2585 16-point TTL Input Module

Description

The 2585 16-Point TTL Input Module accepts sixteen TTL driven inputs to the CTI 2500 SeriesTM or Simatic® 505 Series I/O base. The inputs are isolated channel-to-channel.

The 2585 has an input voltage range from 2.6 to 28 VDC; therefore, the inputs may be driven by CMOS and open collector transistor devices.

Features

- CTI 2500 Series and Simatic 505 base format
- 500 V channel-to-channel isolation
- 1500 V channel-to-PLC backplane isolation

Specifications

- Inputs per module: 16
- Isolation:
  - 500 VDC channel-to-channel
  - 1500 VDC channel-to-backplane
- Input Voltage:
  - 2.6 to 28 VDC
  - TTL OFF <0.8 VDC TTL ON > 2.6 VDC
  - 1500 VDC channel-to-backplane
- Input Current:
  - 20 mA max. per circuit (0.5 mA @ 2.6 VDC)
  - Isolation:
  - 1500 VDC channel-to-backplane
- Turn ON Time: Approx. 1 mSec nominal
- Turn OFF Time: Approx. 2 mSec nominal PLC Reporting: X or WX (jumper selectable)
- Wire gauge: 14-22 AWG removable connectors
- Backplane power: 1.4 Watts (all outputs active)
- Module size: Single-wide
- Blown fuse indication: Front panel LED
- Shipping Weight: 1.5 lb. (0.68 Kg)

Additional Product Information:

On CTI's Website you find will links to the 2500 Series Std Environmental Specifications and the UL Agency Certificates of Compliance.
2585 16-Point TTL Input Modules

Word and Discrete Mode

The 2585 may operate as a 16 Bit Word Input Module or as a 16 Discrete Input Module. By setting JP1 in Word Mode and using Workshop to configure I/O the 2585 will look like a standard WX input module; for example WX1-WX8.

NOTE: The 2585 will be mapped as the first WX address (i.e. WX1). In Word Mode Channel 1 corresponds to bit 16 or LSB and Channel 16 corresponds to Bit 1 or MSB.

Changing Operating Modes

Any time the operating mode of the 2585 is changed with JP1, the module must be configured in the PLC. Failure to do so may cause unpredictable operation due to the fact that the PLC uses different methods of addressing discrete modules from word modules.

I/O MODULE DEFINITION FOR CHANNEL 1 BASE 00

<table>
<thead>
<tr>
<th>SLOT</th>
<th>ADDRESS</th>
<th>X</th>
<th>Y</th>
<th>WX</th>
<th>WY</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>0001</td>
<td>00</td>
<td>00</td>
<td>08</td>
<td>00</td>
<td>NO</td>
</tr>
<tr>
<td>02</td>
<td>0000</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>NO</td>
</tr>
<tr>
<td>15</td>
<td>0000</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>NO</td>
</tr>
<tr>
<td>16</td>
<td>0000</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>NO</td>
</tr>
</tbody>
</table>

Figure 1 I/O Word Mode Configuration Chart

In the example Figure 2, the 16-point TTL input module is inserted in slot 1 in I/O base 0 and configured as a DISCRETE module using JP1. In the example below 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.

I/O MODULE DEFINITION FOR CHANNEL 1 BASE 00

<table>
<thead>
<tr>
<th>SLOT</th>
<th>ADDRESS</th>
<th>X</th>
<th>Y</th>
<th>WX</th>
<th>WY</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>0001</td>
<td>16</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>NO</td>
</tr>
<tr>
<td>02</td>
<td>0000</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>NO</td>
</tr>
<tr>
<td>15</td>
<td>0000</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>NO</td>
</tr>
<tr>
<td>16</td>
<td>0000</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>NO</td>
</tr>
</tbody>
</table>

Figure 2 I/O Configuration Chart

Note:
If the address 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 address line is still incorrect, contact your local distributor or CTI at 1-800-537-8398 for further assistance.
2585 16-Point TTL Input Modules

Figure 3 2585 Wiring Connector Diagram

Figure 4 2585 Typical Application Diagram

Figure 5 JP 1 Location and Configuration

NOTE: UNIT SHIPPED WITH JUMPER 1 CONFIGURED FOR DISCRETE MODE AS SHOWN. FOR WORD MODE MOVE JUMPER TO PINS 2 AND 3.