

# I/O Expansion Modules

CE/UL

Expand your system with local or remote I/O expansion modules<sup>1</sup>. Vision series support both local & remote I/O modules. M91 support local modules only.

## Digital Modules

IO-DI8-TO8	IO-DI8-RO4	IO-DI8-RO8	EX90-DI8-RO8 <sup>3</sup>	IO-DI16
24VDC 8 Digital Inputs, pnp/npn, including one High-speed Counter 8 pnp Transistor Outputs	24VDC 8 Digital Inputs, pnp/npn, including one High-speed Counter 4 Relay Outputs	24VDC 8 Digital Inputs, pnp/npn, including one High-speed Counter 8 Relay Outputs	24VDC 8 Digital Inputs, pnp, including one High-speed Counter 8 Relay Outputs	24VDC 16 Digital Inputs, pnp/npn, including one High-speed Counter
IO-TO16	IO-RO8	IO-RO16	IO-DI8ACH	
24VDC 16 pnp Transistor Outputs	24VDC (power supply) 8 Relay Outputs	24VDC (power supply) 16 Relay Outputs	110/220 VAC 8 AC Inputs	

## High-speed Remote I/O Module

EXF-RC15 <sup>2,5</sup>
24VDC 9 Digital Inputs pnp/npn, including 3 high-speed counter, 4 npn Transistor Outputs, may function as high-speed PWM/PTO, 2 relay outputs

## Analog, Temperature and Weight/Strain Measurements

IO-AI4-AO2	IO-PT400	IO-PT4K		
24VDC (power supply) 4 Analog Inputs 12 bit, 0-10V, 0-20mA, 4-20mA, 2 Analog Outputs, 12 bit + sign, ± 10V, 0-20mA, 4-20mA	4 PT100/NI100/NI120 Inputs Range PT100: -50°C ÷ 460°C (-58°F ÷ 860°F) Range NI100: -50°C ÷ 232°C (-58°F ÷ 449°F) Range NI120: -50°C ÷ 172°C (-58°F ÷ 341°F) 12 bit	4 PT1000/NI1000 Inputs Range PT1000: -50°C ÷ 460°C (-58°F ÷ 860°F) Range NI1000: -50°C ÷ 232°C (-58°F ÷ 449°F) 12 bit		
IO-AO6X	IO-LC1 <sup>4</sup>	IO-LC3 <sup>4</sup>	IO-ATC8	IO-AI8
24VDC (power supply) 6 Isolated Analog Outputs 0-10V, 0-20mA, 4-20mA 12 bit	12/24VDC (Power Supply) 1-3 Loadcell / Strain gauge Inputs Input voltage ranges: ± 20mV, ± 80mV Excitation: AC/DC 1 Digital pnp Input 2 pnp Outputs  Not supported by all OPLCs™		8 Thermocouple/ Analog Inputs T/C J, K, T, B, E, N, R, S, 0.1 <sup>0</sup> Resolution, 0-10V, 0-20mA, 4-20mA, 12/14 bit	8 Analog Inputs 0 ÷ 10V / 0 ÷ 20mA 14 bit 0-10V, 0-20mA, 4-20mA 12/14 bit

## I/O Expansion Module Adapters

EX-A2X <sup>1</sup>
Local I/O module adapter. Galvanic isolation. Up to 8 modules may be connected to a single PLC <sup>1</sup> . Supports both 12/24 VDC
EX-RC1 <sup>1,5</sup>
Remote I/O module adapter, via CANbus. Connect multiple adapters to a single PLC; connect up to 8 modules per adapter. Supports both 12/24 VDC.

- <sup>1</sup> Number of I/Os may vary according to module
- <sup>2</sup> The EXF-RC15 functions as a node in a Vision UniCAN network and connects to the Vision controller via CANbus and programmed in VisiLogic. The EXF-RC15 cannot be extended as regular I/O unit.
- <sup>3</sup> The EX90 is housed in an open casing. Only one EX90 can be connected per PLC, as a single expansion module; Expansion adapter not required.
- <sup>4</sup> IO-LCx models are supported by the M91 & Vision series. Not supported by the M90 series.
- <sup>5</sup> Supported by Vision series. Not supported by M91 series.
- \* Additional 12VDC models are listed on Unitronics web site.

## XL Digital/Analog Modules

IO-D16A3-RO16	IO-D16A3-TO16	EX-D16A3-RO8	EX-D16A3-TO16
24VDC, 16 Digital Inputs pnp/npn, including two High-speed Counters, 3 Analog Inputs, 10 bit, 0-20mA, 4-20mA, 16 Relay Outputs	24VDC, 16 Digital Inputs pnp/npn, including one High-speed Counter, 3 Analog Inputs, 10 bit, 0-20mA, 4-20mA, 15 pnp + 1 pnp/npn Transistor Outputs including 1 HSO	24VDC, built-in Expansion Module Adapter, 16 Digital Inputs, pnp/npn, including two High-speed Counters, 3 Analog Inputs 10 bit, 0-20mA, 4-20mA, 8 Relay Outputs	24VDC, built-in Expansion Module Adapter, 16 Digital Inputs, pnp/npn, including one High-speed Counter, 3 Analog Inputs 10 bit, 0-20mA, 4-20mA, 15 pnp + 1 pnp/npn Transistor Outputs including 1 HSO