2572 Ethernet TCP/IP Module

The 2572 Ethernet TCP/IP can operate in different modes. In *Server Mode*, the module reponds to the PLC commands embedded in the TCP/IP packet. The initiating device (usually a computer or a 2572 operating in client mode) encapsulates the PLC command in the TCP/IP protocol and transmits it to the 2572. The 2572 retrieves the command and formats a corresponding request to the PLC. When the 2572 receives the response from the PLC, it encapsulates the response in the TCP/IP protocol and transmits it back to the IP addresss which sent the initial command.

In *Client Mode*, the 2572 can initiate a TCP/IP message. PLC logic is used to tell the 2572 what to send, where to send it, and when to send it. Using the Client Mode, the local PLC can read and write memory in other remote PLCs or it can send messages to supervisory computers based on events detected by the PLC (alarm detection, data logging, etc.). Since a 2572 can operate as both a server and a client, multiple PLCs (each with a 2572) can participate in peer to peer comunicications.

Serial Redirect is a very powerful feature which routes data received at a serial port on the module to another node on the network. Once the serial port has been configured for the type of service and a destination address has been established, the 2572 will encapsulate the serial port data in the TCP/IP and send it to the destination. Replies from the destination address will be routed back to the serial port.

Description

The 2572 Ethernet TCP/IP module provides connectivity to Ethernet local area networks and allows the PLC to communicate with other network nodes using the Transmission Control Protocol / Internet Protocol (TCP/IP). Using the 2572, other devices on the network can acquire data from the PLC, send data and programs to the PLC, and exercise supervisory control over the PLC operation.

The module provides two serial ports which function as additional PLC program ports, attaches directly to IEEE 802.3 10BaseT via an RJ-45 connector, and includes UDP and TCP support.

Features

- Single-wide I/O module
- Attaches to all Ethernet media (incl. RJ45)
- Two serial ports for PLC programming/ MMI
- Server and Client mode operation for peer-peer communications
- Complete compatibility with Workshop and Tisoft®
- Supported by popular MMI packages

Control Technology Inc.
5734 Middlebrook Pike, Knoxville, TN 37921-5962
Phone: 865/584-0440   Fax: 865/584-5720   www.controltechnology.com

Applications

The 2572 Ethernet TCP/IP adapter connects the CTI 2500 Series or Simatic® 505 PLC to Ethernet local area networks. It allows communication between the PLC and other network nodes using the TCP/IP protocol. Using the 2572, other devices on the network can get data from the PLC, program the PLC and exercise supervisory control over the PLC operation. The 2572 also provides high-speed PLC access from networked MMI stations and peer-peer communications between PLCs.

Specifications

Ethernet Ports	1 - IEEE 802.3 10BaseT with RJ-45 connector 1 - IEEE 802.3 AUI port with female DB15 connector 10BaseT port auto-selected if Link Beat is present AUI power derived from PLC backplane or external power supply
Serial Communications Ports	1 ea. - RS-232C (subset) male DB9 connector, DTE. RS-232 handshake lines - RTS, CTS, DSR, DTR 1 ea. - RS-422 with Female DB9 connector 1500 VDC isolation channel-to-PLC
Diagnostic LEDs	1 ea. - Module Status (ACTIVE) 3 ea. - Transmit Data (Serial Port 1, Serial Port 2, Ethernet) 3 ea. - Receive Data (Serial Port 1, Serial Port 2, Ethernet) 1 ea. - 10BaseT Link Beat Detected 1 ea. - AUI Port Selected 1 ea. - Collision Detected 1 ea. - Reversed Polarity (10BaseT Port)
Backplane Power Consumption	6.0 Watts @ 5 VDC
Module Size	Single Wide
Operating Temperature	0° to 60° C (32° to 185° F)
Storage Temperature	-40° to 85° C (-40° to 185° F)
Humidity	0% to 95% (non-condensing)
Agency Approvals	FM, UL, UL for Canada, CE