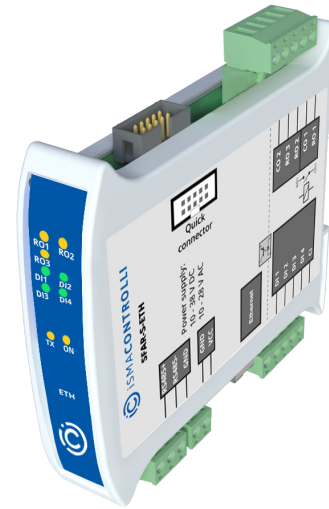


Modbus Gateway

MODEL	DESCRIPTION
SfAR-S-ETH	Modbus TCP to Modbus RTU/ASCII gateway



APPLICATION AND USE

SfAR-S-ETH module is a Modbus TCP to Modbus RTU/ASCII gateway, allowing a connection of Modbus RTU/ASCII devices to the Modbus TCP network. The device has the Ethernet and RS485 interfaces, 4 digital inputs (DI), and 3 relay outputs (RO). Digital inputs can work as fast pulse counters or timers, they support PNP or NPN input types, and offer the possibility to connect an encoder. Relay outputs are normally open (NO) type. All inputs and outputs are isolated from the logic with optoisolators. Communication is performed with the Modbus TCP protocol. The 32-bit ARM core processor provides fast processing and communication. The SfAR-S-ETH offers a unique feature, the Device Table, which facilitates communication with devices connected to the RS485 port, making it even faster. The module is equipped with a set of LED indicators. Configuration of the module is carried out with our free software, the SfAR Configurator. A built-in mini USB allows for performing a primary configuration of the unit without an additional power supply. The module has been equipped with the QuickConnector system to simplify installation. Using a dedicated SfAR-S-LINK cable allows for connecting up to 10 modules, which provide both RS485 communication and external power supply.

FEATURES

- Modbus TCP to RS485 gateway
- Configuration through a web browser
- 1 ETH interface
- 1 RS485 interface
- 4 digital inputs with counters
- 3 relay outputs
- Watchdog function for outputs
- Built-in LEDs for device status indication
- Modbus RTU/ASCII communication
- Baud rate 2400-115200 bps
- Up to 128 modules on the bus
- Built-in mini USB type B port for configuration
- Space-saving housing, DIN rail mounting
- DIP switch for configuration
- Quick Connector for grouping modules and providing power and communication

TECHNICAL SPECIFICATION

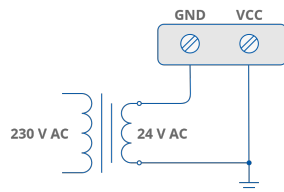
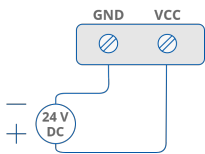
DESCRIPTION		SfAR-S-ETH
Power supply	Voltage	10-38 V DC; 10-28 V AC
Digital input	Number of inputs	4
	Type	PNP or NPN transistor inputs Fast pulse counter up to 1 kHz Timer Encoder support

The performances stated in this sheet can be modified without any prior notice.

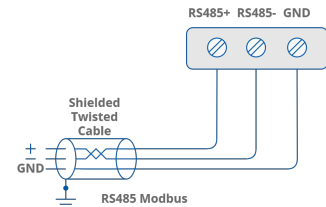
DESCRIPTION		SfAR-S-ETH
Relay output	Number of outputs	3
	Type	NO relay output
	Resistive load (AC1)	3 A at 230 V AC or 3 A at 30 V DC
	Inductive load (AC3)	75 VA at 230 V AC or 30 W at 30 V
TX	RS485 interface	Up to 128 devices
	Communication protocol	Modbus RTU/ASCII
	Ports	3-pin screw connector
	Baud rate	2400-115200 bps
USB	mini USB	Type B, for configuration
Ingress protection	IP rating	IP 40 for indoor installation
Temperature	Storage	-40°C to +85°C (-40°F to +185°F)
	Operating	-10°C to +50°C (14°F to 122°F)
Humidity	Relative	5 to 95% RH (without condensation)
Screw connectors	Type	2-pin (power supply), 3-pin (RS485), 10-pin (I/O)
	Maximum cable size	2.5 mm ² (18..12 AWG)
Housing	Material	Self-extinguishing plastic (PC/ABS)
	Cooling	Internal air circulation
	Mounting	DIN (DIN EN 50022 norm)
Dimensions	Width	119.10 mm/4.69 in
	Length	101.00 mm/3.98 in
	Height	22.70 mm/0.89 in

WIRING DIAGRAMS

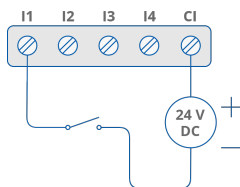
Power Supply



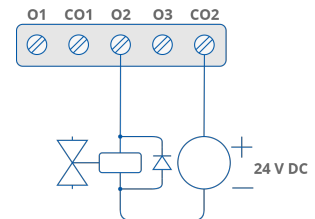
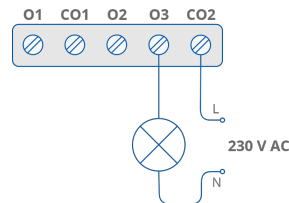
Communication



Digital Input

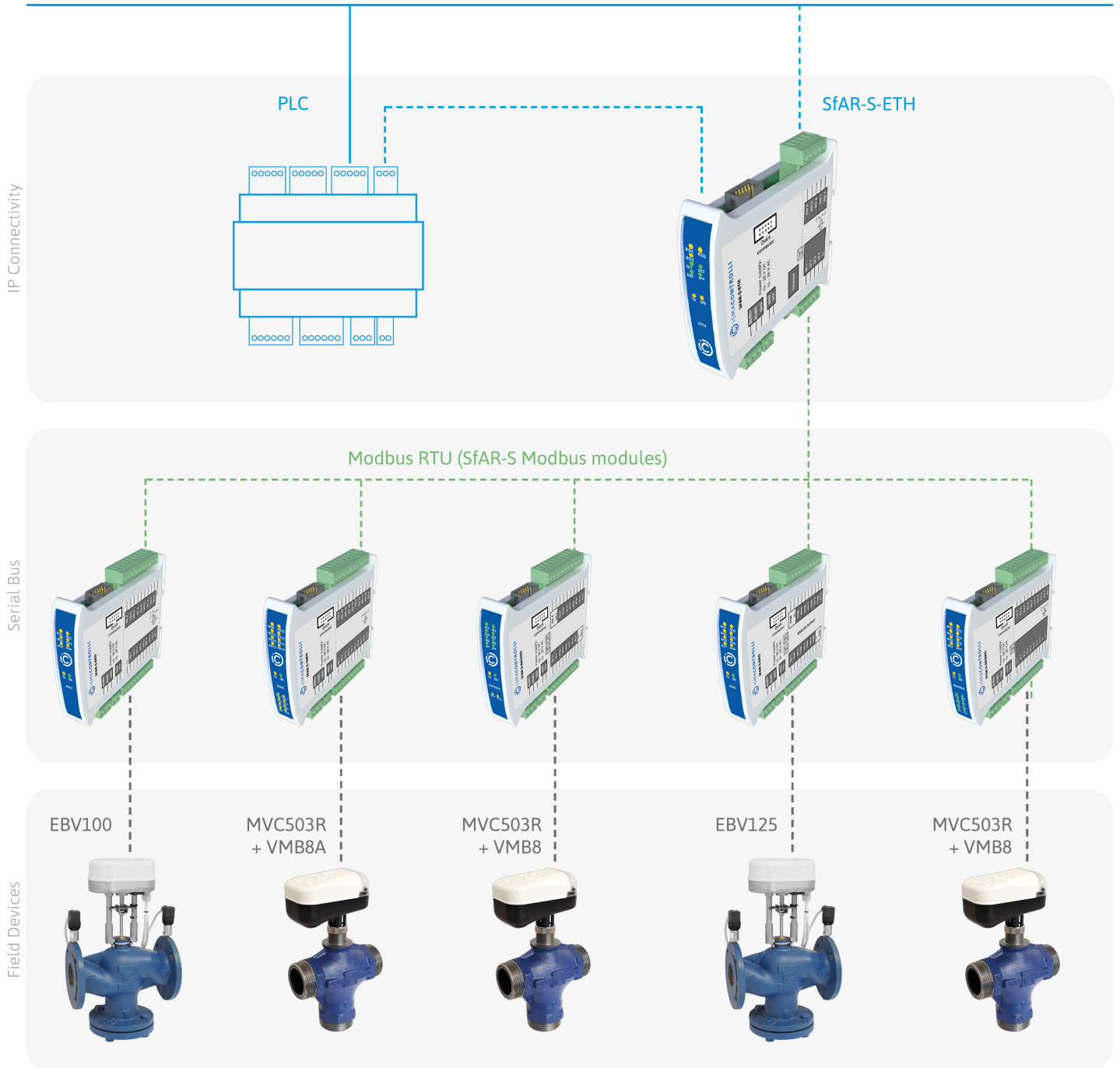


Relay Output



Modbus TCP/IP

IP



DEDICATED SOFTWARE



SfAR Configurator - Windows-based freeware configuration tool made for Modbus I/O modules.

