

# I/O Expansion Modules & Accessories- Vision Series

Expand your system with local or remote I/O expansion modules.

	Expansion Modules Article	Inputs					Outputs				Operating Voltage
		Digital <sup>1</sup>	HSC <sup>2</sup>	Analog	Temperature Measurement	Weight Measurement	Transistor <sup>5</sup>	PWM/HSO <sup>6</sup>	Relay	Analog	
Digital	IO-DI8-T08	8 pnp/npn	1 5kHz 16-bit	—	—	—	8 pnp	—	—	—	24VDC <sup>9</sup>
	IO-DI8-R04	8 pnp/npn	1 5kHz 16-bit	—	—	—	—	4	—	—	24VDC <sup>9</sup>
	IO-DI8-R08	8 pnp/npn	1 5kHz 16-bit	—	—	—	—	—	8	—	24VDC <sup>9</sup>
	EX90-DI8-R08 <sup>3</sup>	8 pnp	1 5kHz 16-bit	—	—	—	—	—	8	—	24VDC
	IO-DI16	16 pnp/npn	1 5kHz 16-bit	—	—	—	—	—	—	—	24VDC <sup>9</sup>
	IO-T016	—	—	—	—	—	16 pnp	—	—	—	24VDC
	IO-R08	—	—	—	—	—	—	—	8	—	24VDC <sup>9</sup>
	IO-R016	—	—	—	—	—	—	—	16	—	24VDC <sup>9</sup>
	IO-DI8ACH	8 AC	—	—	—	—	—	—	—	—	110/220 VAC
Analog, Temperature and Weight/Strain Measurements	IO-AI4-A02	—	—	4 0-10V, 0-20mA, 4-20mA 12-bit	—	—	—	—	—	2 ±10V 12-bit+sign, 0-20mA, 4-20mA 12-bit	24VDC
	IO-PT400	—	—	—	4 PT100/NI100/NI120	—	—	—	—	—	Not relevant
	IO-PT4K	—	—	—	4 PT1000/NI1000	—	—	—	—	—	Not relevant
	IO-A06X	—	—	—	—	—	—	—	—	6 (Isolated) 0-10V, 0-20mA, 4-20mA 12-bit	24VDC
	IO-LC1	1 pnp	—	—	—	1 Loadcell / Strain gauge	2 pnp	—	—	—	24VDC
	IO-LC3	1 pnp	—	—	—	3 Loadcell / Strain gauge	2 pnp	—	—	—	24VDC
	IO-ATC8	—	—	8 Thermocouple, 0-10V, 0-20mA, 4-20mA 14-bit	—	—	—	—	—	—	Not relevant
	IO-AI8	—	—	8 0-10V, 0-20mA, 4-20mA 14-bit	—	—	—	—	—	—	Not relevant
XL Digital/ Analog	IO-D16A3-R016	16 pnp/npn	2 30kHz 16/32-bit <sup>8</sup>	3 0-20mA, 4-20mA 10-bit	—	—	—	16	—	—	24VDC
	IO-D16A3-T016	16 pnp/npn	1 30kHz 16/32-bit <sup>8</sup>	3 0-20mA, 4-20mA 10-bit	—	—	15 pnp, 1 pnp/npn	1 pnp 0.5kHz nnp 50kHz	None	—	24VDC
	EX-D16A3-R08 <sup>7</sup>	16 pnp/npn	2 30kHz 16/32-bit <sup>8</sup>	3 0-20mA, 4-20mA 10-bit	—	—	None	None	8	—	24VDC
	EX-D16A3-T016 <sup>7</sup>	16 pnp/npn	1 30kHz 16/32-bit <sup>8</sup>	3 0-20mA, 4-20mA 10-bit	—	—	15 pnp 1 pnp/npn	1 pnp 0.5kHz nnp 50kHz	None	—	24VDC
High-speed Remote I/O Module	EXF-RC15 <sup>2,4,10</sup>	9 pnp/npn	3 200kHz 32-bit	—	—	—	4 nnp	4 (up to 3 PTO)	2	—	24VDC

## I/O Expansion Module Adapters

I/O Expansion Module Adapters	Article	Description
	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>1,4</sup>	Remote I/O module adapter, via CANbus. Multiple adapters may be connected to a single PLC, with up to 8 modules to each adapter <sup>1</sup> . Supports both 12/24 VDC.

<sup>1</sup> Number of supported I/Os & I/O modules varies 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. High-speed inputs are configurable as either high-speed counter (HSC) or shaft-encoder.  
<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> Supported by Samba, Vision and UniStream series.  
<sup>5</sup> The total number of digital inputs listed includes high-speed inputs. Example: the IO-D16A3-T016 offers a total of 16 pnp/npn inputs. You can configure 14 as a HSC and 15 as a Counter reset; this reduces the available number of digital inputs to 14.  
<sup>6</sup> The total number of digital outputs listed includes high-speed outputs. Example: the IO-D16A3-T016 offers a total of 16 transistor outputs. You can configure 1 to High-speed output, reducing the number of available digital outputs to 15.  
<sup>7</sup> Functions as local adapter. Can support up to 7 I/O modules.  
<sup>8</sup> 16-bit or 32-bit, depending on the PLC.  
<sup>9</sup> Also available as 12VDC – contact us for part number.  
<sup>10</sup> One HSC may be configured as a shaft encoder.

# Snap-in I/O Modules

Compatible with Vision models:  
V560, V570, V700, V1040 and V1210.

Snap-in I/O Article	Inputs				Outputs				Operating Voltage
	Digital (isolated) <sup>1</sup>	HSC/Shaft-encoder <sup>1</sup>	Analog	Temperature Measurement	Transistor (isolated) <sup>2</sup>	PWM/HSO <sup>2</sup>	Relay	Analog	
V200-18-E1B	16 pnp/npn	2 10kHz 32-bit	3 0-10 V, 0-20mA, 4-20mA 10-bit	—	4 pnp/npn	2 pnp 0.5kHz nnp 50kHz	10	—	24VDC
V200-18-E2B	16 pnp/npn	2 10kHz 32-bit	2 0-10 V, 0-20mA, 4-20mA 10-bit	—	4 pnp/npn	2 pnp 0.5kHz nnp 50kHz	10	2 0-10 V, 0-20mA, 4-20mA 12-bit	24VDC
V200-18-E3XB	18 pnp/npn	2 10kHz 32-bit	4 (Isolated) Thermocouple, PT100, 0-10V, 0-20mA, 4-20mA 14-bit	—	2 pnp/npn	2 pnp 0.5kHz nnp 50kHz	15	4 (Isolated) 0-10 V, 4-20mA 12-bit	24VDC
V200-18-E4XB	18 pnp/npn	2 10kHz 32-bit	4 (Isolated) Thermocouple, PT100, 0-10V, 0-20mA, 4-20mA 14-bit	—	15 pnp 2 nnp/pnp	2 pnp 0.5kHz nnp 50kHz	—	4 (Isolated) 0-10 V, 4-20mA 12-bit	24VDC
V200-18-E5B	18 pnp/npn	2 10kHz 32-bit	3 0-10 V, 0-20mA, 4-20mA 10-bit	—	15 pnp 2 nnp/pnp	2 pnp 0.5kHz nnp 50kHz	—	—	24VDC
V200-18-E6B	18 pnp/npn	2 10kHz 32-bit	2 Thermocouple, PT100, 0-10V, 0-20mA, 4-20mA 14-bit 3 0-10V, 0-20mA, 4-20mA 10-bit	—	2 pnp/npn	2 pnp 0.5kHz nnp 50kHz	15	2 (Isolated) 0-10 V, 4-20mA 12-bit	24VDC
V200-18-E46B	18 pnp/npn	2 10kHz 32-bit	6 0-10 V, 0-20mA, 4-20mA 14-bit 3 0-10 V, 0-20mA, 4-20mA 10-bit	—	2 pnp/npn	2 pnp 0.5kHz nnp 100kHz	15	2 (Isolated) 0-10 V, 4-20mA 12-bit	24VDC
V200-18-E62B <sup>3</sup>	30 pnp/npn	2 10kHz 32-bit	2 0-10 V, 0-20mA, 4-20mA 10-bit	—	28 pnp 2 nnp/pnp	2 pnp 0.5kHz nnp 100kHz	—	—	24VDC

<sup>1</sup> The total number of digital inputs listed includes high-speed inputs.  
<sup>2</sup> The total number of digital outputs listed includes high-speed outputs.  
<sup>3</sup> Not yet UL certified

## Vision & Samba COM Modules

Enhance Vision's communication capabilities

Model	Ethernet	RS232/RS485	Isolated RS232/RS485	CANbus	Profibus
SAMBA	V100-17-ET2	V100-17-RS4	V100-17-RS4X	V100-17-CAN	—
V130, V350, V430 <sup>1</sup>	V100-17-ET2, V100-S-ET2 <sup>2</sup>	V100-17-RS4	V100-17-RS4X	V100-17-CAN, V100-S-CAN <sup>5</sup>	V100-17-PB1
V560, V570, V1040, V1210 <sup>2</sup>	V200-19-ET2	V200-19-RS4	V200-19-RS4-X	Built-in	—
V700 <sup>4</sup>	Built-in	V100-17-RS4	V100-17-RS4X	V100-17-CAN	V100-17-PB1

<sup>1</sup> V130/V350/V430: Two ports may be added: 1 for Serial/Ethernet/Profibus and 1 for CANbus.  
<sup>2</sup> V560/V570/V1040/V1210: 1 port may be added: Serial/Ethernet.  
<sup>3</sup> Extended temperature cards, operational temperature: -30°C to 60°C (-22°F to 140°F) - for V350-JS-TA24 only.  
<sup>4</sup> V700 is supplied with an Built-in Ethernet port. One port may be added: serial/Profibus, and CANbus.  
<sup>5</sup> Not yet UL certified

## DIN-rail Power Supplies

UAP-24V24W	UAP-24V60W	UAP-24V96W
24W 24V 1A	60W 24V 2.5A	96W 24V 4A

## GSM

GSM-KIT-17J-3G
KIT, MODEM GPRS, CINTERION, EHS6T