adquio | EXPANSIONS

Adquio Multi IOs

A comprehensive all-in-one expansion module

Reference: ADQ-SA-5R-4DO-8ADI-4AO-4PT1000
Category: ADQUIO · EXPANSIONS

DESCRIPTION

Adquio Multi IOs is the most comprehensive expansion module in the range: one device combines 5 power relays, 4 digital outputs, 8 configurable analogue/digital inputs, 4 analogue outputs and 4 PT1000 probe inputs, meeting most field requirements in a single module.

Its versatility makes it ideal for projects requiring multiple signal types without adding more modules to the cabinet.

BENEFITS

DIRECT CONTROL OF AHUs, etc.

Integrated relays, digital signals, analogue signals and temperature inputs simplify the cabinet, reduce wiring and speed up installation.

2. Configurable analogue or digital inputs

The 8 A/D inputs can be used as 0-10V analogue inputs or 0-24V digital inputs, adapting to different sensors or transducers.

Control power loads and analogue signals

5 × 10A relays for power loads and 4 × 0-10V analogue outputs for variable-speed control, proportional valves and light dimming.

Built-in temperature monitoring

4 PT1000 temperature probe inputs in the same module, with no additional module required.

TYPICAL APPLICATIONS

Direct control of AHUs, etc.

Outdoor HVAC units without a controller become Modbus RTU devices.

Office Offices

Zone management with temperature sensing, HVAC control and electrical circuit switching in one compact device.

Hotels — room control

Room HVAC management: proportional valve, fan coil, room temperature and occupancy signals from a single module.

Lighting and mixed loads

Relay switching for lighting circuits, dimming through analogue outputs and presence detection through digital inputs.

Retail premises

Complete HVAC, lighting and measurement control in a space using a single expansion module.

Is this product part of your project?
Contact us and we will prepare a complete technical proposal.

WHEN TO CHOOSE ADQUIO MUNTI IOS?

Choose Adquio Multi IOs when the project needs multiple field signal types in one compact module, avoiding numerous specialised modules in the cabinet.

Choose Adquio Multi IOs when your project includes any of these scenarios:

→ **Direct control is needed for machinery with:**
Variable-speed fans, motors, proportional pumps, pressure switches, flow meters and temperature probes.

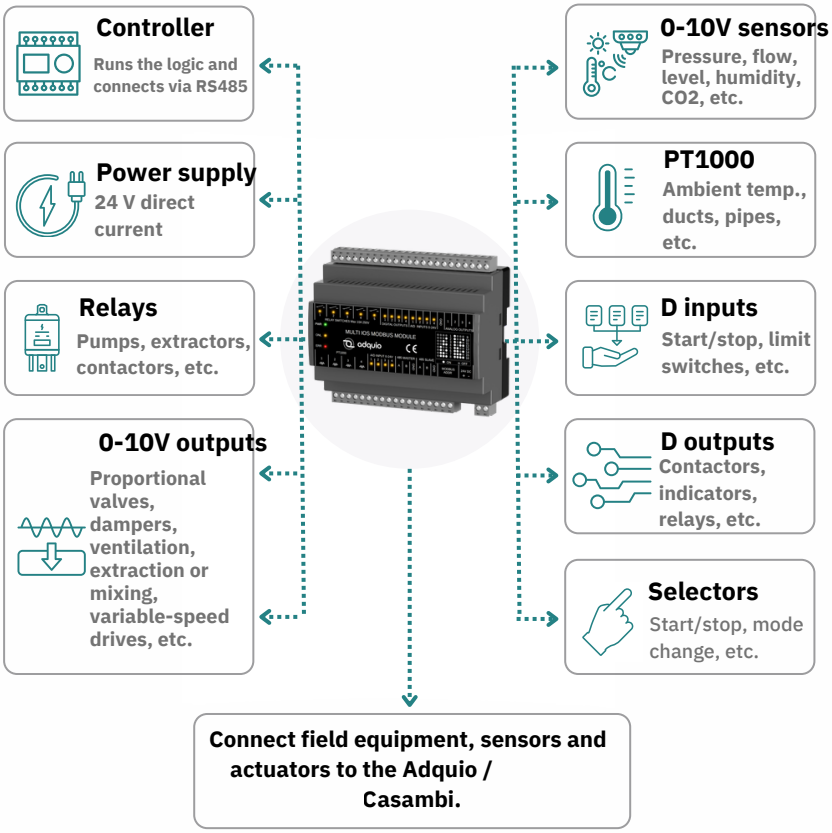
→ **Projects with mixed signal types**
The installation needs relays, digital, analogue and temperature inputs together, while minimising the number of modules.

→ **HVAC control with actuation and sensing**
The project needs analogue valve control, relay-operated pumps and return temperature sensing, all from a single module.

→ **Space-constrained cabinets**
Cabinet space is limited and maximum I/O density per unit of DIN-rail width is needed .

→ **Built-in temperature monitoring**
4 PT1000 temperature probe inputs in the same module, with no additional module required.

TYPICAL ARCHITECTURE



TECHNICAL SPECIFICATIONS

Reference	ADQ-SA-5R-4DO-8ADI-4AO-4PT1000
Power supply	24V DC nominal - 28V DC maximum
Current	130 mA + digital output loads
Communication	1 × RS485 Modbus RTU slave
Nodes per RS485 port	Up to 16 modules
Installation	35 mm DIN rail • electrical cabinet - IP20
Operating temp.	0°C to +60°C
Certifications	CE & RoHS
Compatible with	Adquio Mini, Adquio Lite, Adquio Micro Server or any controller supporting Modbus RTU
Maximum per controller	Up to 64 with Adquio Mini and Lite, up to 32 with Adquio Micro Server
Relay outputs	5 dry contacts · 10A · 250V AC
Digital outputs	4 · 24V · 2A maximum · overvoltage protection
A/D inputs	8 · 0-10V analogue or 0-24V digital (configurable)
Analogue outputs	4 · 0-10V · 12 bits · 10 mA maximum
PT1000 inputs	4 · 15 bits · software-adjustable

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