

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

Classic



## 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

**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
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Turn OFF	80 VAC	1.43 mA
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Nominal	120 VAC	4.0 mA
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2581:

Turn ON	8.76 VDC	1.65 mA
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Turn OFF	7.76 VDC	1.43 mA
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Nominal	24 VDC	4.90 mA
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2582:

Turn ON	63 VDC	1.93 mA
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Turn OFF	60 VDC	1.79 mA
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Nominal	125 VDC	3.82 mA
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**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:

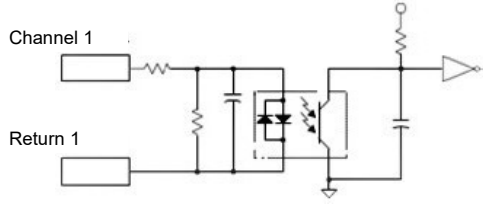
On CTI's Website you will find links to the 2500 Series Std Environmental Specifications and the UL Agency Certificates of Compliance .

## 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



Typical Circuit



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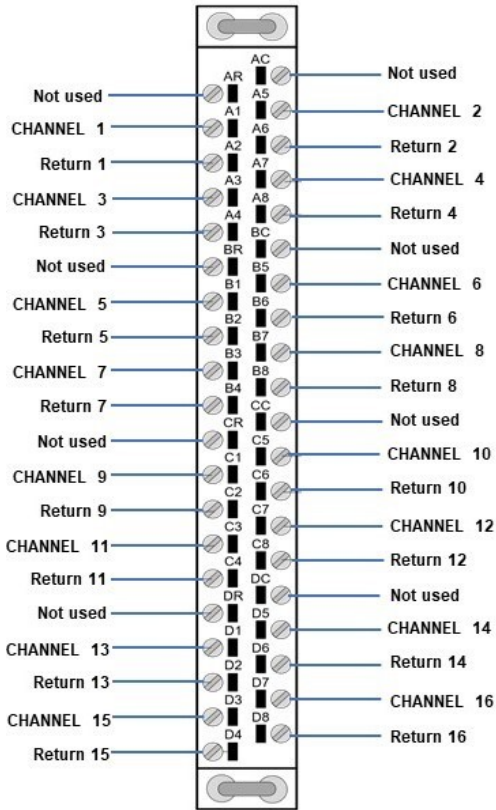
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**ROCK SOLID PERFORMANCE. TIMELESS COMPATIBILITY.**

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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 MODULE DEFINITION FOR CHANNEL ... 1 BASE.....0
I/O
SLOT ADDRESS  NUMBER OF BIT AND WORD I/O  SPECIAL
              X  Y  WX  WY  FUNCTION
01 ..... 0001 ..... 1 6 ..... 00 ..... 00 ..... 00.....NO
02 ..... 0000 ..... 00 ..... 00 ..... 00 ..... 00.....NO
15 ..... 0000 ..... 00 ..... 00 ..... 00 ..... 00.....NO
16 ..... 0000 ..... 00 ..... 00 ..... 00 ..... 00.....NO
    
```

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.

## 2580/81/82 Wiring Connector Diagram

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

## WARNING

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

