

5915 SDI-12

Interface module

- Hardware interface between SCADAPack 32/300 Series controller and SDI-12 slave devices
- C++ application provides SDI-12 protocol functionality
- TelePACE, ISaGRAF or C++ application sends protocol messages
- External (RJ45) RS232 connection to SCADAPack com port
- Rx and Tx communication status LEDs
- Powered by external 12V source
- Class I, Division 2 Groups A, B, C and D Hazardous Locations
- CSA certified to UL508 standards
- ATEX II 3G and IECEx: Ex nA IIC T4 per EN 60079-15, protection type n (Zone 2)
- 3-Year Warranty on parts and labor





The 5915 SDI-12 Interface Module facilitates communications between multi-dropped slave SDI-12 devices and a SCADAPack 32 or 300-Series controller by converting the electrical data signal levels from serial RS232 to SDI-12.

The 5915 is powered by an external 12V power source and therefore does not require an Inter-Module-Connection (IMC) cable connection to the SCADAPack, unless other 5000 Series expansion modules are to be located downstream (to the right) of the 5915. To assist in debugging communications, Rx and Tx status LEDs are included.

SDI-12, (Serial-Digital Interface at 1200 baud) is an ASCII-based serial communication protocol used primarily in environmental monitoring equipment. These microprocessor-based devices are collectively known as SDI-12 sensors (slaves) and are able to calibrate their sensor, control sensor measurements, and convert raw sensor readings into engineering units.

The slave sensor accepts and decodes instructions received from a data recorder (master), starts the measurements, controls all timing, and uses the SDI-12 protocol to transfer information back to the data recorder. SCADAPack32 and 300-Series controllers can act as a master SDI-12 data recorder, polling a number of remote SDI-12 sensors for pertinent information.

Product Data Sheet 5915 SDI-12 Specifications

> 5915 SDI-12 Interface module

General

SDI-12 bus Terminations	<ul style="list-style-type: none"> • 12 to 22 AWG • 15A contacts
Dimensions	2.90 inch (74mm) wide, 4.90 inch (124mm) high, 1.80 inch (45mm) deep
Packaging	Corrosion resistant zinc plated steel with black enamel paint
Environment	<ul style="list-style-type: none"> • 5% RH to 95% RH, non-condensing • -40oC to 70oC (-40oF to 158oF) operation • -40oC to 85oC (-40oF to 185oF) storage
Addressing	None required

Power Requirements

12V	<ul style="list-style-type: none"> • 6mA Idle • 6.5mA active, with LEDs disabled • 24mA active, continuous transmit, both LEDs on
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Communications – Port P1

Port Type	RS-232 compatible serial port
Connector	8 pin modular jack (RJ45)
Pins Used	Transmit, Receive and Ground
Connection	DTE
Protocol	SDI-12 only
Baud	1200bps (as per SDI-12 protocol)
Bits	7 (as per SDI-12 protocol)
Parity	Even (as per SDI-12 protocol)
Hardware Handshaking	None
Protection	15kV ESD protected

Communications – Port P2

Port Type	SDI-12 port
Connector	4-way removable terminal block
Pins Used	12V, Ground, SDI-12 data
Protocol	SDI-12 only
Protection	MOV and current-limit

Indicators

Tx	Illuminates when transmitting data from Master Controller to a slave device on the bus
Rx	Illuminates when receiving data from a slave device AND when ever the Master Controller transmits.

Model	Part Number	Description
5915	297475	SDI-12 Module, serial to SDI-12 converter for SCADAPack 32 and SCADAPack 3xx-Series controllers, c/w config. CD

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