

2571 Program Port Expander Module



Description

The 2571 provides up to four additional programming ports for 505 controllers. Operator Interface devices which adhere to the Non-Intelligent Terminal Protocol (NITP), such as the CTI 5250-TI5, may be connected to the module to provide monitoring and control functions. All ports can operate concurrently and may be individually configured for baud rate.

The 2571 provides two RS-232 ports and two RS-422 ports. The RS-232 ports include RTS, CTS, DCD, DTR, and DSR handshake signals. The DB9 connectors used with the 2571 have pinouts identical to the 545 PLC, allowing cables designed for the PLC programming port to be used.

Transmit (XMT) and receive (RCV) LEDs report communication status for each port. The Active LED indicates module performance status.

Features

- * Provides four additional programming port connections compatible with NITP
- * Each port configurable for baud rates to 19.2Kb
- * Uses standard 545 PLC communications cables
- * LEDs indicate port communication status

SPECIFICATIONS

General

Communications Ports: 2 RS-232C (subset),
2 RS-422

Port Baud Rates:
1200, 2400, 9600, 19,200

Port Parameters:
7 data bits, 1 stop bit, odd parity

Port Connectors:
2 RS-232 ports - Male DB9
2 RS-422 ports - Female DB9

Isolation: 1500 VDC channel to PLC

Module Size: Single wide 505 I/O

Backplane Power: 5 Watts at 5 VDC

Environmental

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

Storage Temperature:
-40° to 85°C (-40° to 185°F)

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

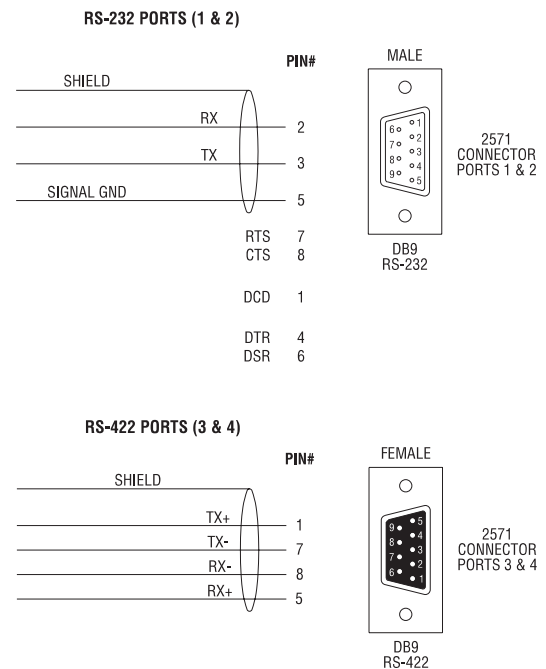
Agency Approvals

UL, UL for Canada

FM (Class I, Div 2)

Shipping Weight

2 lbs.



Program Ports Pin Out Description

Description

The 2571-TCM1 Task Code Master feature is a firmware upgrade for the CTI 2571 Program Port Expander. Using a 2571 with this feature, a 505 series PLC can read or write memory located in other 505 or 500 series PLCs.

All four ports on the 2571 can operate concurrently. Each port can be individually configured as either a task code master or a task code slave. When a port is configured as a task code slave, it emulates the programming port on a 505 PLC and responds to valid Non Intelligent Terminal Protocol (NITP) messages. When a port is configured as a task code master, the PLC can *initiate* NITP task codes to access memory in another PLC.

Example Configurations

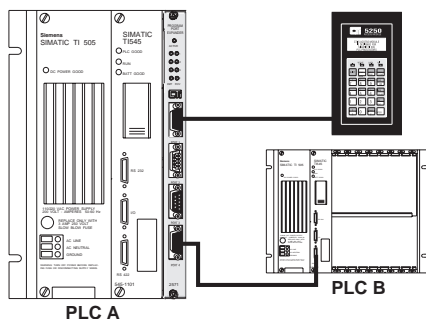


Figure 1 Task Code Master and Slave

Figure 1 illustrates a 2571-TCM1 with one port configured as a task code slave and one port configured as a task code master. The task code slave port is connected to a CTI 5250 Access Module. The task code master port is connected to the programming port of a 545 PLC. In this configuration, the 5250 can access memory in PLC A and PLC A can access memory in PLC B. Ports 2 and 3 are shown unused to simplify the illustration.

NOTE:
CTI also offers custom support for interfacing factory floor devices to the 2571.

- Pepperl+Fuchs Inductive Tag Reader
- Mettler-Toledo SM3000 Weight Scale
- Rice Lake IQ+810 Weigh Scale
- HBM Weigh Scale

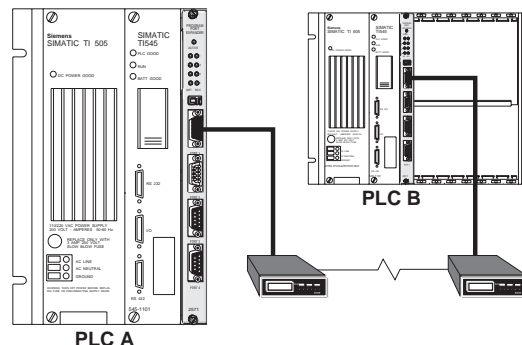


Figure 2 2571 Master to 2571 Slave

Figure 2 illustrates a typical configuration where two 505 PLCs are connected using leased line modems. Each PLC rack contains a CTI 2571-TCM1. Port 1 of the 2571 in PLC A is configured as a Task Code Master. Port 1 of the 2571 in PLC B is configured as a Task Code Slave. PLC A can access V memory in the remotely located PLC B.

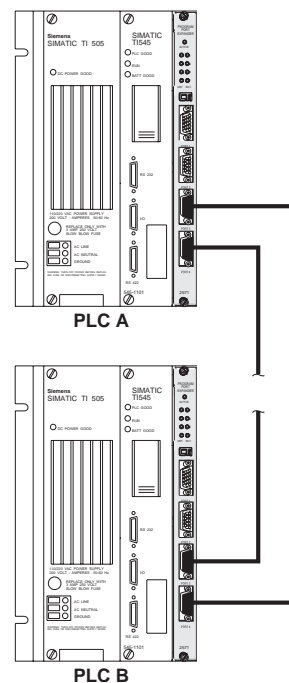


Figure 3 Full Duplex Master

In Figure 3, both PLCs contain a CTI 2571 equipped with the 2571-TCM1 feature. Port 3 of each 2571 is configured as a Task Code Master. Port 4 of each 2571 is configured as a Task Code Slave. In this configuration PLC A can read and write V memory in PLC B and PLC B can simultaneously read and write V memory in PLC A. Either PLC can initiate a command to the other PLC.