contact 2.5mm pitch connectors.

Fault/fail, diagnostic and PSU shutdown monitor, and IRIG B time Synchronisation signals are also available via Phoenix connectors.

A complete set of connectors mentioned above are allocated to both the Active and Standby processors.

Termination resistors for RS422/485 communications are selectable via links. These are mounted on the PCB and are the only configurable items which require setting up before using the Adaptor.

When the Adaptor is plugged into the I/O connector on the rear of the Trusted™ Controller Chassis, it is mechanically latched in position. Release buttons are provided to enable the user to unplug the Adaptor as required.

FEATURES

- Allows easy access for external systems to communicate with a Trusted™ System
- Easy installation (connects directly onto the I/O connector at the rear of the processor)
- Two RS422/485 connections
- One RS485 connection
- Fault/fail connections for Active and Standby Processors
- Processor diagnostics connection
- PSU shutdown monitor connections
- Connection facilities for IRIG B122 and IRIG B002 time Synchronisation signals
- Modbus Master enabling of the T8151B Communication Interface Card
ASSEMBLY LAYOUT

MECHANICAL SPECIFICATION

Dimensions (HxWxD):
138mm x 120mm x 108mm
(5.43ins x 4.72ins x 4.25ins)

Weight:
877gms
(1.93lbs)

ENVIROMENTAL

Operating Temperature:
-5°C to 60°C
(23°F to 140°F)

Operating Humidity:
5 to 95%, non-condensing

Vibration:
10 to 57Hz ±0.075mm
57 to 150Hz 1.0g

Shock:
15g, ½ sine wave, 11ms

EMI (IEC 801):
ESD
Air discharge to 15kV
Contact discharge to 8kV

Radiated Fields
10V/m, 27MHz to 500MHz

Transients and Bursts
2kV, 2.5kHz for t=60 seconds

ELECTRICAL SPECIFICATION

Serial Ports
  Active and Standby
1-off RS485
2-off RS422/485

Connections
  Active and Standby
1-off fault/fail
1-off diagnostic
1-off PSU shutdown monitor
1-off IRIG B (122 and 002 on the same connector)

AVAILABLE OPTIONS

T8120 Basic Module
T8121 IRIG-B
T8122 Modbus Master
T8123 IRIG-B and Modbus Master