

CMN-URM-8816 is a universal industrial relay module featuring an RS-485 interface and support for the **Modbus RTU** protocol. The module is designed for building **BMS**, smart home and **SCADA** systems, as well as for automated control of commercial, engineering, and technological infrastructure.



high switching
reliability



flexible
configuration



easy integration with
BMS and SCADA



support for Modbus
industrial protocol



optimal solution for distributed
automation systems

FEATURES

8x8 Module is equipped with 8 discrete (low-voltage) inputs for connecting sensors and devices with dry contacts, as well as 8 × 16 A power relays for switching various types of loads.

The module provides reliable remote control, status monitoring, and seamless integration into distributed automation systems.

AREAS OF APPLICATION

- ✓ BMS (Building Management System)
- ✓ Automation of engineering systems
- ✓ SCADA and IIoT platforms
- ✓ Dispatching and remote monitoring
- ✓ Smart residential and commercial buildings
- ✓ Lighting control
- ✓ Control of ventilation, pumps, valves, and actuators
- ✓ Control of gates, locks, roller shutters, and curtains
- ✓ Security and alarm system management

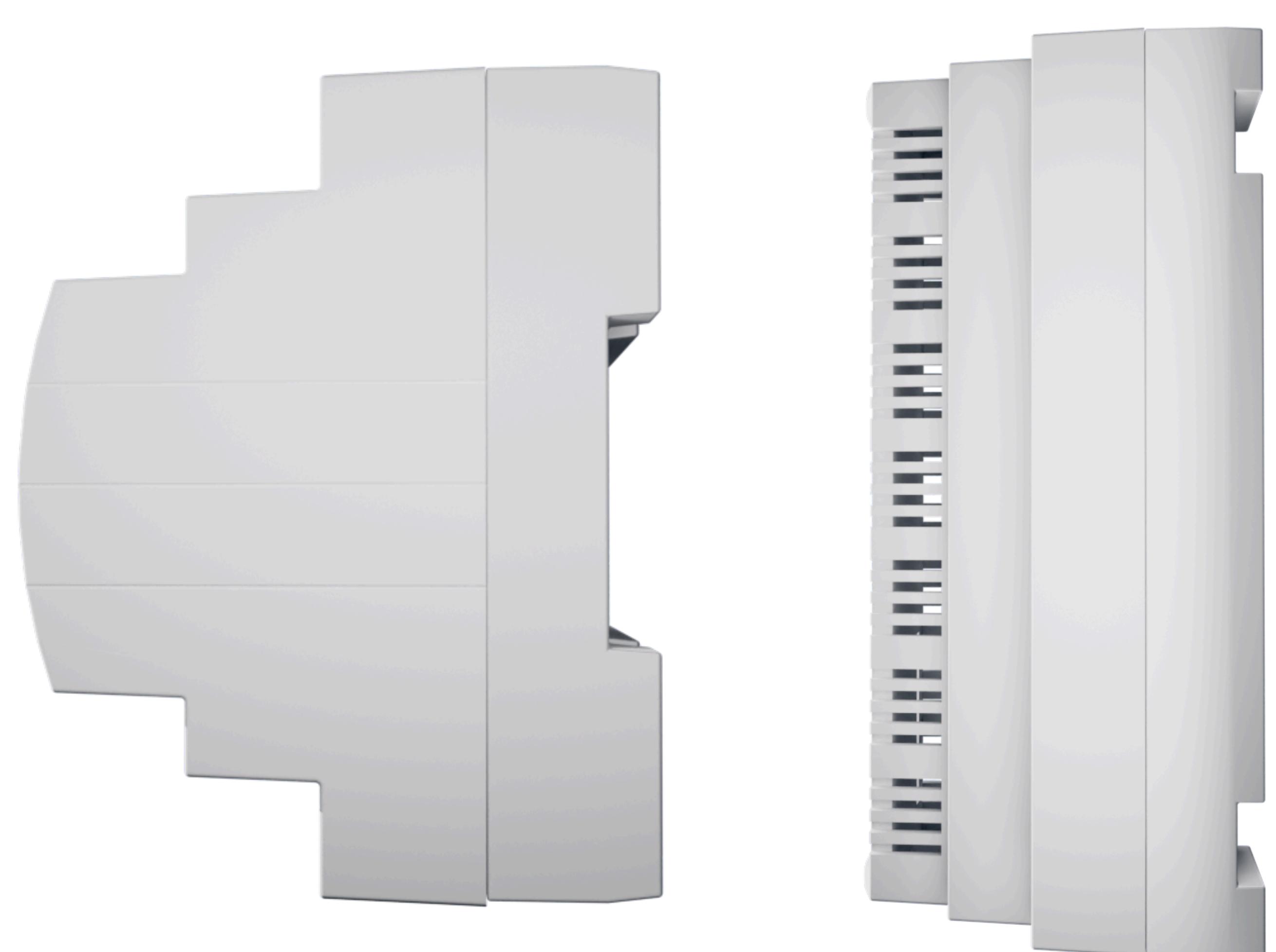
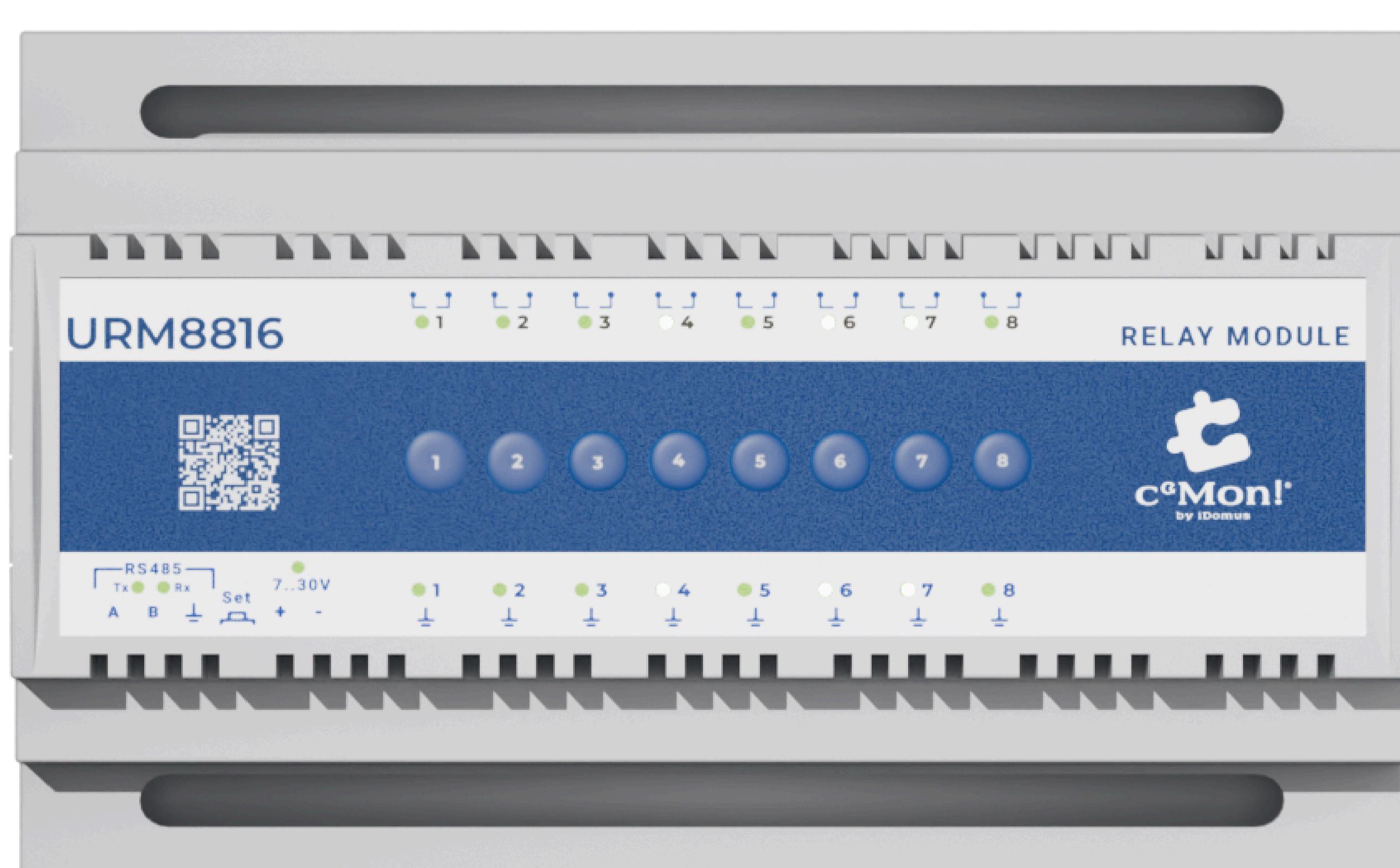


FUNCTIONAL CHARACTERISTICS

Number of discrete inputs	8
Input type	dry contacts (NO/NC)
Number of outputs	8
Relay type	electromechanical
Rated contact current	up to 16 A
Contact type	NO / NC

DIMENSIONS

Width	~140 mm
Height	~90 mm
Depth	~67 mm
Weight	325 g



KEY FEATURES

- Communication Interface: RS-485
- Protocol: Modbus RTU (slave)
- 8 discrete inputs (dry contacts)
- 8 electromechanical relays 16 A
- Control and monitoring through Modbus
- Galvanic isolation of inputs
- Support for individual and group control of relays
- Visual indication of inputs, relay, power and connection
- Industrial level of reliability
- DIN rail mounting

POWER SUPPLY

- Nominal supply voltage: 12–24 V DC
- Power consumption: ≤ 5 W

RELAY OUTPUTS

- Rated load voltage: up to 250 V AC / 30 V DC
- Rated current: up to 16 A (AC-1)
- Electrical endurance: $\geq 100\,000$ cycles
- Mechanical endurance: $\geq 10\,000\,000$ cycles

DISCRETE INPUTS

- Type: dry contacts
- Polling interval: programmable
- Reverse input logic support

INDICATION

- Power LED
- RS-485 activity LED
- Relay status indicator
- Input status indicator

PACKAGE CONTENTS

- CMN-URM-8816 relay module
- Datasheet / user manual
- Packaging

COMMUNICATION INTERFACE

- Interface: RS-485
- Protocol: Modbus RTU
- Transmission speed: 9 600 - 115 200 bps
- Device address: 1-250
- Line protection: built-in (TVS / ESD)
- Network topology: daisy chain

MODBUS FUNCTIONS

- Discrete inputs status reading
- Relay status reading
- Relay control (ON/OFF)
- Group control of outputs
- Communication diagnostics and control

Supported Modbus Functions

- 01 – Read Coils
- 02 – Read Discrete Inputs
- 05 – Write Single Coil
- 15 – Write Multiple Coils

FORM FACTOR

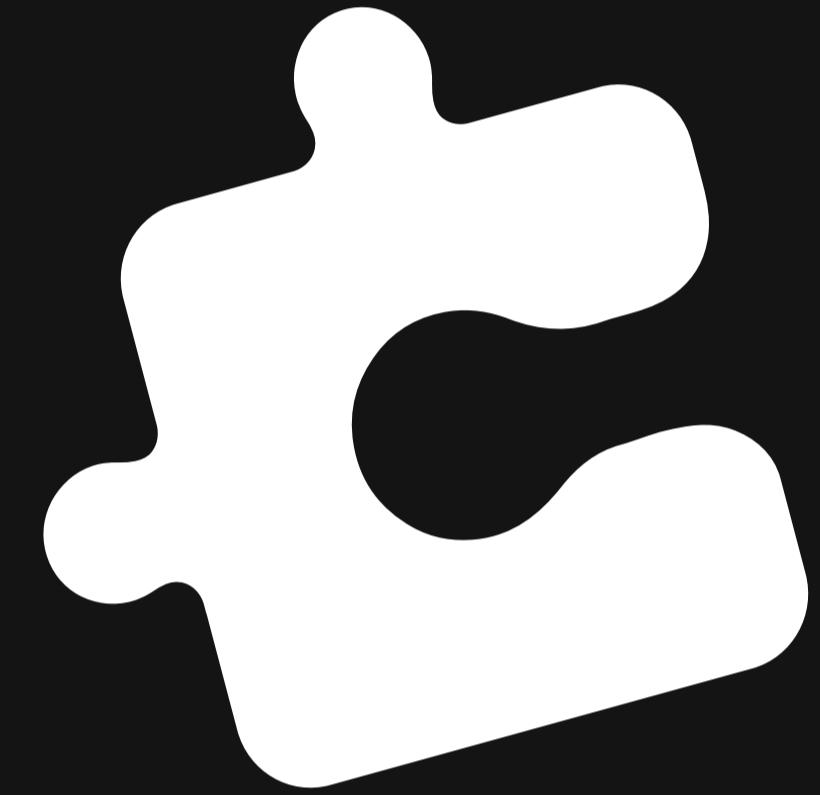
- Enclosure: PC/ABS self-extinguishing
- Mounting: 35 mm DIN rail
- Terminals: screw-type, detachable
- Protection rating: IP20

OPERATIONAL CONDITIONS

- Operating temperature: $-20\ldots+60$ °C
- Storage temperature: $-40\ldots+85$ °C
- Humidity: up to 92%, without condensation

Model designation CMN-URM-8816

URM	Universal Relay Module
8x8	8 inputs / 8 relays
16	rated relay current up to 16 A



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by iDomus

CONTACTS

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