

# SfAR-1M-4DI

**SfAR-1M-4DI** is designed for production lines, with options to connect 2 encoders and counting pulses from flowmeters. Perfect choice for applications with a need for counting or timing of digital inputs state.

The module has 4 **digital inputs** (DI). 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. 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

- 4 opto-isolated digital input
- Every DI can work as 32-bit pulse counters or timer
- Support for 2 encoders
- 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-4DI

## Specification

### Digital Inputs (DI)

- PNP or NPN transistor inputs
- Fast pulse counter up to 1 kHz
- Timer
- Up to 2 encoders support
- 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
- Built-in LED indicators
- Free software: SfAR Configurator

### 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

