

Introducing SPIO Series

Digital And Analog I/Os

SPIO Series



maestrotek
innovations



CloudXTU

PRODUCT OVERVIEW

The SPIO series Modules are a robust and versatile I/O system which provides a simple low-cost solution to fulfil Remote I/O requirements of Industries. The SPIO series Modules consists of a combination of Digital and Analog Input (DI up to 16, AI up to 2) and Output (DO up to 16, 1 x AO) which can be connected together on a RS422 4W multi-drop network using the MODBUS RTU protocol (up to 16 devices) or CAN FD interface.

A 32bit ARM CPU is used in the module to provide high speed data processing and low communication latency. All SPIO series products plug directly onto an industry standard DIN rail. All modules have a minimum isolation of 1500VAC rms between the field and logic.

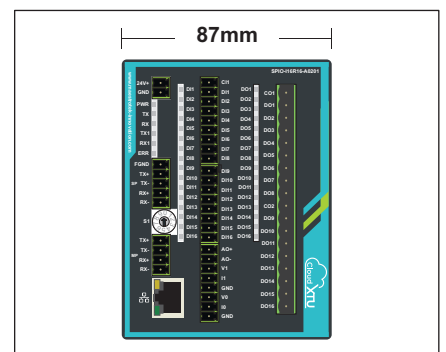
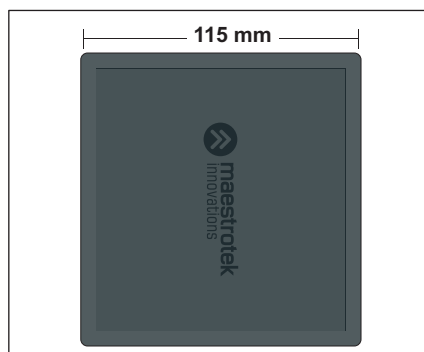
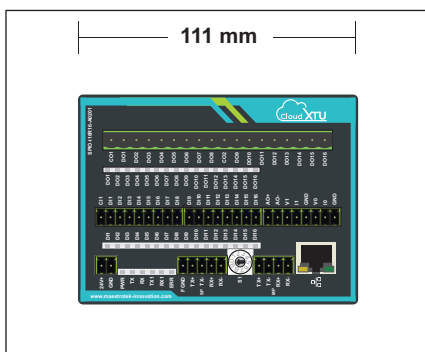
The SPIO module is also equipped with status led's to indicate the status of the inputs, outputs, communication and error. This visual indication assists with fault finding and diagnostics.



FEATURES

Parameter	Description
Supply Voltage	24VDC/12VDC
Digital Input	16 digital inputs (DI1 - DI16) <ul style="list-style-type: none"> • 24V (18V to 30V) sink/source selectable • 5mA Max Current draw (at 30V)
Digital Output	16 digital outputs (DO1 – DO16) <p>Relay:-</p> <ul style="list-style-type: none"> • SPST NO Relay Output • 3A I_{max} (24V DC / 230V AC) <p>Transistor:-</p> <ul style="list-style-type: none"> • PNP Output • 500 mA I_{max} (24VDC) - short act protected
Counters	8 counters DI1 - DI8 - (shared with DI) <ul style="list-style-type: none"> • 32 bit resolution • Retentive memory • 50kHz (Max) per counter
Analog Input	2 X Analog input channels <ul style="list-style-type: none"> • 16 bit resolution • Voltage Mode: 0 - 10V • 4mA-20mA Mode with 250 Ω Load resistor
Analog Output	1 Analog output channel <ul style="list-style-type: none"> • 4mA-20mA output with 12 bit resolution • Externally supplied loop(24VDC)
Communication	1x Modbus Port with RS422 4W with configurable timeout and Default Output State
Data Storage	On board retentive storage for select data
Safety	WDT timer & configurable safe state output

PRODUCT IMAGES



SPECIFICATIONS

Parameter	SPIO-1616DTA0201	SPIO-0016T	SPIO-1600D	SPIO-0808DT
Supply Voltage	24VDC			
Inputs	16 x 24V digital inputs	-	16 x 24V digital inputs	08x24V digital inputs
Output(Transistor)	16 x 24V PNP Output 500mA max		-	08x24V PNP Output 500mA max
Counters	8 x 32 bit counters	-	8 x 32 bit counters	-
Analog Inputs	2 x 16-bit Analog input with Voltage & 4-20mA	-	-	-
Analog Output	1 x 12 bit 4mA-20 mA output	-	-	-
Communication	<ul style="list-style-type: none"> • 1 x Modbus Port with RS422 4W • 1 x CAN FD port (optional) • 1 x Master Port with RS485 (2W/4W) 			
Data Storage	On board retentive storage for select data			

Parameter	SPIO-1616DRA0201	SPIO-0016R	SPIO-0808DR
Supply Voltage	24VDC		
Inputs	16 x digital inputs 24V	-	08x24V digital inputs
Output(Relay)	16 x SPST NO Relay Output 3A Imax		08 x SPST NO Relay Output 3A Imax
Counters	8 x 32 bit counters	-	8 x 32 bit counters
Analog Inputs	2 x 16-bit Analog input with Voltage & 4-20mA	-	2 x 16-bit Analog input with Voltage & 4-20mA
Analog Output	1 x 12 bit 4mA-20 mA output	-	1 x 12 bit 4mA - 20mA output
Communication	<ul style="list-style-type: none"> • 1 x Modbus Port with RS422 4W (Default) • 1 x CAN FD port (optional) • 1 x Master Port with RS485 (2W/4W) 		
Data Storage	On board retentive storage for select data		

MODEL SELECTION

SPIO - XX XX DXA XX XX
1 2 3 4 5

1: Number of Digital Inputs:-

00: No input channels.
16: 16 channels.
08: 08 Channels

4: Number of Analog Inputs:

00: No Analog input Channel
02: 2 Channels

2: Number of Outputs:

00: No Output channels.
16: 16 Channels
08 - 08 Channels

5: Number of Analog Outputs:

00: No Analog output Channel.
01: 1 channel

3: Type Of Output:

R: NO Relay Output
T : Transistor Output(PNP)