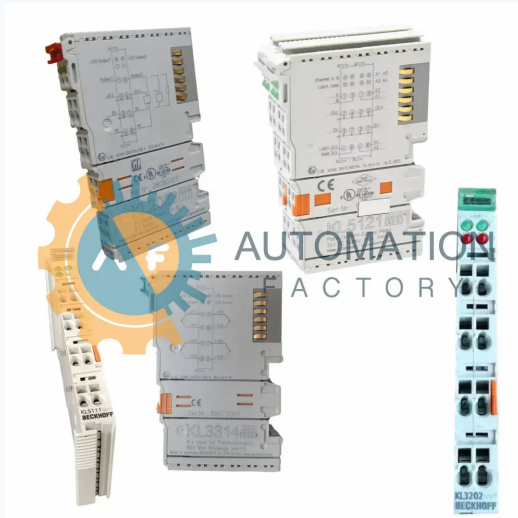


Beckhoff — KL Analog Input Modules

KL1501

 **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 **KL1501** from Beckhoff belongs to the KL Analog Input Modules series and serves as a single-channel counter interface for decentralized I/O stations. It captures fast pulse or position signals from sensors and forwards the count value to a higher-level controller through the fieldbus coupler system. By moving the counting function onto the DIN-rail terminal, the module reduces the processing load on the PLC and keeps sensor wiring localized inside the control cabinet.

The terminal stores every pulse in a **32-bit** register, providing a numerical range large enough for extended production batches without additional overflow handling. It accepts input frequencies up to **100 kHz**, so encoders or proximity switches that generate rapid edge sequences remain fully resolved. The counting circuit operates with a rated load voltage of **24 VDC**, supporting standard industrial sensors without a separate voltage level. An enclosure rated at **IP20** protects the internal electronics against incidental contact when the terminal is mounted inside a control panel. Despite the integrated electronics, the housing has a width of **12 mm**, allowing a high density of I/O terminals on the mounting rail. Two additional transistor outputs are available for simple limit signaling. The address setting is fixed to none, and the power contacts forward only the load voltage, preventing system voltage from being fed back through the terminal row.

The counting channel uses **one up/down counter input** and is qualified as an **EN 61131-2 Type 1** input, ensuring compatibility with standard 24 V sensor signals. Mechanical fastening uses a **35 mm** mounting rail, and the device can be installed in any orientation without derating. A process image width of **40 I/O bits** maps the

count value, status information, and two auxiliary outputs directly into the PLC memory area. The module evaluates rising edges for each count received from the connected sensor. Its internal direction bit controls whether each detected pulse increments or decrements the stored count value.

Specifications

0' Signal Voltage:	-3...+5 V (EN 61131-2, type 1)	1' Signal Voltage:	15...30 V (EN 61131-2, type 1)	Additional Outputs:	2
Address Setting:	None	Aligned Width:	12 mm	Connection Technology:	1 x Up/Down Counter
Count Edge:	Rising Edge	Counter Depth:	32 bit	Counting Frequency:	max. 100 kHz (2 kHz for switching up/down)
Current Consumption:	typ. 50 mA from K-bus, load only from power contacts	Input Current:	typ. 5 mA (EN 61131-2, type 1)	Input Type:	EN 61131-2 Type 1
Installation Position:	Any	Ip Rating:	IP20	Max Input Frequency:	100 kHz
Max. Output Current:	24 V/0.5 A (short-circuit proof per channel)	Mounting Rail:	35 mm	Nominal Voltage:	24 V DC (-15%/+20%)
Number Of Counters:	1 or 2	Operating Temperature:	-25...+60°C	Power Contacts:	Load Only
Process Image Width:	40 I/O	Protection Class:	IP20	Rated Load Voltage:	24 VDC
Specification:	EN 61131-2, type 1, '0': < 5 V DC, '1': > 15 V DC, typ. 5 mA	Up/down Counter Depth:	32 Bit	Vibration/shock Resistance:	Conforms to EN 60068-2-6/EN 60068-2-27
Last Verified:	10/23/2026 8:32 PM				

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.