2500 Series® PLC System
Product Bulletin

2572-B Fast Ethernet TCP/IP Adapter

Classic

Description

The 2572-B Ethernet TCP/IP Adapter is a high-performance version of the CTI 2572 Ethernet module. Because it supports the same PLC logic commands and network protocols, it can be used as a direct replacement for the CTI 2572-A in all applications except where DHCP addressing is used, and can also be used as a direct replacement for CTI 2572 and Siemens® 505-CP2572 in most applications.

The CTI 2572-B provides network services to CTI 2500 Series® and Simatic®/TI 505 PLCs. Using the TCP/IP protocol, suitably configured network stations can acquire data from the PLC, send data and programs to the PLC, and exercise supervisory control over the PLC operation. In addition, the PLC can use the CTI 2572-B to access data in other PLC systems equipped with CTI 2572-B, 2572-A, 2572 or 505-CP2572 modules.

The CTI 2572-B module directly attaches to Ethernet twisted pair cabling via the Ethernet CAT5e connector (RJ-45) and can be used with either 10Mb or 100Mb data links (half or full duplex operation). The module automatically detects network speed and duplex mode and configures its port accordingly. The firmware includes a full function TCP/IP stack that supports both TCP and UDP protocols.

The module provides extensive diagnostic facilities, accessible via a standard web browser, to aid in the detection and correction of network problems. A web browser can also be used to configure the module. The ability to make configuration changes can be disabled entirely via module switch settings.

Features

- Direct replacement for 2572-A
- New IP address display on front panel
- No serial connection required to set IP address
- DHCP address switches removed from front panel (contact CTI if your application uses DHCP)
- Provides a substantial increase in transaction processing capability compared to 2572
- Supports 10Mb and 100Mb Ethernet
- Supports Modbus TCP-Server protocol
- Does not require special configuration software and cables
- Offers enhanced browser-base diagnostic facilities to help in troubleshooting
- Incorporates flash memory technology to facilitate firmware upgrades in the field using a web browser
- Compatible with 2572 and 505-CP2572 PLC logic interface
- Fully compatible with 2572-DDS2 and 2572-OPC I/O servers

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Specifications

Module Size: Single Wide

Ethernet Port:
Speed autosensing.
RJ-45 style connector.
Accepts shielded twisted and unshielded twisted pair cabling.

Diagnostic LEDs:
Module status
Network status
Activity
Link status
Full duplex
100 Mb operation

Backplane Power: 2.5 watts

Operating Temperature
0°-60°C (32° to 140°F)

Storage Temp
-40° to 85°C (-40° to 185° F)

Relative Humidity
5% to 95% (non-condensing)

Agency Approvals:
CE
UL, UL-C (pending)
Class 1 Div 2 (pending)

Shipping Weight
1.5 lb. (0.68 Kg)

Note: 2572B Maximum Ethernet Connections

CAMP Server—24 TCP + UDP
CAMP Client—8 (total of TCP and UDP)
Ethernet/IP Server—8 connections
Modbus Server—8 connections

Comparing 2500 Series® Ethernet Solutions

	2572	2572-A	2572-B	2500-Cxxx / 2500C-Cxxx	2500P-ECC1	2500P-ACP1	2500P-JACP	2500P-J750 / 2500C-J750	Siemens 505-CP1434-TF	Siemens 505-CP1434-TCP
Applications Supported										
Programs with				Workshop, TISoft, APT	ECC1 Configurator	Workbench (Jsoft)	Workbench (Jsoft)	Workbench (Jsoft)		
PLC programming	✓	✓	✓						✓	✓
HMI/SCADA access	✓	✓	✓	✓	✓		✓[11]	✓[11]	✓	✓
Peer-peer (CAMP)	✓	✓	✓	✓[6]	✓	✓	✓	✓		✓
Peer-peer (other)	✓[1]	✓[2]	✓[2]		✓[2,3]	✓[2,3]	✓[2,3]	✓[2,3]	✓	
Communication to SIMATIC/TI 505® CPU over the backplane	✓	✓	✓			✓	✓		✓	✓
Communication to Rockwell PLCs		✓[4]	✓[4]			✓[5]	✓[12]	✓[12]		
Communication to S7	✓									✓
Email	✓									✓
Communication to Modbus TCP devices		✓[9]	✓[9]		✓	✓	✓	✓		
Communication to Ethernet/IP devices		✓[4]	✓[4]			✓[5]	✓[12]	✓[12]		
Performance in CTI standard SCADA test										
Packets sent/received per second [10]	68	102	102	199	989	N/A	N/A	N/A	N/A	N/A
Protocols Supported										
505 Ethernet (aka CAMP, NITP)	✓	✓	✓	✓[7]	✓	✓[8]	✓	✓		✓
Multicast		✓	✓		✓	✓	✓	✓		
Data Cache with 2500-Cxxx PLCs					✓	✓	✓	✓		
Network Data Exchange					✓	✓	✓	✓		
Data Share	✓									
Modbus-TCP		✓[7]	✓[7]		✓	✓	✓	✓		
Ethernet/IP		✓[4]	✓[4]			✓[5]	✓[12]	✓[12]		
H1									✓	
Communicates Directly With (Over Ethernet)										
2572	✓	✓	✓	✓	✓	✓	✓	✓		✓
2572-A	✓	✓	✓	✓	✓	✓	✓	✓		✓
2572-B	✓	✓	✓	✓	✓	✓	✓	✓		✓
2500 Series® CPUs	✓	✓	✓		✓	✓	✓	✓		✓
2500P-ECC1	✓	✓	✓	✓	✓	✓	✓	✓		✓
2500P-ACP1	✓	✓	✓	✓	✓	✓	✓	✓		✓
2500P-JACP						✓	✓	✓		
2500P-J750 CPU						✓	✓	✓		
505-CP1434-TF									✓	
505-CP1434-TCP	✓	✓	✓	✓	✓	✓	✓	✓		✓
Other										
For Direct Use with SIMATIC TI505®	✓	✓	✓			✓	✓		✓	✓
Webserver for diagostics		✓	✓	✓	✓	✓	✓	✓		
OPC/DDE support	✓	✓	✓	✓	✓		✓	✓	✓	✓
100Mbit speed		✓	✓	✓	✓	✓	✓	✓		
1000Mbit speed							✓	✓		
Availability										
Manufactured and supported			✓	✓	✓	✓	✓	✓		
Support Only	✓	✓								

Notes V3.2

[1] Datashare protocol

[2] IP Multicast

[3] Network Data Exchange

[4] Supports accessing V memory using CIP DATA TABLE READ and CIP DATA TABLE WRITE messages

[5] Supports connections to Ethernet/IP devices via I/O Scanner, I/O Adapter, Explicit Message Adapter, and Tag Client interfaces

[6] CPU supports "server only" for peer-peer

[7] Supports "server" operation only

[8] Supports "client" operation only

[9] Supports "slave" operation only

[10] Tested with Kepware OPC Server, 3 connections from 2 different PCs, each connection polling 1000 C's and 1000 V's at 10msc speed, 30msec PLC scan

[11] Using OPC-UA or CAMP Server

[12] Supports connections to Ethernet/IP devices via I/O Scanner, I/O Adapter, Tag Client/Server, Explicit Message Client/Server, and Flex I/O Client