TCIB-UNI

INTER**SECTOR**™

Interface Boards

MS SEDCO

ENGINEERED FOR MOTION

TCIB-2.1-UNI
TCIB-4.1-UNI

TCIB-4.2-UNI

DESCRIPTION

The TCIB-UNI INTERFACE BOARDS allow the INTER**SECTOR**™ family of sensors to communicate with a traffic control cabinet. In addition to the functionality of previous TCIB interface boards, the TCIB-UNI offers a completely redesigned and improved user interface and includes an unmanaged Ethernet switch. The TCIB-UNI has two selectable operating modes: Full Feature and Legacy. Full Feature mode runs the new user interface, utilizes the Ethernet switch and unlocks the latest software advancements to our Intersector SBE 2.0, Intersector VMS, and Intersector WWD models. Legacy mode allows the TCIB-UNI to work with previous Intersector-SBE sensors running software version 1.9.

TCIB-UNI models are compatible with NEMA, 170, 179, and 2070 cabinets. One TCIB-UNI is used for each Intersector and has the capability of networking with additional TCIB-UNIs via the built-in Ethernet Switch. Three models are available: TCIB-2.1-UNI (2 Outputs, uses single slot in the cabinet rack); TCIB-4.1-UNI (4 Outputs, uses single slot in the cabinet rack); and TCIB-4.2-UNI (4 Outputs, uses 2 slots in the cabinet rack).

- TCIB-UNI user interface is single page with drop down menus for easy setup
- TCIB-UNI allows up to 6 sensors to operate via a single data port
- TCIB-UNI full feature mode works with Intersector-SBE-2.0, Intersector VMS, and Intersector WWD.
- TCIB-UNI legacy mode allows backwards compatibility with Intersector SBE running 1.9 software.

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.

TCIB-UNIv012020

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MS Sedco's TCIB-UNI card interfaces to INTER**SECTOR**™ and provides the necessary interface to a NEMA rack. Power for the INTER**SECTOR**™ 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 or4	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 StatusVisual Indicator	Four4 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