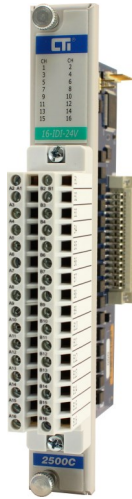




## 2500C-16-IDI-24V Discrete Input Module



### DESCRIPTION

The 2500C-16-IDI-24V Module accepts a wide range of voltage signals. It is designed to accept both AC and DC voltage allowing the user to pick and choose ranges on a single module. Motor centers, optical sensors, limit switches and utility control are excellent examples of applications for this product

### FEATURES

- Single wide module
- 16 Isolated channel to channel inputs
- Supports AC or DC voltage inputs
- Sourcing or sinking Inputs
- Channel On/Off Status Indication
- Uses CTI's 2500C-32F Connector

Input Specifications	
Inputs per module	16
Module Logon	16X
Signal Range	10 to 30VAC/VDC
Input current	VAC 1.4 - 9.3mA VDC 2.9 - 9.3mA
Operating Characteristics for Typical Input	
AC Voltage Input	Turn ON Time: 3.7mS Turn OFF Time: 15.0mS
DC Voltage Input	Turn ON Time: 3.14mS Turn OFF Time: 13.7mS

Module Size	Single wide module
Connector	2500C-32F
Backplane Power (MAX)	0.067 watts No inputs ON 1.188 All inputs ON
Input ESD Protection	IEC 1000-4-2 LEVEL 4
Isolation	1500 VDC Channel to Backplane 1000 VDC Channel to Channel
Shipping Dimensions and Weight	223.84mm x 109.86mm x 34.93mm, 0.234kg
Operating Temperature Range	0°C to 60°C (32°F to 140°F)
Storage Temperature Range	-40°C to 85°C (-40°F to 185°F)
Relative Humidity	5% to 95% (non-condensing)
Agency Approvals Pending	UL, ULC, UL Class 1, Div 2, CE

#### 2500-16-IDI-24V Default Shipment Settings

Operation Mode	NA
Logon	16X
Signal Range	10 - 30 VAC\VDC



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## 2500C-16-IDI-24V Discrete Input Module

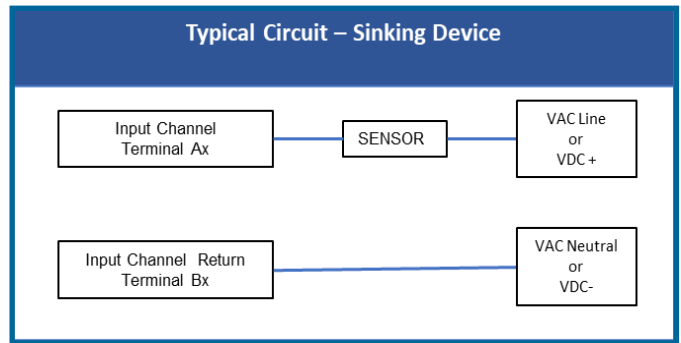
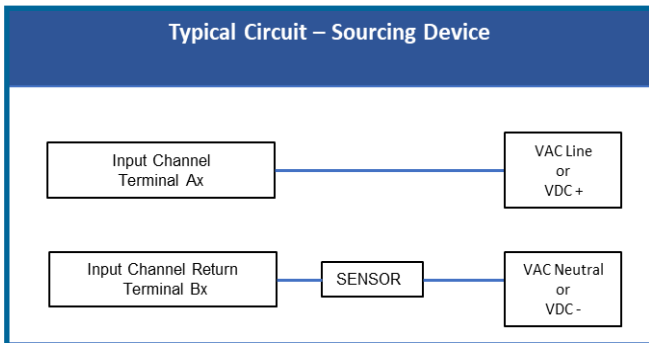
Channel 1	24V	A1		B1	Return	Channel 1
Channel 2	24V	A2		B2	Return	Channel 2
Channel 3	24V	A3		B3	Return	Channel 3
Channel 4	24V	A4		B4	Return	Channel 4
Channel 5	24V	A5		B5	Return	Channel 5
Channel 6	24V	A6		B6	Return	Channel 6
Channel 7	24V	A7		B7	Return	Channel 7
Channel 8	24V	A8		B8	Return	Channel 8
Channel 9	24V	A9		B9	Return	Channel 9
Channel 10	24V	A10		B10	Return	Channel 10
Channel 11	24V	A11		B11	Return	Channel 11
Channel 12	24V	A12		B12	Return	Channel 12
Channel 13	24V	A13		B13	Return	Channel 13
Channel 14	24V	A14		B14	Return	Channel 14
Channel 15	24V	A15		B15	Return	Channel 15
Channel 16	24V	A16		B16	Return	Channel 16

**2500C-16-IDI-24V Wiring Connector**

**Note:**

The 2500C-16-IDI-24V Discrete Input Modules use CTI Wiring Connector 2500C-32F. Please see the wiring connector specification table below. This connector is ordered separately from the module.

2500C-32F Specifications	
Connector Style	Removable
Number of Wiring Connections	32 point
Wire Gauge Use Copper Conductors Only	14 to 22AWG
Screw Torque Value	5.22 lb-in
Current Rating	6A @ 300VAC
Insulation Stripping Length	0.24" 6mm
Connector Material	
Body:	Polycarbonate UL 94V0
Screw :	M3 Zinc plated Steel
Cage Clamp	Nickel Plated Brass
Socket Contact Spring:	Tin Plated Bronze
Retaining Screw:	M3 Zinc Plated Steel



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## 2500C-16-IDI-24V Discrete Input Module

### Physical Installation



### **Physical Installation Picture**

Remove AC power from the rack. Align the circuit board with the card guide and backplane connector. Slide the controller into the rack until the connector seats. Use the thumbscrews to secure the controller in the rack. Once the module is secured to the rack you may install the wiring connector.



### **CAUTION REGARDING HOT SWAPPING:**

The 2500C-16-IDI-24V is designed to allow “hot-swapping” the module under power in the event that a replacement is needed. However, you must be aware that hot-swapping does not meet UL Safety requirements and is not recommended. If you must “hot-swap” the module, use the following procedure:

- Make sure all field devices connected to the module are placed into a “safe” state
- Remove the I/O connector from the front of the module
- Loosen the module retaining screws and remove it from the base
- Ensure the jumper configuration of the replacement module matches the one just removed
- Install the replacement module and tighten the retaining screws. The replacement module must be the same model number as the one removed.
- Reattach the I/O connector to the module
- Ensure the replacement module and all other components are operating properly
- Remove the field devices from “safe” state
- Return to NORMAL RUN mode

**You are responsible for any results in your application control. DO NOT ATTEMPT TO HOT-SWAP A MODULE IN A HAZARDOUS LOCATION!**



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