

**TURCK**  
*works*

Industrial  
Automation

**BL COMPACT:  
FLEXIBLE  
REMOTE I/O  
STATIONS**

*DeviceNet™  
PROFIBUS®-DP  
CANopen*



**....Sense It!....Connect It!....Bus It!....Solve It!**

[www.turck.us](http://www.turck.us)

# BL COMPACT

## CONCEPT

I/O systems installed between the control cabinet and in close proximity to sensors and actuators have become increasingly more rugged, efficient and user friendly. TURCK is supporting this trend with its new **BL compact** flexible I/O stations for analog and digital signals rated up to IP 69K.

**BL compact** combines the variety of I/O offered in our **BL67** remote I/O system with the manufacturing technologies provided in our **AIM** (Advanced I/O Module).

The result is a rugged distributed I/O station capable of providing a wide range of I/O (PNP/NPN input, discrete output, analog input, analog output, RFID, counter, etc.) on DeviceNet™, PROFIBUS® and CANopen.

**Flexible Remote I/O  
(BL67)**



**Rugged I/O Module  
(AIM)**



**BL  
compact**



**The most flexible remote I/O station available!**

# FLEXIBLE REMOTE I/O

## FEATURES

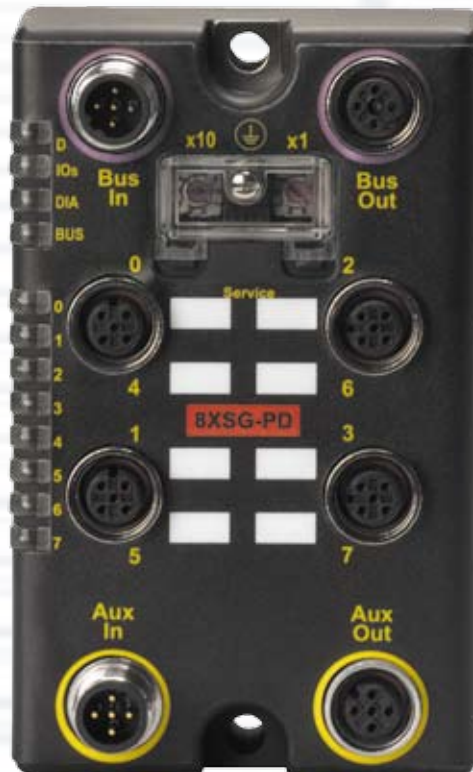
**TURCK's new BL compact line** brings all of your I/O to the plant floor through a rugged, compact device. This product line provides a vast signal variety in packages rated up to IP 69K, including analog, digital, RTD, thermocouple, serial, or a mixture of signal types, all inside one robust node on your network.

**BL compact** provides an inexpensive means to add a variety of different I/O in an environmentally hardened package that allows direct mounting onto a machine without the need for a separate enclosure.

**BL compact's** design features and breadth of I/O combinations make it suitable for many applications, including material handling, assembly and packaging in a wide variety of industries, including:

- Automotive
- Petrochemical
- Food and beverage
- Semiconductor

**DEVICENET, PROFIBUS & CANOPEN**

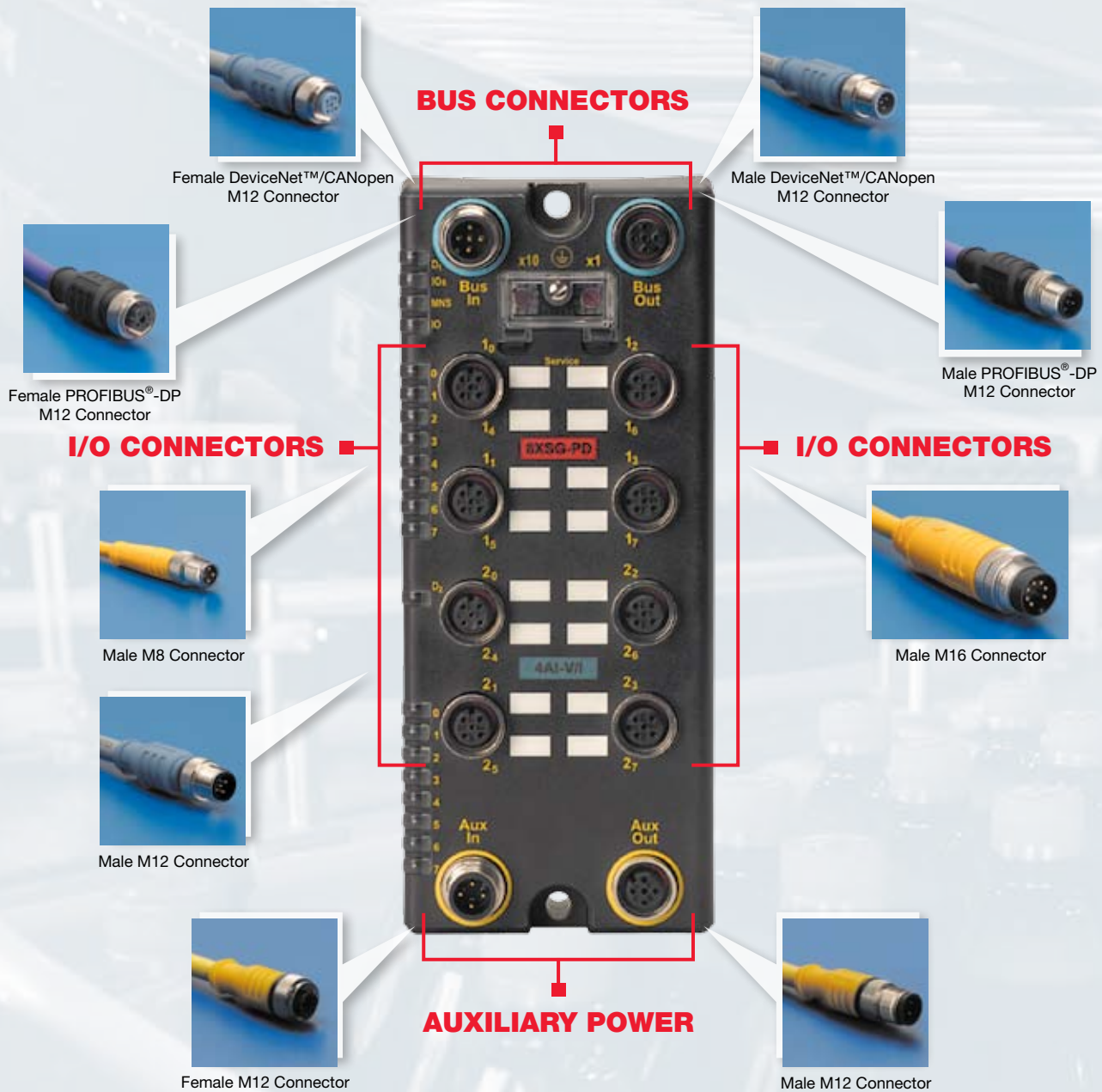


**ANALOG, SSI, PT, RS232, RS485, RFID, RELAY  
PNP/NPN DIGITAL, THERMOCOUPLE, COUNTER, SERIAL,**

# I/O STATIONS

## OPTIONS

**BL compact** offers I/O with M8 *picofast*<sup>®</sup>, M12 *euromast*<sup>®</sup> or M16 *multifast*<sup>®</sup> connectors that allow for easy installation into any application, existing or new. With TURCK's line of network, sensor and power cables, **BL compact** is capable of meeting the most demanding application requirements.



**BLCDN-16M8LT-8XSG-PD-4AI-VI**

Featured item above combines analog and digital I/O

**Combining analog & digital I/O in a single unit!**

# FLEXIBLE REMOTE I/O STATIONS

**TURCK**  
*works*

Industrial  
Automation

**BL Compact**

**Bus Type**  
 DN = DeviceNet™  
 DP = PROFIBUS®-DP  
 CO = CANopen†

**Number of I/O Ports**  
 2 = 2 ports  
 4 = 4 ports  
 6 = 6 ports  
 8 = 8 ports  
 16 = 16 ports (only available with M8)

**Type of Connectors**  
 M8 = *picofast*® (8 mm)  
 M12 = *eurofast*® (12 mm)  
 M16 = *versafast*® (16 mm)

**Housing Style**  
 S = Small housing  
 M = Medium housing  
 L = Large housing

**I/O Type Position #2\***

4DI-P	4DIDO-PD	2AI-I
4DI-N	8DO-0.5A-P	2AI-V
4DI-PD	8DO-0.5A-N	2AO-I
8DI-P	16DO-	2AO-V
8DI-N	0.1A-P	2AI-PT
8DI-PD	8DO-R-NO	2AI-TC
8XSG-PD	CVI	1RS232
4DO-0.5A-P	2RFID-S	1RS485-422
4DO-2A-P	2RFID-A**	1SSI
4DO-2A-N	4AI-VI	1CNT-ENC†

**I/O Type Position #1\***

4DI-P	4DIDO-PD	2AI-V
4DI-N	8DO-0.5A-P	2AO-I
4DI-PD	8DO-0.5A-N	2AO-V
8DI-P	16DO-0.1A-P	2AI-PT
8DI-N	8DO-R-NO	2AI-TC
8DI-PD	CVI	1RS232
8XSG-PD	2RFID-S	1RS485-422
4DO-0.5A-P	2RFID-A**	1SSI
4DO-2A-P	4AI-VI	1CNT-ENC†
4DO-2A-N	2AI-I	

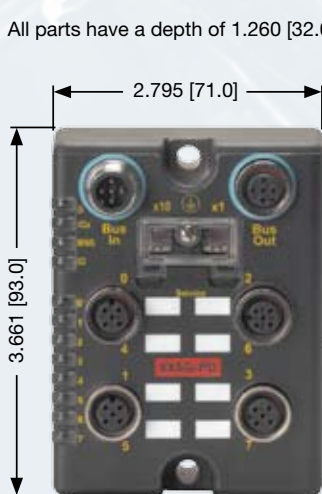
**Auxiliary Power Connector**  
 T = Auxiliary power connector present  
 (Blank) = No auxiliary power connector

\* Not all combinations are available. Consult factory for more details.  
 \*\* Only available for PROFIBUS®-DP  
 † Available 1st Qtr 2009

## I/O Type Descriptions

- |   |  |
|---|--|
| DI-P(D) = Digital Input-PNP (Diag.)     | AO-V = Analog Output (Voltage)               |
| DI-N = Digital Input-NPN                | AI-PT = Analog Input (Platinum Thermocouple) |
| DO-P = Digital Output-PNP               | SSI = Synchronous Serial Interface           |
| DO-N = Digital Output-NPN               | RS232 = Single Point Serial                  |
| XSG-P(D) = Configurable I/O-PNP (Diag.) | RS485-422 = Multi-point Serial               |
| AI-I = Analog Input (Current)           | R-NO = Relay (Normally Open)                 |
| AI-V = Analog Input (Voltage)           | RFID = Radio Frequency Identification        |
| AI-TC = Analog Input (Thermocouple)     | CNT-ENC = Counter and Encoder                |
| CVI = CANopen Interface Module          |  |
| AO-I = Analog Output (Current)          |  |

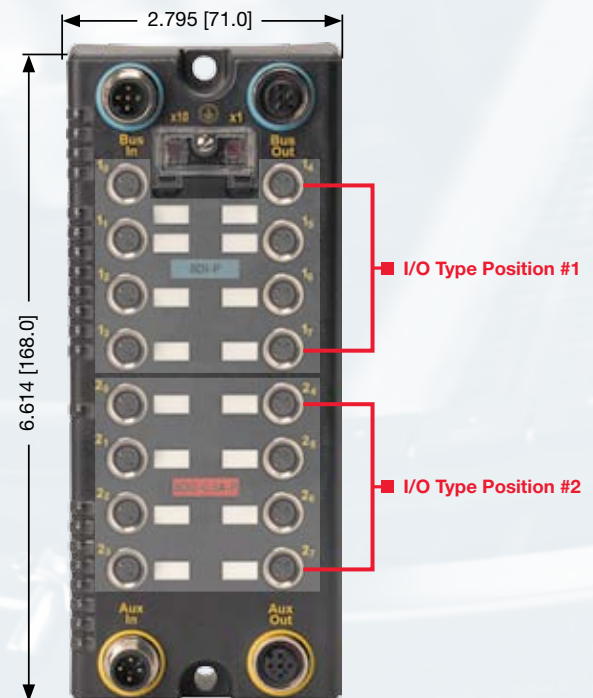
All parts have a depth of 1.260 [32.0]



BLCDN-4M12S-8XSG-PD



BLCDP-2M12MT-2RFID-S



BLCDN-16M8LT-8DI-P-8DO-0.5A-P



## USA

TURCK Inc.  
3000 Campus Drive  
Minneapolis, MN 55441  
Phone: (763) 553-7300  
Fax: (763) 553-0708  
Application Support:  
1-800-544-7769  
E-mail: turckusa@turck.com  
www.turck.us



## MEXICO

TURCK MEXICO S. DE R.L. DE C.V.  
Carr. Saltillo-Zacatecas km 4.5 s/n  
Parque Industrial "La Angostura"  
Saltillo, COAH. C.P. 25070  
Mexico  
Phone: +52 (844) 411-6650/46  
Fax: +52 (844) 482-6926  
Local Toll Free: 01-800-01-88725  
E-mail: ventasmexico@turck.com



## CANADA

CHARTWELL ELECTRONICS, INC.  
140 Duffield Drive  
Markham, Ontario  
Canada, L6G 1B5  
Phone: (905) 513-7100  
Fax: (905) 513-7101  
Toll Free: 1-877-513-7769



## AUSTRALIA

TURCK Australia Pty. Ltd.  
Unit 5, 6-7 Gilda Court  
Mulgrave, Victoria 3170  
Australia  
Phone: (+61) 3 9560 9006  
Fax: (+61) 3 9560 1620  
Local Toll Free: 1300 132566  
E-mail: turckaustralia@turck.com



## GERMANY

### WORLD HEADQUARTERS

Hans TURCK GmbH & Co. KG  
Witzlebenstrasse 7  
D-45472 Muelheim an der Ruhr  
Federal Republic of Germany  
Phone: (+49) 208-49 52-0  
Fax: (+49) 208-49 52 264

www-turck-us

....**Sense It!**....**Connect It!**....**Bus It!**....**Solve It!**