

## Bus coupler BK51x0 I/O modules



The BK51x0 CANopen bus coupler family connects the modular and flexible Beckhoff bus terminal system to a CANopen network. The bus couplers supply up to 255 electronic terminal blocks for any type of signal. Different voltage groups can be set up to fully replace the mechanical terminal blocks.

The system ensures that control cabinets and terminal boxes are constructed more economically. Using the four-wire terminating system, all of the usual sensors and actuators with different signal types can be connected directly without other connection systems. This significantly reduces costs involved in controller design and saves space, material, work and hence money. There are several different types of CANopen bus couplers available, ranging from low cost and economy versions with reduced signal numbers to the standard coupler with full functionality. A fully IEC 61131 programmable version (BC51x0) for data pre-processing and local controls is also available.

### Features include

- Interfaces for up to 255 terminal blocks with up to 1 024 I/O points per adapter to a CANopen network
- About 400 different terminal blocks available, including serial interfaces and various incremental encoder and thermocouple interfaces
- Full CANopen functionality with variable mapping, all PDO transmission types supported, boot-up message and comprehensive diagnosis via Emergency message
- Auto bit-rate detection mode available for 10, 20, 50, 100, 125, 250, 500, 800, 1 000 kbit/s
- Parameters can be stored in non volatile memory.
- Smart PDO triggering through delta functions and limit value settings for analog inputs
- Flash upgradeable firmware gives easy access to new features.
- DE-9 connector as bus interface in the BK5151

[www.beckhoff.com/BK5110](http://www.beckhoff.com/BK5110)

[www.beckhoff.com/BK5151](http://www.beckhoff.com/BK5151)

## Contact

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### Beckhoff Automation GmbH

Eiserstr. 5  
DE-33415 Verl

Email: [info@beckhoff.com](mailto:info@beckhoff.com)  
Phone: +49-5246-963-0  
Fax: +49-5246-963-198  
Web: <http://www.beckhoff.com>

### Technical contact

Beckhoff Automation GmbH  
Office Nuremberg  
Martin Rostan  
Ostendstr. 196  
DE-90482 Nuremberg

Phone: +49-911-5405611  
Fax: +49-911-5405629  
Email: [nuernberg@beckhoff.com](mailto:nuernberg@beckhoff.com)

### Austria

Beckhoff Automation GmbH  
Hauptstr. 4  
AT-6706 Bürs

Phone: +43-5552-688130  
Fax: +43-5552-6881318  
Email: [info@beckhoff.at](mailto:info@beckhoff.at)  
URL: [www.beckhoff.at](http://www.beckhoff.at)

### China

Beckhoff Automation (Shanghai) Co., Ltd.  
5th Floor, No. 163 Jiang Chang San Road  
Shanghai Shibei Industrial New Zone  
CN-200436 Shanghai

Phone: +86-21-6631-2666  
Fax: +86-21-6631-5696  
Email: [info@beckhoff.com.cn](mailto:info@beckhoff.com.cn)  
URL: [www.beckhoff.com.cn](http://www.beckhoff.com.cn)

### Finland, Estonia

Beckhoff Automation Oy  
P.O. Box 23  
Kankurinkatu 4-6  
FI-05801 Hyvinkää

Phone: +358-20-7423800  
Fax: +358-20-7423801  
Email: [info@beckhoff.fi](mailto:info@beckhoff.fi)  
URL: [www.beckhoff.fi](http://www.beckhoff.fi)

### Italy

Beckhoff Automation S.r.l.  
Via E. Majorana, 1  
IT-20054 Nova Milanese, MI

Phone: +39-03-62-365164  
Fax: +39-03-62-40990  
Email: [info@beckhoff.it](mailto:info@beckhoff.it)  
URL: [www.beckhoff.it](http://www.beckhoff.it)

### Poland

Beckhoff Automation SP.z.o.o.

Stara Iwiczna, ul. Sloneczna 116A  
PL-05500 Piaseczno

Phone: +48-22-7572610  
Fax: +48-22-7572607  
Email: [info@beckhoff.pl](mailto:info@beckhoff.pl)  
URL: [www.beckhoff.pl](http://www.beckhoff.pl)

#### Russia

Beckhoff Automation OOO  
Ul. Bakuninskaya 14, Building 9  
RU-105005 Moscow

Phone: +7-495-981-6454  
Fax: +7-495-981-6454  
Email: [russia@beckhoff.com](mailto:russia@beckhoff.com)  
URL: [www.beckhoff.ru](http://www.beckhoff.ru)

#### Sweden, Norway

Beckhoff Automation AB  
Stenådersgatan 2B  
SE-21376 Malmö

Phone: +46-40-6808160  
Fax: +46-40-6808161  
Email: [info@beckhoff.se](mailto:info@beckhoff.se)  
URL: [www.beckhoff.se](http://www.beckhoff.se)

#### Switzerland

Beckhoff Automation AG  
Rheinweg 9  
CH-8200 Schaffhausen

Phone: +41-52-6334040  
Fax: +41-52-6334055  
Email: [schaffhausen@beckhoff.ch](mailto:schaffhausen@beckhoff.ch)  
URL: [www.beckhoff.ch](http://www.beckhoff.ch)

#### USA, Canada, Mexico

Beckhoff Automation LLC  
12150 Nicollet Avenue South  
US-55337 Burnsville, MN

Phone: +1-952-8900000  
Fax: +1-952-8902888  
Email: [beckhoff.usa@beckhoff.com](mailto:beckhoff.usa@beckhoff.com)  
URL: [www.beckhoffautomation.com](http://www.beckhoffautomation.com)

## Features

<b>NMT</b>	NMT slave
<b>Error control</b>	Node guarding Heartbeat producer
<b>Boot-up</b>	No
<b>Node ID range</b>	None
<b>Node ID</b>	Hardware switch
<b>CANopen bit-rates</b>	n/a
<b>Type of bit-rate adjustment</b>	None
<b>RPDOs</b>	16
<b>TPDOs</b>	16
<b>PDO modes</b>	Event-triggered Triggered by event-timer Synchronous (cyclic) Synchronous (acyclic)
<b>PDO linking</b>	Yes
<b>PDO mapping</b>	Variable

<b>SDO server</b>	1
<b>SDO client</b>	No
<b>Emergency producer</b>	Yes
<b>Emergency consumer</b>	No
<b>Sync producer</b>	No
<b>Sync counter</b>	No
<b>Time stamp</b>	No
<b>Additional functions</b>	None
<b>CANopen version</b>	CiA 301 V 4.0.2
<b>Frameworks</b>	None
<b>Device profiles</b> CiA 401: CANopen device profile for generic I/O modules	
<b>Certified</b>	Yes
<b>Availability</b>	In stock