WPIO

Series B IO Modules

Where Smart IO Meets Scalable Control - WPIO Series B is a rugged, modular Ethernet I/O system for industrial automation, offering up to 64 points, hot-swappable modules, dual Ethernet with redundancy, real-time LCD diagnostics, and compact DIN rail design.

Rugged Industrial Build

DIN-rail mount, wide temp range (–40°C to +85°C), and high EMI/EMC resistance

Flexible I/O Architecture

Hot-swappable I/O slots support DI, DO, AI, AO, RTD & more

High-Speed Ethernet Backbone

Daisy-chain & ring topology support

Real-Time LCD Diagnostics

On-device LCD for instant system status and IO health

Scalable Configuration Options

Two housing variants (32 & 64 point) for scalable deployment

Compact, Reliable & Efficient

Reduced panel footprint with circular redundancy support

The **WPIO Series B** is a powerful, Ethernet-enabled modular I/O system designed to elevate the WP500 control ecosystem. Built for industrial environments, it features a compact, rugged DIN rail-mounted design with wide operating temperature support (-40 °C to +85 °C), high EMI/EMC resistance, and a durable plastic enclosure.

With two to four hot-swappable I/O slots supporting up to 64 points, Series B offers flexible configurations using digital inputs and outputs, analog signals, RTDs, and other specialized I/O blocks. These modules are seamlessly integrated through a high-bandwidth Ethernet communication backbone.

Dual Ethernet ports come factory-installed, enabling daisy-chain and ring topologies that reduce wiring complexity and minimize the need for external switches. Optional support for managed Ethernet switching provides circular redundancy, ensuring robust and continuous connectivity across the network.

A built-in LCD offers real-time insights into system status, diagnostics, and I/O health—without requiring external devices. Available in two compact housing options—32-point (S) and 64-point (D)—WPIO Series B delivers scalable performance, reliable operation, and a reduced panel footprint, making it a smart choice for modern automation needs.

IO Block Selection Guidelines for WPIO Modules

WPIO	Density	Description			
	S	32-Channel Module – Holds up to 2 I/O Blocks			
	D	64-Channel Module – Holds up to 4 I/O Blocks			
		IO Block Selection For 4 Slots			
		D16 /L16 / H16 /AV8 /AI8 /AI4 / R4A / TC4 / AO4 /AOV /E25 /E24 /ESS / E05 /MR2 / D88 /AI4			
		BLOCK #01	**BLOCK #02**	**BLOCK #03**	**BLOCK #04**
WPIOB	**D**	D16	L16	A18	A04

Note: Refer to the IO Block List for Short Code Descriptions in below table

IO Block List

TAS Model Number	3 Digit TAS Code	Description
WPIO-DI16	D16	16 channel / digital input / 24VDC /dual direction, the input high & low level is valid
WPIO-DO16L	L16	16 channel / digital output / 24VDC / sink, the output low level is valid
WP-DO16H	H16	16 channel / digital output / 24VDC / source, the output high level is valid
WPIO-AIV8	AV8	8 channels voltage input, 0~5VDC/0~10VDC/±5VDC/ ±10VDC,16 bit
WPIO-AII8	AI8	8 channels / current input / 0&4- 20mA, 16 bit single-ended
WPIO-AII4	AI4	4 channels/current input /0&4- 20mA, ±20mA, 16-bit, single
WPIO-RTA4	R4A	4 channels thermal resistance input, RTD-PT100
WPIO-RTB4	R4B	4 channels thermal resistance input, RTD-PT1000
WPIO-RTA4	TC4	4 channels Thermocouple input, TC- J / K/ E / T / S / R / B / N type, fixed filtering parameters
WPIO-AOI4	AO4	4 channels current output, 0&4-20mA, 16-bit, single-ended
WPIO-AOV4	AOV	4 channels voltage output, 0~5VDC/0~10VDC/±5VDC/ ±10VDC, 16-bit
WPIO-ENC05S2	E25	2 channels orthogonal/pulse encoder input, 5V single-ended, 1.5MHz
WPIO-ENC24S2	E24	2 channels orthogonal/pulse encoder input, 24V single-ended, 1.5MHz
WPIO-SSI05D1	ESS	1 channel SSI encoder input, 5V differential, 2MHz
WPIO-ENC05D1	E05	1 channel orthogonal/pulse encoder input, 5V differential, 10MHz
WPIO-MRTU2	MR2	2 Channel RS485 Modbus RTU Master? Slave Module
WPIO-DI8DO8	D88	8 channels / digital input, source & sink /NPN&PNP/ 24VDC, supports counter function (counter frequency up to 200Hz); 8 channels / digital output / source / PNP / 24Vdc/0.5A