



XDK Digital Input-Extension 4DI

The Four-Channel Digital Input-Extension, 9-24VDC

Connect your XDK with the 4DI-Extension board and explore a wide range of possible applications

The XDK Digital Input-Extension (4DI) acquires the binary control signals from sensors, machines and systems and transmits them galvanically isolated to the XDK.

The XDK 4DI-Extension enables a wide range of possible applications. (e.g. together with the XPM120 Application.)

Thanks to the XDK and the XDK 4DI-Extension, there are no limits to your creativity in developing new use cases. .

XDK BUILT-IN SENSORS FOR ADDITIONAL PURPOSE



Accelerometer



Acoustic sensor



Digital light sensor



Gyroscope



Humidity sensor



Magnetometer



Pressure sensor



Temperature sensor

APPLICATION ADVANTAGES

- ▶ Galvanic separation of the Inputs
- ▶ Wide range of input voltage
- ▶ Supported by the XPM120-Firmware to use XDK and the 4DI-Extension with the Nexeed backend
- ▶ Many application possibilities, e.g. Machine Status transmission to the Cloud
- ▶ Small form factor (w 62mm x h 22mm x d 52mm), weight 55g

- ▶ PC and MAC based development tools for Windows, LINUX and MacOS make it an easy to work with tool for any developer
- ▶ CE certified, according to EMC directive 2014/30/EU
EMC standards: EN 61000-6-3, EN 61000-6-2, EN 55011 and EN 61326-1
FCC Part 15 B, | further on request





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Scope of delivery

- ▶ 4DI-Extension
- ▶ Instructions for safe use
- ▶ Linkcard to Quickstart Guide

MAIN COMPONENTS

- ▶ 4 Digital Inputs, rated up to 40V (4DI), (in version 1 and 2)
- ▶ 1 12VDC Output (only in version 2)

OPERATING CONDITIONS

- ▶ Indoor use
- ▶ Operating temperature -20 °C ... 60 °C,
- ▶ Storage temperature -20 °C ... 60 °C
- ▶ Humidity range 10...90 %rH (non-condensing)
- ▶ IP Rating IP30 (XDK), IP20 (4DI-Extension), Mounting position optional
- ▶ Connection Technology 2 wires
- ▶ Nominal Voltage 0-24 V_{DC}
- ▶ Abs-Maximum Voltage 40 V_{DC}
- ▶ Signal Voltage „0” -3 V ... +2,3 V
- ▶ Signal Voltage „1” 5 V ... 24 V
- ▶ Input Current typ. 3mA
- ▶ Potential Separation 50 V (input or output to extension port)

ADDITIONAL OPERATING CONDITIONS

- ▶ The XDK 4DI-Extension is authorized for indoor use in light industrial, industrial and residential environments. The IP class is IP20, i.e. the XDK 4DI-Extension must not get wet and is protected against foreign bodies $\geq \varnothing 12,5\text{mm}$. The permissible operating temperature range is between -20°C and +60°C. Any use or operation under deviating environmental conditions may lead to loss of EU conformity and must be validated and tested by the customer on his own responsibility. The product shall not be used in ATEX zones. BCDS points out that the XDK 4DI-Extension does not implement any requirements on functional safety. Therefore, it is not approved by BCDS for applications under the Machine Directive or any application in which it has role to ensure safety and health of people.

Bosch Connected Devices and Solutions GmbH declares that the XDK 4DI-Extension is conform to the Directive 2014/30/EU and FCC Part 15 B. The full text of the EU declaration of conformity is available at the following internet address:

www.XDK.io/conformity

GET IN CONTACT WITH US

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