


TCIB-2.1-UNI
TCIB-4.1-UNI

TCIB-4.2-UNI

DESCRIPTION

The TCIB-UNI INTERFACE BOARDS are designed to allow the INTERSECTOR™ family of sensors to communicate with a traffic control cabinet. The TCIB-UNI provides similar functionality to the TCIB Interface Boards, but also features a 3-port unmanaged Ethernet Switch. The TCIB-UNI has two operating modes: legacy mode and full-feature mode. Legacy mode is compatible with previous generation TC-CK1-SBE sensors with software versions between 1.8M and 1.9U. Full-feature mode provides additional features to compliment the latest TC-CK1-ESW sensors with software version 2.0 or higher, or the TC-CK1-VMS.

The TCIB-UNI is available in models compatible with NEMA, 170, 179, and 2070 cabinets. One TCIB-UNI is used for each sensor and has the capability of networking with additional TCIB-UNI via the built-in Ethernet Switch. Three models are available: TCIB-2.1-UNI, TCIB-4.1-UNI, and TCIB-4.2-UNI. The TCIB-2.1-UNI provides 2 outputs and uses a single slot in the cabinet rack. The TCIB-4.1-UNI provides 4 outputs and uses a single slot in the cabinet rack. The TCIB-4.2-UNI provides 4 outputs and uses two slots in the cabinet rack.

- The TCIB-UNI can be used with the TC-CK1-SBE in Legacy Mode, or with the TC-CK1-ESW in Full Feature Mode.
- The TCIB-UNI combined with the TC-CK1-ESW allows up to 6 sensors to work using only one data port, not 12.
- Setup only uses one page with dropdown menus for easy setup.

TCIB-UNI CARD SPECIFICATIONS

PHYSICAL:

- ☑ Dimensions per TS2 standard
- ☑ Color: Anodized bright blue
Edge pins gold plated

OPERATING:

- ☑ Temperature range: -40°C to +85°C
- ☑ Power requirements: 800 mA at 12 VDC,
400 mA at 24 VDC

NOTE: MS Sedco recommends 1 amp be available for each TCIB-UNI card.

PERFORMANCE:

- ☑ Two output or four output
- ☑ Four LEDs to indicate each zone active
- ☑ Four Opto-isolated outputs each with LED indicator and Status Indicator
- ☑ Surge protection provided on interface board

- ☑ Fault mode (no Ethernet connection) all LEDs and Opto-isolators on (constant call to control cabinet)
- ☑ Ethernet setup port (bridge from PC to Intersector) and operational port
- ☑ RS232 port for diagnostics and data
- ☑ Supplies power for Intersector, short circuit protected
- ☑ Operational from cold start in 20 seconds
- ☑ Automatically recovers from power failure

WARRANTY

A 3 year warranty is available from the manufacturer covering defects in materials and workmanship. Contact MS SEDCO for details.

MS Sedco's TCIB-UNI card interfaces to INTERSECTOR™ and provides the necessary interface to a NEMA rack. Power for the INTERSECTOR™ is delivered over the Ethernet cable. The TCIB-UNI will hold a call on the detection outputs until it confirms the system is working correctly and the failsafe timer has expired. Then it will enter normal operation.

TCIB-UNI PERFORMANCE

Parameter	Value	Unit
Card Performance		
Interface with Intersector	Yes	100baseT with PoE
Interface with Laptop	Yes	100baseT Ethernet
Opto Outputs	2 or 4	Open collector
Secondary card	Via RS232 bridge	Four additional outputs
Flash download	With Bootloader Program	Software
Ethernet connection time	<10	Seconds
Failsafe	60-960 seconds, 120 seconds default	Time before operational.
Service port	Diagnostics, change IP address	RS232
Flash download	Via RS232	Use Bootloader program
Fault detection	Connection, power, Intersector status.	Pass/fail
Call Status Visual Indicator	Four LEDs	One per output
Environmental		
Tested under NEMA TS2 2003	Pass	Applicable sections
Temperature	-40 to +85	Degrees C
Shock	10	G's
Vibration	+/- 0.5	G's
PCB protection	Yes	Conformal coated PCB
Mechanical		
Weight	<0.5	Pound
Dimensions 21	7 x 4.5 x 1.14	L x H x W Inches
Dimensions 4.1	7 x 4.5 x 1.14	L x H x W Inches
Dimensions 4.2	7 x 4.5 x 2.34	L x H x W Inches
Faceplate	PCB	
Pull out handle	1.375"	Inch
General		
Interface	100baseT	Ethernet with power
IP Address	Yes	Configurable
MAC Address	Yes	Set at factory
Power Consumption TCIB-UNI	2.4	Watts
Power Consumption System	8.8	Watts
Power Requirements	10.5 to 26.5	Volts DC