eZi-COM-IO – Input / Output modules

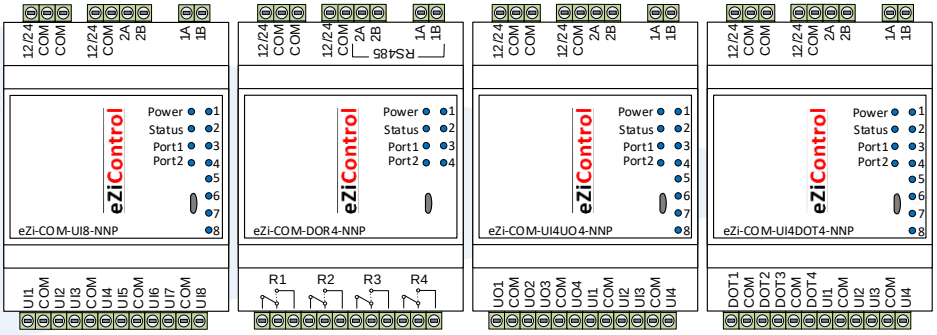
Select IO to suit application.

Modbus with Optional BACnet

Optional Control Blocks

User configurable

Pulse and Runtime count



Applications

- IO extension
- Edge IO transducing
- Communicating to Modbus sensors using Modbus Client port
- Variable Air Volume diffusers
- Fan Coil Units and Fan Air Terminals when combined with eZiView display

Features

- User configurable Inputs and Outputs
- Modbus Server and optional Modbus Client
- Optional BACnet MSTP
- FLASH for configuration
- EERAM for runtime or pulse count
- Firmware IO configuration (No jumpers)
- Temperature °C/°F selectable
- Digital Input invert selectable.
- Add on licensing for Configurable Control blocks, Modbus Client (Master) or BACnet MSTP
- eZi-App for configuration and testing
- Can be stacked to increase IO using Client Server as a local bus.

Register Table

A comprehensive Register table allows full user configuration and control of register types and IO behavior. The table has volatile, EERAM and FLASH sections.

Communications

Up to 2 Communications ports are available to support multiple signal types and protocols. Both the hardware and protocols are modular and expandable allowing for additional variants as the product matures. Both Modbus Client (P2 Master) and Server (P1Slave) are supported on separate ports (Px). BACnet is available for Port 1. Client baud rate and data format are configurable allowing communication to different devices at different baud rates with different data types. Ports and features are model dependent. Communication protocols require optional license except for Modbus Server on Port which is standard.

Operation

Supplied with a factory default setting as described in the user manual. Use eZi-App to write register values for IO configuration. This includes selecting the IO type.

Termination and wiring

The power supply is 3 wire – the 24V AC N (in AC applications) is connected to the COM. For detailed wiring refer to user manual.

Models

Multiple models are available with more variants to be released – this includes FCU and FAT variants. A complete list of models is available from Home - eZiControl. Engineering tools are free – download from Knowledge - eZiControl

Specifications

Power AC. Excludes P2 power		24V AC 50/60Hz +10% -15% 110mA
Power DC. Excludes P2 power		12V DC +10% -15%. 110mA. Except DOT
P2 P type devices		Same as power in max 20mA fused 600mA
P2 D type devices		12V DC max 200mA fused 600mA
UI (Universal Input)		Thermistor (10K3A1) °C/°F
		Analog 0-10V
		Analog resistance
		Analog percent
		Digital Volt Free - max 10Hz pulse
SI (Sensor Input)		Thermistor (10K3A1) °C/°F
		Analog resistance
		Digital Volt Free - max 10Hz pulse
DI (Digital Input)		Digital Volt Free - max 10Hz pulse
UO(Universal Output)		0-10V DC @ 20mA
		0-12V DC @20mA
DOT		Digital output Triac 24V AC 1A
DOR		R1/R2 230VAC 2A. R3/R4 5A. Resistive loads
Terminals	Power	3 way terminal. 5mm plug in
	Modbus Server	2 way terminal. 5mm plug in
	Modbus Client	4 way terminal. 5mm plug in. With power
	IO1-8	3 way terminal. 5mm plug in.

Power Connectivity	3 Wire. Note the COM terminal is common for both AC and DC power supplies. Rules of 3Wire application apply to devices powered by AC with full wave rectifiers.
Port1	RS485 Modbus RTU. Selectable baud rate 9600 to 57600 8/N/1. No EOL. Max 32 devices
Port2	RS485 Modbus RTU. Selectable baud rate 9600 to 57600 8/N/1. No EOL. Max 32 devices
Enclosure	DIN mount Dimensions 90Hx70Wx60Dmm Weight 150g unpacked Weight 200g packaged Material ABS Color White IP20
Country of Origin	South Africa Manufactured by eZicontrol for iLED and Digital Twin Member of i4 Group