

CMN-URM-8850 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** and **SCADA** systems, as well as for automated control of industrial and energetic infrastructure.



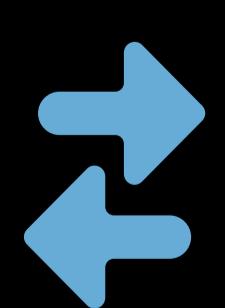
high switching  
reliability



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 power relays (up 50 A) for reliable switching of high-current loads.

The module provides stable switching control, status monitoring, and remote interaction via Modbus RTU. The device is easily integrated into distributed automation systems and is provides flexible configuration and an industrial level of reliability.

## 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

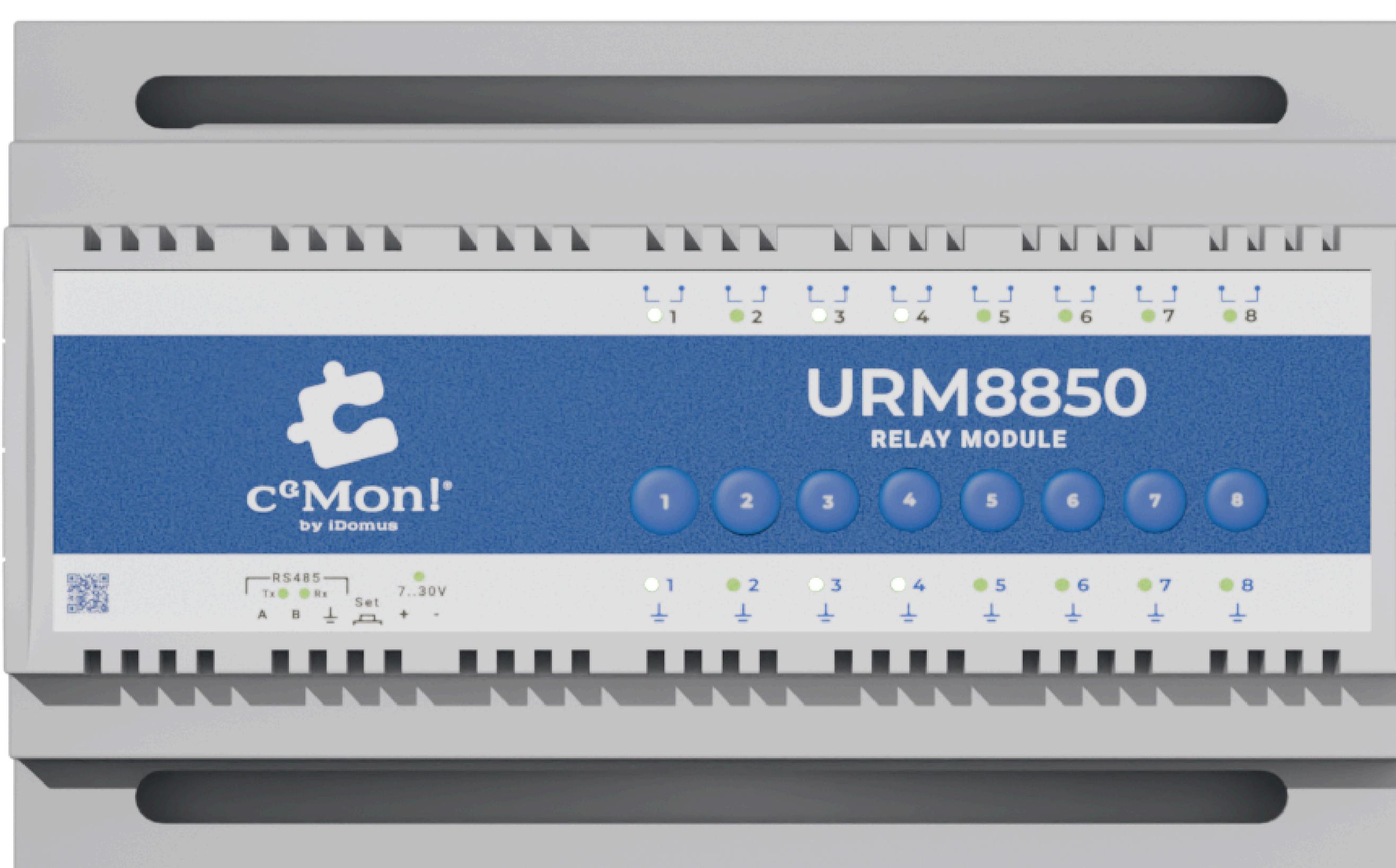


## FUNCTIONAL CHARACTERISTICS

Number of discrete inputs	8
Input type	dry contacts (NO/NC)
Number of outputs	8
Relay type	electromechanical
Rated contact current	up to 50 A
Contact type	NO / NC

## DIMENSIONS

Width	~140 mm
Height	~90 mm
Depth	~67 mm
Weight	460 g



## KEY FEATURES

- Communication Interface: RS-485
- Protocol: Modbus RTU (slave)
- 8 discrete inputs (dry contacts)
- 8 electromechanical relays 50 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 50 A (AC-1)
- Electrical endurance: ≥ 100 000 cycles
- Mechanical endurance: ≥ 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-8850 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...+60 °C
- Storage temperature: -40...+85 °C
- Humidity: up to 92%, without condensation

## Model designation CMN-URM-8850

URM	Universal Relay Module
8x8	8 inputs / 8 relays
50	rated relay current up to 50 A



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## CONTACTS

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