2580, 2581 and 2582 16-Point Isolated Discrete Input Modules

**Description**
The 2580, 2581 and 2582 16-point Discrete Input Modules accept sixteen discrete isolated inputs to the CTI 2500 Series® or Simatic® 505 I/O base.

**Features**
- CTI 2500 Series and Simatic 505 base format
- 1500 V channel-to-channel isolation
- 1500 V channel-to-PLC backplane isolation
- Sourcing and sinking applications
- LEDs field side

**Specifications**
- **Inputs Per Module**: 16
- **Isolation**:
  - 1500 VDC channel-to-channel
  - 1500 VDC channel-to-backplane
- **Input Voltage**:
  - 2580: 95-132 VAC
  - 2581: 12-56 VDC, 7-42 VAC
  - 2582: 90-146 VDC
- **Input Current**: 7 mA nominal per circuit
- **Turn ON Time**:
  - 2580: 1 AC cycle
  - 2581/2582: 1.7 mSec nominal
- **Turn OFF Time**:
  - 2580: 1 AC cycle
  - 2581/2582: 7.2 mSec nominal
- **Operating Characteristics for Typical Input**:
  - 2580:
    - Turn ON 85 VAC 2.85 mA
    - Turn OFF 80 VAC 1.43 mA
    - Nominal 120 VAC 4.0 mA
  - 2581:
    - Turn ON 8.76 VDC 1.65 mA
    - Turn OFF 7.76 VDC 1.43 mA
    - Nominal 24 VDC 4.90 mA
  - 2582:
    - Turn ON 63 VDC 1.93 mA
    - Turn OFF 60 VDC 1.79 mA
    - Nominal 125 VDC 3.82 mA
- **Connector**: 2500-40F Removable
- **Wire Gauge**: 14-22 AWG
- **Backplane Power**: 1 Watt (maximum)
- **Module Size**: Single wide
- **Shipping Weight**: 1.5 lb. (0.68 Kg)

**Additional Product Information:**
On CTI’s Website you can find links to the 2500 Series Std Environmental Specifications and the UL Agency Certificates of Compliance.
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Checking Module Operation

You must check to see that the module is configured in the memory of the PLC. This is important because the module will appear to be functioning regardless of whether it is communicating with the PLC. To view the PLC I/O configuration chart listing all slots on the base and the inputs or outputs associated with each slot, refer to your Programming Manual. An example chart is shown in the following figure.

I/O Configuration Chart

In this example, the 16-point discrete input module is inserted in slot 1 in I/O base 0. Data appears as 16 "X" locations starting at "X1". For your particular module, look in the chart for the number corresponding to the slot occupied by the module. If bit locations appear on this line, then the module is registered in the PLC memory and the module is ready for operation.

If the line is blank or erroneous, re-check the module to ensure that it is firmly seated in the slots. Generate the PLC I/O configuration chart again. If the line is still incorrect, contact your local distributor or CTI at 1-800-537-8398 for further assistance.

WARNING
The module must not be inserted into the I/O rack while rack power is ON.

Note: The connector 2500-40F is sold separately.