

ELPRO 115S Industrial Serial I/O

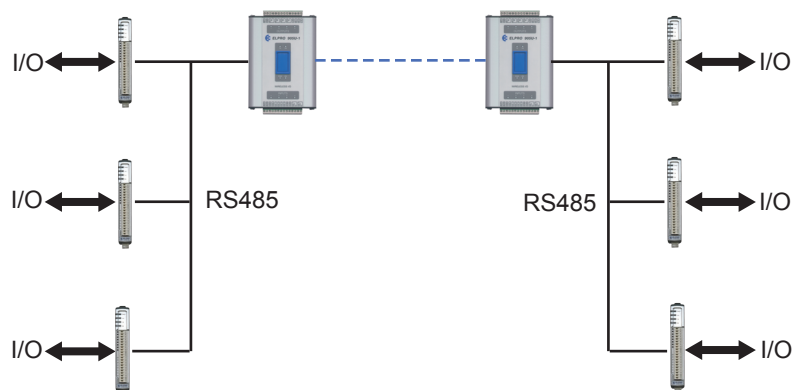
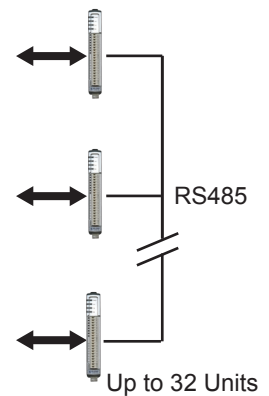
Serial I/O multiplexer, the transfer of I/O via RS485 - up to 32 units per multi-drop link.

Expansion I/O for Modbus devices - up to 31 x 115S units can be connected to each Modbus

Expansion I/O for 105U/905U wireless units - up to 31 x 115S units can be connected to each wireless unit via RS485.

Features

- Multi I/O channels - monitoring and control functions.
- Connected via RS485 multi-drop.
- Selectable communications via WIB-net or Modbus protocol (both RTU and ASCII formats).
- Sensor signals connected at one module (input signals) are transmitted to another module where the signals are re-created as output signals, or passed via serial data bus to a host device such as a PLC or SCADA system.
- Connect to 105U/905U wireless I/O units for I/O expansion - up to 31 serial addresses per wireless unit.
- Connect 115S units together to form a serial multi-drop I/O system - up to 32 serial addresses per multi-drop link - no Master device is required to control communications.
- Connect up to 99 x 115S units as multi-drop Modbus I/O (RS485 extenders/isolators required for more than 31 units per single multi-drop length)
- RS485 multi-drop up to 2 km (1 mile) depending on installation environment.
- Four I/O versions available.
- *WIB-net* intelligent wireless protocol. Peer-to-peer communications. Exception reporting. Reliable self-checking messages. Any input on any unit can be linked to any output on any unit. Inputs can be linked to multiple outputs. Serial communications 9.6Kb/s
- Alternate Modbus RTU or Modbus ASCII slave protocol, serial communications configurable up to 115.2Kb/s, 7 or 8 data bit format.



SPECIFICATIONS

General

Temperature -40 to +60 degC
(-40 to 140 degF).

Humidity 0-99% RH

EMC FCC Part 15, AS3548, 89/336/EEC

CSA Class 1 Div 2 hazardous areas
(USA Canada)

Housing - high density thermo-plastic
5.91" x 7.09" x 1.38" (150 X 180 x
35mm) with DIN rail mounting.

Removable terminals up to 12 gauge (2.5
sqmm) wires.

LED indication for power supply, processor
OK, serial TX and RX, digital I/O.

Inputs and Outputs

Digital Inputs

Suitable for voltage free contacts or
NPN transistor, contact wetting
current 5mA, inputs are surge
protected

type -11 up to 16 selectable I/O

type -12,-13,-14 up to 8 selectable I/O

Digital Outputs

FET outputs, 30VDC 200mA

type -11 up to 16 selectable I/O

type -12,-13,-14 up to 8 selectable I/O

Analog Inputs

"floating" differential inputs, common
mode voltage 27V, 24VDC for
powering external loops provided,
digital filtering 1 sec, 0-20mA/0-10V
resolution 15 bit, accuracy 0.1%
type -12 8 input channels, selectable
as 4 dual-terminal floating inputs or
8 single-terminal commoned inputs.

**Specifications subject to change without
notice**

Analog Outputs

selectable as current/voltage source or
current link to common, max loop voltage
27V, max loop resistance 1000 ohms,
0 - 20mA/ 0 - 10V, 12 bit, accuracy 0.1%
type -13 8 channels
type -14 4 output channels 15 - bit
resolution, 1500v isolation, accuracy 0.1%

Pulse Inputs

specifications as per digital inputs Max
pulse rate 1kHz, pulse width min 0.5ms
type -11 4 inputs (DIO1-4)

Pulse Outputs

specifications as per digital outputs Max
pulse rate 100Hz, pulse width min
31ms type -11,-12,-13,-14 8 outputs
(DIO1-8)

Power Supply

10.8 - 15.6VDC, over-voltage and reverse
power protected

Internal monitoring of supply voltage.

These values may be transmitted to
remote modules for monitoring.

An internal DC/DC converter provides
24VDC 250mA for analog loop supply.
(-12, -13, -14)

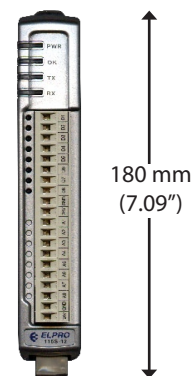
Serial Port

RS485 serial port configurable up to
115.2Kb/s, 7/8 data bits, n/e/o parity,
1 / 2 stopbits.

RS232 configuration port 9pin DB9
female connector, 9.6Kb/s, 8/n/1
RS485 max cable distance 2000 m
terminal connections.

Weight

0.359 grams



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WORLDWIDE OFFICE LOCATIONS:

USA/Canada
Ph: 619 741 3574

United Kingdom
Ph: 44 1295 72 4270

Australia
Ph: 61 7 3352 4533