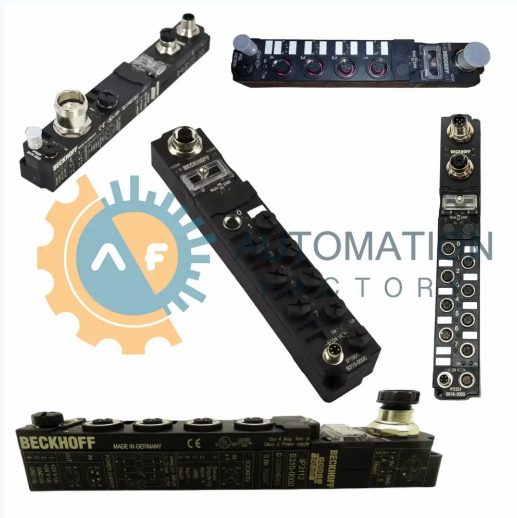


Beckhoff — IP Compact Box Units

IP1001-B310-0000



 **In-Stock, Ships Today**

- ☒ Get a Quote in 5 minutes
- ☒ Parts ship in as little as 24 hours
- ☒ Up to half the cost of the manufacturer



Secure Online
Checkout



Free Ground
Shipping



One Year
Warranty

The **IP1001-B310-0000** is a digital input block produced by Beckhoff for the IP Compact Box Units series. Designed for direct machine mounting, the module accepts 24 V sensor signals and sends them to a controller. Sealed field connectors and integrated bus electronics allow decentralized automation without a control cabinet. It gathers states from proximity switches, pushbuttons, or limit contacts and forwards the data to the plant network, while the solid-cast housing tolerates vibration, spray, and continuous motion.

All eight input channels are powered from the control voltage rail rated at **24 VDC**. Each channel occupies one bit in the controller image, so the module presents **8 discrete status bits** to the PLC. Sensors draw only **6 mA** when active, reducing the load on inductive or solid-state devices. The input circuitry conforms to **EN 61131-2 Type 2**, which establishes the switching thresholds and allows direct connection of PNP sensors. A hardware debounce period of **3.0 ms** is integrated, eliminating the need for additional software filtering. To energize external transducers, the unit provides up to **0.5 A of sensor supply current per channel**, sourced internally from the supply line.

The fieldbus interface is **PROFIBUS**, so telegrams from the controller reach the module through standard two-wire cabling. On the outgoing side, additional IP units can be daisy-chained through **one 4-pin M8 socket**. Signal lines enter the housing through **M8 screw-in connections**, allowing quick replacement without tools while maintaining the IP67 seal. Electrical separation exists between the control logic and the bus, whereas no isolation is provided between the sensor channels and the local supply. A dedicated four-pin M8 power feed allows the supply voltage to

Automation Factory sells factory new and pre-owned surplus products and maintains channels to procure supply. Automation Factory is not affiliated with nor an authorized distributor or representative of any manufacturers, brands or products listed. Designated trademarks, brand names, and brands appearing herein are the property of their respective owners.

be distributed in parallel along the machine frame.

Specifications

"0" Signal Voltage:	-3...+5 V (EN 61131-2, type 2)	"1" Signal Voltage:	11...30 V (EN 61131-2, type 2)	Approvals/markings:	CE, UL
Bus Interface:	1 x M12 socket, 5-pin, B-coded	Channels/ctrl Isolation:	No	Ctrl/fieldbus Isolation:	Yes
Data Transfer Medium:	Shielded copper cable, 2 x 0.25 mm²	Data Transfer Rates:	Automatic detection up to 12 Mbaud	Downstream Port:	1 x M8 Socket, 4-Pin
Fieldbus System:	PROFIBUS	Input Connections:	M8, screw type	Input Current:	6 mA
Input Filter:	3.0 ms	Input Type:	EN61131-2 Type 2	Material Housing:	PA6 (polyamide)
Nominal Input Voltage:	24 VDC	Number Of Inputs:	8	Operating Temperature:	0...55°C
Power Feed:	1 x M8 Connector, 4-Pin	Process Image:	8 Bits Input	Protection Rating:	IP65/66/67 (EN 60529)
Sensor Supply:	0.5 A Per Channel Max	Sensor Supply Source:	Control Voltage	Signal Connection:	M8 Screw-In
Storage Temperature:	-25...+85°C	Last Verified:	10/24/2026 6:59 AM		

Contact Us

-  1620 Old Apex Road, Cary, NC 27513, USA
-  Toll Free: [1-888-551-3082](tel:1-888-551-3082)
-  International: [1-919-443-0207](tel:1-919-443-0207)
-  Fax: [1-919-867-6204](tel:1-919-867-6204)
-  Email: sales@wakeindustrial.com

Shipping Options



Payment Methods



Automation Factory sells factory new and pre-owned surplus products and maintains channels to procure supply. Automation Factory is not affiliated with nor an authorized distributor or representative of any manufacturers, brands or products listed. Designated trademarks, brand names, and brands appearing herein are the property of their respective owners.