



MULTIFUNCTION I/O  
MODULE - ANALOG /  
PULSE / DIGITAL



# Z1201 I/O MODULE

Providing the flexibility required to serve a wide range of digital/analog input and industrial-rated output control requirements

Designed specifically for I/O expansion of **Z45 Industrial Controllers**, the **Z1201** is ideal for industrial automation projects with analog, digital and/or pulse sensors. Manage everything from indicator lamps to motor start/stop operations with the Z1201 I/O Module and our Automation Control Application. The module easily interfaces with most any 0-5 VDC, 4-20 mA current loop or 0-10 VDC sensor.

The Z1201 is a 16-pin, multifunction I/O module consisting of 8 open collector outputs, and 8 multifunction inputs, each of which can be configured under software control for analog, digital or pulse operation.

Data communication between Z1201 modules and Z45 Industrial Controllers is provided by a 2-wire RS-485 connection with addressing and individual pin function established by program control using our Automation Control Application.

Z1201 modules can be daisy-chained with power and communication connections for expansion beyond a single I/O module.

## FEATURES AND BENEFITS

- Versatile industrial-rated I/O module
- 8 open controller output options
- 8 multi-mode inputs configurable to analog, digital or pulse
- RS-485 communications
- Compatible with industry standard sensors ranging from 0-5 VDC, 4-20 mA or 0-10 VDC
- Switch selectable pull-ups
- Switch selectable RS-485 termination
- Daisy-chain power and communications to support multiple I/O modules and other RS-485 devices
- DIN rail mountable

## DAISY-CHAIN POWER AND COMMUNICATION



## RELATED PRODUCTS



Z45 Industrial  
Controllers



SkyCloud



Connect  
Sensor+

SPECIFICATIONS	Z1201 I/O MODULE
<b>GENERAL FEATURES</b>	RS-485, 2-wire interface
	8 open collector outputs, 30 VDC max
	8 multi-mode inputs, 30 VDC max
	Pulse counting
	Analog inputs
	Digital outputs
<b>INPUTS</b>	Maximum input voltage: 30 VDC
	Input logic, Low $\leq$ 1, High $\geq$ 4
	Sample rate: 512 Hz
<b>CONFIGURABLE I/O: DIGITAL OUTPUTS</b>	Open collector output rating: 30 V 350 mA single output, 250 mA with all outputs on
	Max update frequency: 60 Hz
	Pulse width modulation: 7.8 KHz, 8-bit resolution
<b>CONFIGURABLE I/O: ANALOG INPUTS</b>	Measurable range: 0-5 VDC
	Read frequency: 20 Hz
	Analog input A/D conversion: 12-bit with 10 mV
<b>CONFIGURABLE I/O: PULSE INPUTS</b>	Max pulse width: 3 msec
	Max count stored between reads: 32,767
<b>CONTROL INTERFACE</b>	RS-485 2-wire
	Protocol: Proprietary Automation Control
<b>POWER</b>	Input: 9-24 VDC (external source)
	Consumption: 100 mA (excluding active inputs)
<b>ENVIRONMENTAL</b>	Operating temperature: -30° to 70° C (-22° to 158° F)
	Humidity: 90% non-condensing
<b>MOUNTING</b>	35 mm DIN
<b>DIMENSIONS</b>	4.22 x 2.37 x 1.312 in (10.719 x 6.02 x 3.33 cm), excluding terminal block and DIN clip
<b>WEIGHT</b>	0.29 kg (0.63 lb), without power adapter
<b>WARRANTY</b>	1-year standard warranty

PART NUMBERS	Z1201 I/O MODULE
CTK-Z1201S	Multifunction I/O Controller

FOR MORE INFORMATION  
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