SfAR-1M-2DI2DO

SfAR-1M-2DI2DO can be used as a controller's I/O extension, which, thanks to its unique features, fits variety of applications, for example, measuring working time of devices or connecting valves without Modbus support into the Modbus network.

The module has 2 **digital inputs** (DI) and 2 **digital outputs** (DO). Digital inputs can work as fast pulse **counters** with up to 1000 counts per sec, or **timers** measuring the ON state, and also offering a possibility to connect 2 **encoders**. Digital inputs support both **PNP** and **NPN** input types. Digital outputs are PNP transistor outputs sending voltage signals. All inputs and outputs are isolated from the logic with opto-isolators.

A built-in **RS485** interface allows easy connection over **Modbus RTU/ASCII** protocol. A 32-bit ARM core processor provides fast processing and communication.

The module is equipped with a set of **LEDs** used to indicate the status of I/O, power supply, and RS485 communication.

Configuration of the modules is carried out with our free software, the **SfAR Configurator**. A built-in mini **USB** allows to perform a primary configuration of the unit without additional power supply.

Key Features

- 2 opto-isolated digital input
- 2 opto-isolated digital output
- Every DI can work as 32-bit pulse counter or time counter
- Support for encoder
- Built-in LEDs for device status indication
- Modbus RTU/ASCII communication
- Baud rate: 2400 bps to 115200 bps
- Up to 128 modules on the bus
- Built-in mini USB type B port for configuration
- Space-saving housing, DIN rail mount

SfAR-1M-2DI2DO

Specification

Digital Inputs (DI)

- PNP or NPN transistor inputs
- Fast pulse counter up to 1 kHz
- Timer
- DI1-DI2- 1x encoder support
- Opto-isolated from RS485 and power supply

Digital Outputs (DO)

- PNP transistor output, max. 250 mA, 55 V DC
- Opto-isolated from RS485 and power supply

Platform

- ARM Cortex-M3

Communication

- RS485 interface
- Up to 128 devices on the bus
- Modbus RTU/ASCII
- Baud rate: 2400 to 115200 bps
- Mini USB type B

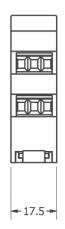### Power Supply

- 10-38 V DC; 10-28 V AC

Housing

- Dimensions WxHxD: 17x90x56 mm
- Construction: UL approved, self-extinguishing plastic (PC/ABS)
- DIN rail mounting DIN (DIN EN 50022 norm)
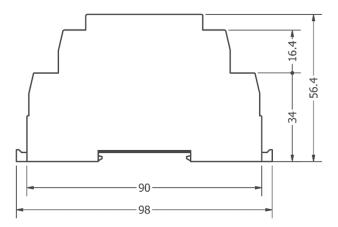- Cooling: internal air circulation

Environment

- Operating temperature: -10°C to 50°C
- Storage temperature: -40°C to 85°C
- Relative humidity: 5% to 95%, no condensation
- Ingress protection rating: IP40 – for indoor installation

Dimensions