

2500S SLICE I/O Ethernet I/O Modules



Description

The 2500S family of Slice I/O modules expands the capability of 2500 Series[®] Systems to include small drops of I/O connected over Ethernet.

Slice I/O modules communicate to 2500 Series[®] Processors using CAMP protocol and read/write directly to the PLC memory or I/O image table. This allows transparent integration into the 2500 Series[®] system without the requirement for any complicated configuration step. Ethernet connection to the CPU can be accomplished using the on-board port on 2500-Cxxx Processors, using a 2572 / 2572-A Ethernet module, or using the 2500P-ECC1 Ethernet Communications Coprocessor. Note that when using 2572 or 2572-A modules, Slice I/O can be connected even to legacy Siemens[®] and Texas Instruments PLCs.

Several models of Slice I/O are available with different mixes of I/O and with additional communications options including RS232/485 and 900MHz radio. Slice I/O modules feature Universal Analog Inputs which allow connection of 0-5V, 0-20mA, thermocouple, and RTD sensors.

All Slice I/O modules can also be configured to communicate over Ethernet using Modbus-TCP.

Features

- Connects to CTI and legacy Siemens[®] /TI CPUs over Ethernet
- Several models with differing I/O capabilities allow you to customize the solution to your needs
- Serial RS232/485 and 900MHz radio options for additional communications flexibility (900MHz wireless subject to import limitation, depending on country)
- Extensive intelligent features for processing attached I/O signals:
 - Totalization, filtering, forcing, inversion, runtime, and counting on digital inputs
 - Frequency out (with PWM) and synchronization on digital outputs
 - Filtering, averaging, scaling and totalization on analog inputs
 - Data logging and trending
- All module configuration done using a simple web browser interface
- Wide -40°C to +70°C operating temperature range

Hardware Specifications

Ethernet Ports:

Number of Ports: 2 (Switched)
Connectors: RJ-45 (Auto-MDIX)
Speed: 10Mb or 100Mb (auto-negotiated)
Duplex: Half or Full (auto-negotiated)

Status LEDs:

Ethernet communications activity
I/O channel status

Serial Port: (on some models)

Connector: RJ45
Electrical Interface: RS-232, RS-485
Baud Rates: 1200b -115Kb

I/O Specifications:

Digital Inputs (DI):

Input type: low voltage DC or contact closure
 Input Voltage: 0 to 30 VDC
 Maximum rate on counting: 10KHz

Digital Outputs (DO):

Output type: relay contact



Output voltage: 0 to 30 VDC, 0-120 VAC
Output current: 3A maximum

Digital Combo (DIO):

Input type: low voltage DC or contact closure
Input Voltage: 0—30 VDC
Output type: FET output
Output voltage: 0 to 30 VDC
Output current: 1A maximum
Output protection: 1A thermal circuit breaker

Universal Analog Inputs (UAI):

Signal range:
0-20mA, 4-20mA
0-5V, 0-100mV, 0-250mV
J,K,T,E,R,S,B,N thermcouple
10Ω, 100Ω, 1KΩ RTD (2-wire and 3-wire)
10K Type II and Type III thermistor
Note: 3-wire RTD requires 2 inputs
Resolution: 16-bits

Accuracy:

Voltage: 0.1% of full scale from -40°C to 70°C
Current: 0.1% of full scale from -40°C to 70°C
RTD: 0.1% of full scale from -40°C to 70°C
Thermocouple: 0.1% of full scale ± 3°C from -40°C to 70°C

Analog Inputs (AI):

Signal range:
0-20mA, 4-20mA, 0-5V, 0-100mV, 0-250mV
Resolution: 12-bits

Accuracy:

Voltage: 0.1% of full scale from -40°C to 70°C
Current: 0.1% of full scale from -40°C to 70°C

Analog Output (AO):

Signal range: 0-20mA, 4-20mA
Resolution: 12-bits
Accuracy:
0.1% of full scale from -40°C to 70°C

Connector Wire Gauge: 12-22 AWG

Power: externally supplied 10-28VDC, 5 watts

Operating Temperature

-40 to +70°C (-40°F to +158°F)

Storage Temperature

-40 to 85°C (-40 to 185° F)

Relative Humidity

5% to 95% non-condensing

Agency Approvals (pending)

UL, UL-C, CE
Class 1 Div 2

Shipping Weight

0.5 lb. (225g)

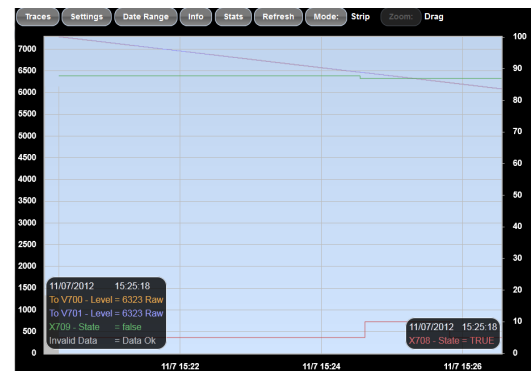
Configuration

All 2500S Slice I/O modules include a web server, allowing parameters for communications, signal ranges, intelligent features, and data logging/trending to be set using a simple web browser interface.

The browser interface is used for configuring all module functions, including:

- Ethernet communications parameters
- Intelligent I/O functions
- Alarms
- Trending
- Maintenance
- PLC mapping of I/O information

	Values	Raw
DI1	X708	
DI2	X709	
DI3	X710	
DI4	X711	
DO1	Y704	
DO2	Y705	
DO3	Y706	
DO4	Y707	
UI1	To V700	7987 Raw
UI2	To V701	7990 Raw
AO1	Analog Out 01	0.000 mA
AO2	Analog Out 02	16.000 mA



Ordering information

Slice I/O with Ethernet

2500S-23-1050	Slice I/O, Ethernet, 4DI / 4DO / 2UAI / 2AO
2500S-26-1050	Slice I/O, Ethernet, 8DIO / 2UAI
2500S-27-1050	Slice I/O, Ethernet, 2DIO / 4UAI / 2AI

Slice I/O with Ethernet and RS232/485

2500S-23-1550	Slice I/O, RS232/485, 4DI / 4DO / 2UAI / 2AO
2500S-26-1550	Slice I/O, RS232/485, 8DIO / 2UAI
2500S-27-1550	Slice I/O, RS232/485, 2DIO / 4UAI / 2AI

Slice I/O with Ethernet and 900Mhz Radio (subject to import limitation, depending on country)

2500S-23-1360	Slice I/O, 900MHz, 4DI / 4DO / 2UAI / 2AO
2500S-26-1360	Slice I/O, 900MHz, 8DIO / 2UAI
2500S-27-1360	Slice I/O, 900MHz, 2DIO / 4UAI / 2AI