

RTU CONTROLLER · MODBUS RTU

6ADi4Ro2AVo2Alo

6 analog/digital inputs · 4 relays · 2× 0–10 V · 2× 4–20 mA
— one Modbus RTU controller.



SUPPLY

11–30 V DC

FIELD BUS

RS-485 Modbus RTU

TEMP RANGE

–40 ... +55 °C

MOUNTING

DIN-rail 6M
 MULTIFUNCTION SENSING

Inputs ×6

Digital · 0–10 V · 4–20 mA · NTC

Pick each input's mode in software, not at the terminals. 16-bit, ±0.1%.

 POWER SWITCHING

Relays ×4

16 A @ 250 V AC · Omron

3× SPDT + 1× SPST-NO. Drive heaters, contactors, pumps — 20 M operations.

 ANALOG CONTROL

Outputs ×4

2× 0–10 V · 2× 4–20 mA

Modulate VFDs, valves, and dampers — full closed-loop control from one unit.

WHERE IT SITS

FIELD

Sensors · Actuators



RTU CONTROLLER

6ADi4Ro2AVo2Alo
16 automation rules · standalone



FIELD BUS

RS-485 · Modbus RTU



MASTER

Gateway · PLC · SCADA

Built for **HVAC, VFD control, and building automation** — 16 standalone rules keep critical outputs 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

6ADi4Ro2AVo2AIo

DS-6ADI4R0 · REV 1.1

INPUTS · SENSING

Channels	6 universal inputs
Modes	Digital · 0–10 V · 4–20 mA · NTC 10k (β 3435 / 3977)
Resolution	16-bit · $\pm 0.1\%$ (or ± 3 mV) · >100 Hz
Impedance	>5 M Ω · pull-up 10 k Ω @ 10 V (per input)
Max voltage	30 VDC · debounce 50 ms

- ✓ **Four modes per port.** Reconfigure in software — no rewiring.

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 VDC · 0.35 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
6ADi4Ro2AVo2AIo	RTU-6ADI4R0-R1	6 universal inputs · 4 relays · 2× 0–10 V · 2× 4–20 mA · RS-485 Modbus RTU
DIN-rail PSU	ACC-PSU-24D	24 VDC · 1.5 A (30 W)

FULL MANUAL

foxiot.eu/downloads/FoxIoT-6ADi4Ro2AVo2AIo-Product-Manual-v1_0.pdf



WIRING INSTRUCTIONS

foxiot.eu/downloads/FoxIoT-6ADi4Ro2AVo2AIo-Wiring-Instructions-v1_0.pdf



MODBUS REGISTER MAP

foxiot.eu/downloads/FoxIoT-6ADi4Ro2AVo2AIo-Modbus-RTU-Registers-v1_1.pdf



PRODUCT PAGE

foxiot.eu/products/rtu-controllers/6adi4ro2avo2aio



OUTPUTS · CONTROL

Relays	3× SPDT (NC·C·NO) · 1× SPST-NO · 16 A @ 250 V AC / 24 VDC
Coil control	Software coil voltage reduction · reduces idle power and heat
0–10 V outputs	2 ch · 0–10 V · ≥ 1 k Ω load · max 10 mA · >1000 Hz update rate
4–20 mA outputs	2 ch · 0–20 mA range · 4–20 mA mode selectable · ≤ 1.0 k Ω @ 24 V / ≤ 450 Ω @ 12 V
Rule engine	Up to 16 standalone rules · thermostat · switch · Virtual Power Plant (VPP) failover

- ✓ **Full loop.** Read sensors, drive analog outputs, switch relays — one unit.

