

Safety modules

Communication modules	Field bus extension module	BM
------------------------------	-----------------------------------	-----------



The BM communication modules ensure data exchange between the Safety-M basic modules and non-safe controls.

These devices take over the function of a gateway between the Safety-M backplane bus and the corresponding fieldbus (Profibus, Profinet, CANopen, EtherCAT).



- For max. 4 basic modules (CANopen: 1 basic module) on a common backplane bus
- The binary input data or the binary or analogue output data, configured for each module by a safe PLC, are transmitted from and to the non-safe control via fieldbus.
- This connection allows for coordination of the non-safe and of the safe sections of the global system thanks to easily configurable functions.
- The modules are to be parameterised as slave elements.

Profibus

The device comes with its GSD files. The Profibus baud rate of 9.6 kbaud up to 12 Mbaud is recognised automatically.

Profinet

The device comes with its GSDML files. The Profinet baud rate is 100 Mbit/s in full-duplex mode.

CANopen

The device comes with its EDS files. The CANopen baud rates of 125 kbps, 250 kbps and 500 kbps can be set with the address switches on the front side. The size of the output information is 16 bytes.

EtherCAT

The device comes with its ESI files. The EtherCAT transmission rate is 100 Mbit/s in full-duplex mode. Size of the input data: 32 bytes, size of the output data 64 bytes.

Order-No.

BM31	BUS communication - Profibus
BMC1	BUS communication - Profinet
BM21	BUS communication - CANopen
BMB1	BUS communication - EtherCAT

8.BM31.000
8.BMC1.000
8.BM21.000
8.BMB1.000

Data interface

Max. numbers of basic modules	Profibus 4
	Profinet 4
	CANopen 1
	EtherCat 4
Binary input data	max. 56 Bit / basic module
Binary output data	max. 56 Bit / basic module
Analogue output data	max. 64 Bit / basic module
Minimum operating time	> 8 ms
Timeout WD	adjustable, max. 400 ms

Environmental data

Operating temperatur	0°C ... +50°C
Type of protection	IP52
Service life	90 kh (at 50° operating temperature)

Mechanical characteristics

Size h x d x w [mm]	100 x 115 x 22,5
Weight	110 g
Mounting	snap-on mounting on standard head rail

Electrical characteristics

Power consumption	2,4 W
Supply voltage	5,7 V via backplane bus

Connection principle

