

RTU CONTROLLER · MODBUS RTU

6Oi6Ro

6 opto-isolated inputs · 6 relays — rugged Modbus RTU control that keeps switching when the master drops.



SUPPLY

11–30 V DC

FIELD BUS

RS-485 Modbus RTU

TEMP RANGE

–40 ... +55 °C

MOUNTING

DIN-rail 6M

ISOLATED SENSING

Inputs x6

Opto-isolated · polarity-insensitive

5–30 V digital, 3750 Vrms isolated — shrug off field noise and reversed wiring.

POWER SWITCHING

Relays x6

16 A @ 250 V AC · Omron

6× SPDT with 6 front-panel buttons for manual switching — heaters, contactors, pumps.

STANDALONE AUTOMATION

Rules x8

8 rules run offline

A built-in rule engine switches relays on local logic — control stays alive if the master drops.

WHERE IT SITS

FIELD

Sensors · Actuators



RTU CONTROLLER

6Oi6Ro

8 standalone rules · runs offline



FIELD BUS

RS-485 · Modbus RTU



MASTER

Gateway · PLC · SCADA

Built for **noisy field sites, HVAC, and remote automation** — 8 standalone rules keep relays running when the master is offline.

COMPLIANCE CE | RoHS | WEEE

Made in EU · 3-year warranty · in-field firmware updates

Request an evaluation unit

Evaluation units and volume pricing for engineers and integrators across the EU.

hello@foxiot.eu

INPUTS · ISOLATED

Channels	6 opto-isolated digital inputs
Type	Optocoupler (LTV-354T-A) · polarity-insensitive
Range	5–30 V DC activation (≥ 5 V) · ~2 mA @ 12 V / ~4.2 mA @ 24 V
Isolation	3750 Vrms (input $\leftrightarrow$ logic) · ± 30 kV ESD (IEC 61000-4-2)
Filter	Software debounce 50 ms · max 30 V DC

- ✓ **Isolated and robust.** A 3750 Vrms barrier, with no polarity to get wrong.

MECHANICAL & ENVIRONMENTAL

Dimensions	106 × 90 × 58 mm · 265 g
Mounting	DIN-rail (TH35) · 6M
RS-485	1-247 addr · 300–115200 bps · 8N1/8N2/8E1/8O1 · ± 30 V · ± 16 kV ESD · fail-safe receiver · no built-in termination
Power	11–30 V DC · 0.2 W idle · 3 W max · reverse-protected
Operating temp.	–40 ... +55 °C
Storage temp.	–40 ... +60 °C
Humidity	<90 % non-condensing

ORDERING INFORMATION

ITEM	ORDER CODE	DESCRIPTION
60i6Ro	RTU-60I6R0-R1	6 opto-isolated digital inputs · 6 relays · RS-485 Modbus RTU
DIN-rail PSU	ACC-PSU-24D	24 V DC · 1.5 A (30 W)

FULL MANUAL

foxiot.eu/downloads/FoxIoT-6Oi6Ro-Product-Manual-v1_0.pdf



WIRING INSTRUCTIONS

foxiot.eu/downloads/FoxIoT-6Oi6Ro-Wiring-Instructions-v1_0.pdf



MODBUS REGISTER MAP

foxiot.eu/downloads/FoxIoT-6Oi6Ro-Modbus-RTU-Registers-v1_0.pdf



PRODUCT PAGE

foxiot.eu/products/rtu-controllers/6oi6ro



RELAYS · SWITCHING

Relays	6 × SPDT (NC·C·NO) · 16 A @ 250 V AC / 30 V DC
Coil control	Software coil voltage reduction · reduces idle power and heat
Contact life	20 M mechanical · 30k @ 16 A · 200k @ 8 A (cosφ 0.4)
Front panel	6 buttons — manual relay switching + on-site configuration
Rule engine	8 standalone rules · thermostat · switch logic · safe fallback

- ✓ **Sense and switch.** Read inputs, run local rules, switch relays — one unit.

