

## Bus coupler - IBS RL 24 BK RB-LK-LK-2MBD - 2731597

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Bus coupler with remote branch for INTERBUS; fiber optic technology with 2 Mbaud, rugged metal housing with IP67 protection, tool-free mounting on a separate mounting plate, can be used directly on welding robots



The illustration shows version IBS  
RL 24 BK RB-LK-LK

### Product Features

- Rugged metal housing
- Comprehensive diagnostic functions
- M12 connector for I/O devices
- Rugged Line connector for INTERBUS, either with fiber optic or twisted pair, and supply voltage



### Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	778.1 g
Custom tariff number	85389091
Country of origin	Germany

### Technical data

#### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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#### Dimensions

Width	179 mm
Height	67 mm
Depth	71 mm

#### Ambient conditions

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## Technical data

### Ambient conditions

Ambient temperature (operation)	0 °C ... 55 °C
Ambient temperature (storage/transport)	-25 °C ... 70 °C
Permissible humidity (operation)	100 %
Permissible humidity (storage/transport)	95 % (non-condensing)
Air pressure (operation)	860 hPa ... 1080 hPa (up to 1500 m above mean sea level)
Air pressure (storage/transport)	660 hPa ... 1080 hPa (up to 3500 m above mean sea level)
Degree of protection	IP65/IP67

### General

Mounting type	Wall mounting
Net weight	610 g
Mounting type	On mounting plate

### Interfaces

Fieldbus system	INTERBUS
Designation	INTERBUS
Connection method	IP67-RL connector with FO connection
Transmission speed	2 MBit/s

### Power supply for module electronics

Supply voltage	24 V DC
Supply voltage range	18.5 V DC ... 32 V DC (including ripple)
Ripple	Max 3.6 V <sub>SS</sub> within the permissible voltage range
Current consumption	typ. 120 mA

### Standards and Regulations

Air clearances and creepage distances	According to EN 50178: 1998
Connection in acc. with standard	CUL
Protection class	III, IEC 61140, EN 61140, VDE 0140-1

## Classifications

### eCl@ss

eCl@ss 4.0	27250203
eCl@ss 4.1	27250203
eCl@ss 5.0	27250203
eCl@ss 5.1	27242608
eCl@ss 6.0	27242608
eCl@ss 7.0	27242608

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### Classifications

#### eCl@ss

eCl@ss 8.0	27242608
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#### ETIM

ETIM 2.0	EC001434
ETIM 3.0	EC001604
ETIM 4.0	EC001604
ETIM 5.0	EC001604

#### UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	43201404

### Approvals

#### Approvals

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#### Approvals

UL Recognized / cUL Recognized / INTERBUS CLUB / cULus Recognized

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#### Ex Approvals

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#### Approvals submitted


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#### Approval details


UL Recognized 	
Nominal current I <sub>N</sub>	0.12 A
Nominal voltage U <sub>N</sub>	24 V

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### Approvals

cUL Recognized 	
Nominal current I <sub>N</sub>	0.12 A
Nominal voltage U <sub>N</sub>	24 V

INTERBUS CLUB
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cULus Recognized  US
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### Accessories

#### Accessories

#### Adapter cable

Cable set - IBS RL CABLE POF/ - 2819956

Assembled cable sets with fiber optic bus connectors, sold by the meter



#### Assembly element

Lower mounting part - IBS RL AP - 2731128



Mounting plate for Ruggedline devices

#### Assembly tool

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### Accessories

Fiber cutter - IBS RL FOC - 2725147



Fiber cutter for assembling polymer fiber cables for connecting INTERBUS Ruggedline devices

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Assembly tool - PSM-POF-KONFTOOL - 2744131



Polymer fiber DIY case, consisting of: Stripping knife, stripping pliers, polishing wheels for F-SMA and SC-RJ quick mounting connectors, polishing pad and emery paper

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### Bridge

Cable set - IBS RL CONNECTION-LK - 2733029



Assembled cable jumper as a short connection between two INTERBUS Rugged Line devices with fiber optic bus connectors and power supply, approximately 30 cm

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### Cable by the meter

Cable - IBS PWR/5HD/F - 2731775



Power supply cable, gray, welding-splash-resistant in standard applications, 5 x 1.5 mm<sup>2</sup>, highly flexible, sold by the meter

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Cable - IBS PWR/5 - 2820000



Power supply cable, gray, welding-splash-resistant in standard applications, 5 x 1.5 mm<sup>2</sup>, sold by the meter

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### Accessories

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#### Connector set

Connector set - IBS CCO-R/L - 2759883



M23 solder connection for bus connector set, male/female connector, 9-pos. (8+1)

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#### Data cable by the meter

FO cable - PSM-LWL-RUGGED-980/1000 - 2744322



Polymer fiber cable, duplex, 980 µm/1000 µm, heavy version for permanent indoor installation, sold by the meter without connectors

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FO cable - PSM-LWL-RUGGED-FLEX-980/1000 - 2744335



Polymer fiber cable, duplex 980/1000 µm, heavy-weight, highly flexible version for flexible conduit applications, by the meter, without connector

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FO cable - PSM-LWL-KDHEAVY-980/1000 - 2744319



Polymer fiber cable, duplex 980/1000 µm, medium-weight version for permanent indoor installation, by the meter, without connector

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#### Labeling panel

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### Accessories

Marking label - IBS RL MARKER-SET - 2732729



Set of 50 small and 50 large metal marking labels

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Marking label - IBS RL MARKER-G-SET - 2734727



100 large metal marking labels

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Marking label - IBS RL MARKER-K-SET - 2734730



100 small metal marking labels

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### Measuring tools

Measuring instrument - PSM-FO-POWERMETER - 2799539



Fiber optic measuring case, consisting of an optical power meter, F-SMA, B-FOC adapters, reference fibers and operating instructions

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### Media converter

FO converters - IBS OPTOSUB-MA/M/R-LK-OPC - 2732635



INTERBUS fiber optic converter for converting the remote OUT interface to fiber optics, correction of the optical transmission capacity, FO output right

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### Accessories

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#### Plug

Bus connector - IBS RL PLUG-LK/POF - 2731076



Connector for the fiber optic bus with polymer fiber cable and for the power supply with QUICKON connection method

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Adapter set - IBS RL 24 ADAP-LK/T - 2725040



INTERBUS Rugged Line adapter for converting the fiber optic remote bus to a copper wire remote bus

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Adapter set - IBS RL 24 ADAP-T/LK - 2725037



INTERBUS Rugged Line adapter for converting the copper wire remote bus to a fiber optic remote bus

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Bus connector - IBS RL PLUG-LK/POF-F - 2734183



Connector for the fiber optic bus with polymer fiber cable and for the power supply with spring-cage connection method

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Connector set - IBS CCO-PSF/L - 2780878



M23 power supply connector, female connector, 6-pos.

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### Accessories

Connector set - IBS CCO-PSM/L - 2759906



M23 power supply connector, male connector, 6-pos.

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### Protective cap

Transport protection - IBS RL PROT-LK - 2819969



Transport protection for optic fiber bus connection

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### Y-distributor

Y distributor - SAC-3P-M12Y/2XM12FS PE - 1683455



Y distributor, 4-position, Plug straight M12, A-coded, on Socket straight M12, A-coded and Socket straight M12, A-coded

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User manual - IBS RL SYS PRO UM - 2743705



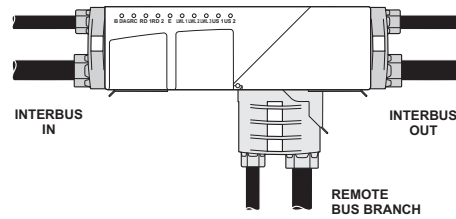
User manual, German, for configuring and installing the Rugged Line product range, only available as a download.

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### Drawings

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Connection diagram



# Mouser Electronics

Authorized Distributor

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