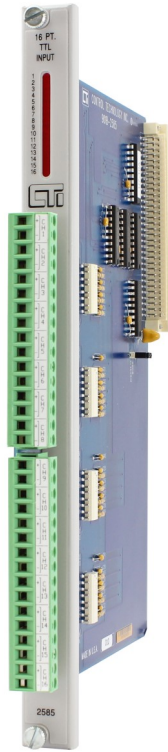# 2585 16-point TTL Input Module

Classic

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 .

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

Control Technology Inc.

5734 Middlebrook Pike, Knoxville, TN 37921-5962
Phone: +1.865.584.0440   Fax: +1.865.584.5720
www.controltechnology.com

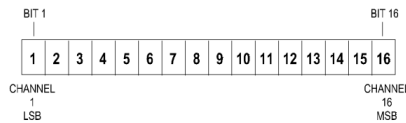**ROCK SOLID PERFORMANCE. TIMELESS COMPATIBILITY.**

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.

```
BIT 1                                    BIT 16
 |                                        |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
| 1| 2| 3| 4| 5| 6| 7| 8| 9|10|11|12|13|14|15|16|
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
CHANNEL                                  CHANNEL
  1                                        16
 LSB                                       MSB
```

I/O MODULE DEFINITION FOR CHANNEL 1 BASE 00						
	I/O	NUMBER OF BIT AND WORD I/O				SPECIAL
SLOT	ADDRESS	X	Y	WX	WY	FUNCTION
01	0001	00	00	08	00	NO
02	0000	00	00	00	00	NO
15	0000	00	00	00	00	NO
16	0000	00	00	00	00	NO

Figure 1 I/O Word Mode Configuration Chart
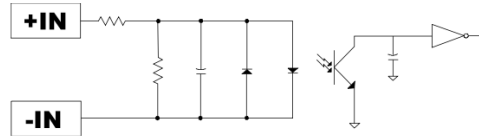
Changing Operating Modes

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.

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						
	I/O	NUMBER OF BIT AND WORD I/O				SPECIAL
SLOT	ADDRESS	X	Y	WX	WY	FUNCTION
01	0001	16	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

Fig-

ure 2 I/O Configuration Chart

ROCK SOLID PERFORMANCE. TIMELESS COMPATIBILITY.

2585 16-Point TTL Input Modules
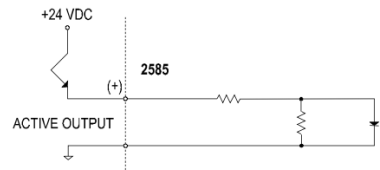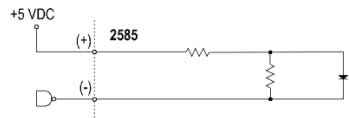

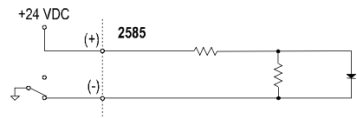Figure 3 2585 Wiring Connector Diagram

Typical Circuit

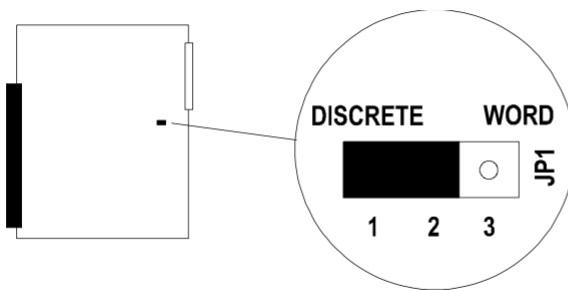**TYPICAL CONNECTION FOR HIGHER LEVEL VOLTAGE (24 VDC)**

RECOMMENDED TTL LEVEL INPUT CONNECTION

TYPICAL 24 VDC SWITCH CONNECTION

Typical Applications

Figure 4 2585 Typical Application Diagram

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

Figure 5 JP 1 Location and Configuration

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