

Smart-ASI Hardware Manual

FIELDBUS Gateway-PLC Controller



Version 3.0

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Atlanta, GA USA

1. Overview



Smart-ASI is a FIELDBUS Gateway-PLC Controller with built in power supply. It boasts a wide range of features alongside its accompanying software VSLogix that set it apart from the competition.

Key Features

- Cost effective, Compact, High Performance FIELDBUS Master Device
- No special 30V power supply required (Use 48V supply to power all connected devices and motors)
- Integrated PLC + Gateway + FIELDBUS Power Supply
- Compact Form-Factor, fits inside conveyor channel
- Sealed enclosure for protection against spills (**IP65**)
- Controls up to 30 slaves with onboard FIELDBUS power supply
- PC Connection over Ethernet with built-in dual port **Ethernet/IP** for chaining bigger networks.
- **VSLogix** PC Software allows creation of Conveyor Types as ladder programs, that can be instantiated multiple times to create Conveyor Sections, as well as host of other features such as Realtime monitoring and maintenance logging
- Stores up to 10 different Conveyor Types, and can run up to 16 instances (Conveyor sections) of those conveyor types at the same time

2. Electrical Characteristics

	Type	Current Rating	Voltage Rating
Power Supply	DC	250 mA (Each GX20 Slave connected adds additional 50mA)	48V

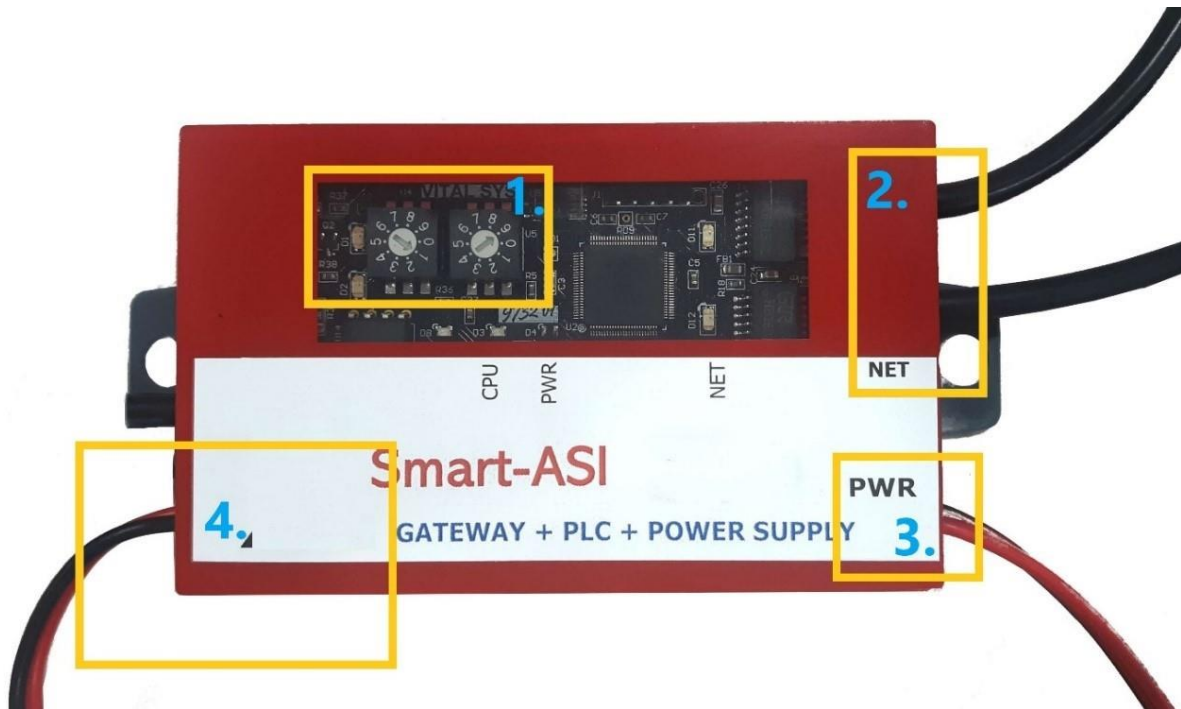
Ambient temperature		Non- operating: -50°C to +80 °C
Operating temperature:		-40 °C to +70 °C (-40 °F to 160 °F)
Temperature shock		-40 °C to +70 °C (-40 °F to 160 °F) within 3 min
Maximum humidity	Non- operating:	up to 95% relative humidity non-condensing at 35 °C (95 °F)
	Operating:	up to 95% relative humidity non-condensing at 25 °C (77 °F) up to 90% relative humidity non-condensing at 42 °C (108 °F)

FIELDBUS Network Cable and Power Cable Connections



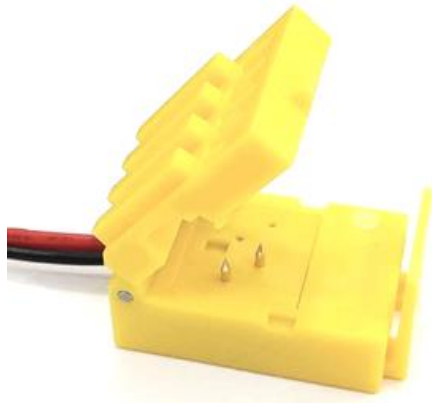
3. Smart-ASI Hardware Interface

The Smart-ASI has several interface ports and indicator LEDs. The figure below shows a top view of the Smart-ASI board with interface ports and other components:



1	Rotary Switch to set IP address
2	Dual Ethernet ports with M12 connectors
3	24V Power port with vampire clip
4	FIELDBUS bus port with vampire clip

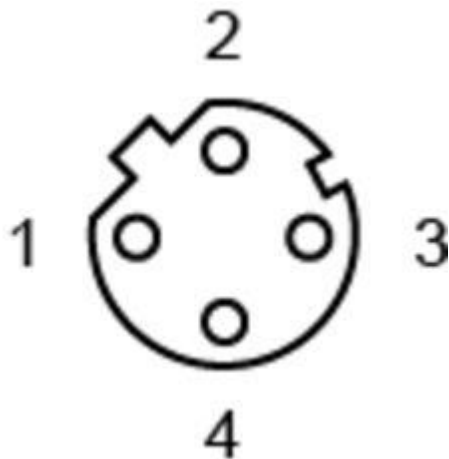
3.1 Vampire Clips (FIELDBUS Network & Power supply)



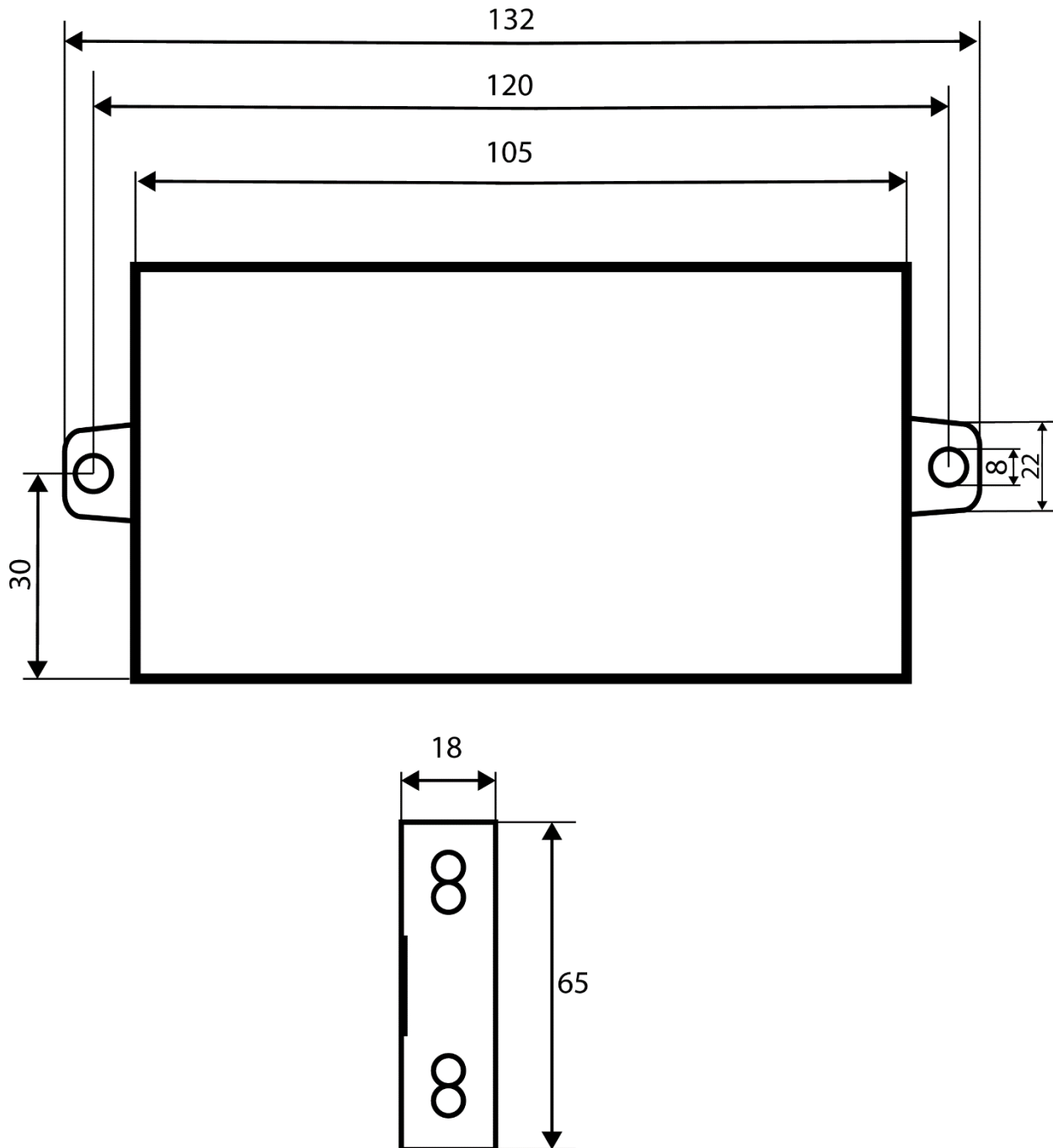
Pin	Description
Pin1	Tx (+) Rx(+)
Pin2	Rx (+) Tx(+)
Pin3	Tx (-) Rx(-)
Pin4	Rx (-) Tx(-)



3.2 Ethernet - M12-D (FEMALE) Connector – Auto MDIX Capable



4. Dimensions



All Dimensions are in mm.