



LC3100 | PROFIBUS "Low Cost" Bus Coupler



The LC3100 "Low Cost" Bus Coupler is marked by a smaller design and a more economical connection method. Its functions correspond to those of the PROFIBUS BK3110 Bus Coupler in relation to operation with Bus Terminals and to the fieldbus properties. Up to 64 digital input/output terminals can be connected. The firmware can be updated via the configuration interface.

The LC3100 Bus Coupler is particularly suitable for use in small, low-price stations. The 24 V DC supply voltage feeds the peripheral devices via the power contacts. It also feeds the Bus Coupler and K-bus electronics. Electrical isolation from the I/O level is omitted from the Bus Coupler, but can if necessary be implemented by means of a power feed terminal.

The LC3100 Bus Coupler can be replaced by a Bus Coupler from the BK3110 series.

System data	PROFIBUS LC3100				
Number of I/O stations	100 with repeater				
Number of I/O points	approx. 6,000, depending on the master				
Data transfer medium	shielded copper cable, 2 x 0.25 mm ²				
Max. cable length	1,200 m	1,000 m	400 m	200 m	100 m
Data transfer rates	9.6/19.2/ 93.75 kbaud	187.5 kbaud	500 kbaud	1,500 kbaud	...3, 6, 12 Mbaud

Technical data	LC3100
Number of Bus Terminals	64
Max. number of bytes fieldbus	64 byte input and 64 byte output
Data transfer rates	automatic detection up to 12 Mbaud
Bus interface	connection via Bus Terminal
Power supply	24 V DC (-15 %/+20 %)
Input current	70 mA + (total K-bus current)/4, 500 mA max.
Current supply K-bus	500 mA
Power contacts	max. 24 V DC/max. 10 A
Electrical isolation	between power supply/field bus, none between power supply/power contacts
Connection method	directly to spring-loaded terminals
Dimensions (W x H x D)	similar to the Bus Terminal housing, width 21 mm
Weight	approx. 100 g
Operating/storage temperature	0...+55 °C/-25...+85 °C
Relative humidity	95 %, no condensation
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protect. class/installation pos.	IP 20/variable
Approvals	CE, UL, Ex

Accessories	
KS2000	configuration software for extended parameterisation
Cordsets	cordsets and connectors
FC310x	PC Fieldbus Cards with PCI interface

Related products	
BK3010	PROFIBUS Bus Coupler for up to 64 digital Bus Terminals, 1.5 Mbaud
BK3100	PROFIBUS DP/FMS Bus Coupler for up to 64 Bus Terminals, 12 Mbaud
BK3110	PROFIBUS Bus Coupler for up to 64 digital Bus Terminals, 12 Mbaud
BK3120	PROFIBUS "Economy plus" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension), 12 Mbaud
BK3150	PROFIBUS "Compact" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension), 12 Mbaud
BK3520	PROFIBUS "Economy plus" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension), 12 Mbaud
BC3100	PROFIBUS Bus Terminal Controller for up to 64 Bus Terminals, 12 Mbaud
BC3150	PROFIBUS "Compact" Bus Terminal Controller for up to 64 Bus Terminals (255 with K-bus extension), 12 Mbaud
BX3100	PROFIBUS Bus Terminal Controller for up to 64 Bus Terminals (255 with K-bus extension), 12 Mbaud
CX8030	PROFIBUS Embedded PC, master
CX8031	PROFIBUS Embedded PC, slave

System	
PROFIBUS	For further PROFIBUS products please see the system overview