

Composition

References and characteristics

To order ruggedized or conformal coated modules and racks, see the reference pages 4/3 to 4/5 (the references of the ruggedized products available include the suffix "H" and the conformal coated processors available include the suffix "C").

The standard separate parts (cordsets, cables, sub-bases, etc.) that are compatible with the ruggedized modules offer are listed in the reference pages (see pages 4/3 to 4/5).

The majority of operating and electrical characteristics of ruggedized modules are identical to those of their equivalent standard versions. However, some characteristics are subject to either derating or limitation. Please consult our website www.schneider-electric.com.



BMEP580000H

Ruggedized Modicon M580 processors

Ruggedized Modicon M580 standalone processors

I/O capacity	Maximum number of networks	Device ports	Service port	Reference	Weight kg/lb
1,024 discrete I/O, 256 analog I/O 24 application-specific channels 4 MB integrated (memory program)	2 Ethernet networks	2 DIO	1	BMEP581020H	—
2,048 discrete I/O, 512 analog I/O 32 application-specific channels 8 MB integrated (memory program)	2 Ethernet networks	2 DIO	1	BMEP582020H	—
		2 RIO/DIO	1	BMEP582040H	—

"Conformal coating" Modicon M580 standalone processors

I/O capacity	Maximum number of networks	Device ports	Service port	Reference	Weight kg/lb
5,120 discrete I/O, 1,280 analog I/O 180 application-specific channels 24 MB integrated (memory program)	6 Ethernet networks	2 RIO/DIO	1	BMEP585040C	—
6,144 discrete I/O, 1,536 analog I/O 216 application-specific channels 64 MB integrated (memory program)	6 Ethernet networks	2 RIO/DIO	1	BMEP586040C	—

"Conformal coating" Modicon M580 redundant processors

I/O capacity	Maximum number of networks	Device ports	Service port	Reference	Weight kg/lb
8 MB integrated (memory program)	2 Ethernet networks	2 RIO/DIO	1	BMEH582040C	—
16 MB integrated (memory program)	4 Ethernet networks	2 RIO/DIO	1	BMEH584040C	—
64 MB integrated (memory program)	6 Ethernet networks	2 RIO/DIO	1	BMEH586040C	—

Standard SD memory card

Description	Processor compatibility	Capacity	Reference	Weight kg/lb
SD memory card (optional)	Any processor	4 GB (for application backup and data storage)	BMXRMS004GPF	0.002/ 0.004



BMXRMS004GPF

Standard separate parts

Description	Use		Length m/ft.	Reference	Weight kg/lb
	From	To			
Terminal port/ USB cordsets	Mini-B USB port on the Modicon M580 processor	Type A USB port on PC terminal,	1.8/5.905	BMXXCAUSBH018	0.065/ 0.143
		Magelis HMI graphic terminal	4.5/14.764	BMXXCAUSBH045	0.110/ 0.243



BMXXCAUSBH000



BMXXBP0400H



BMEXBP0800H



BMXXBE1000H

BMXXSP0000
+ BMXXSP3000

Ruggedized racks

Description	Type of module to be inserted	No. of slots (1)	Power consumption (2)	Reference	Weight kg/lb
Ruggedized X-bus racks	BMEP58 processor, BMEH58 processor, BMXCPS power supply, I/O modules, and application-specific (counter and communication) modules	4	1 W	BMXXBP0400H	0.630/ 1.389
		6	1.5 W	BMXXBP0600H	0.790/ 1.742
		8	2 W	BMXXBP0800H	0.950/ 2.094
		12	0.74 W	BMXXBP1200H	1.270/ 2.800
Ruggedized Ethernet + X-bus racks	BMEP58 processor, BMEH58 processor, BMXCPS power supply, I/O modules, and application-specific (counter and communication) modules	4	2.8 W	BMEXBP0400H	0.715/ 1.576
		8	3.9 W	BMEXBP0800H	1.070/ 2.359
		12	3.9 W	BMEXBP1200H	1.387/ 3.058
Ruggedized Ethernet + X-bus dual power supply racks	BMEP58 processor, BMEH58 processor, BMXCPS400 redundant power supply, I/O modules, and application-specific (counter and communication) modules	6	3.9 W	BMEXBP0602H	1.387/ 3.058
		10	3.9 W	BMEXBP1002H	1.387/ 3.058

Ruggedized expansion module

Description	Use	Reference	Weight kg/lb
Ruggedized expansion module for ruggedized rack (3)	Standard module to be installed in each rack (XBE slot) Used to daisy-chain up to 4 racks	BMXXBE1000H	0.178/ 0.392

Standard accessories for racks

Description	For use with	Sold in lots of	Reference	Weight kg/lb
Shielding connection kits comprising: - a metal bar - 2 support bases	BM●XBP0400H rack	—	BMXXSP0400	0.280/ 0.617
	BMXXBP0600H rack	—	BMXXSP0600	0.310/ 0.683
	BM●XBP0800H rack	—	BMXXSP0800	0.340/ 0.750
	BM●XBP1200H rack	—	BMXXSP1200	0.400/ 0.882
Spring clamping rings	Cables, cross-section 1.5...6 mm ² /AWG 16...9	10	STBXSP3010	0.050/ 0.110
	Cables, cross-section 5...11 mm ² /AWG 10...7	10	STBXSP3020	0.070/ 0.154
Protective covers (replacement parts)	Unoccupied slots on BM●XBP●●00H rack	5	BMXXEM010	0.005/ 0.011

Note: For other ruggedized modules in the Modicon X80 range, please consult the "Modicon X80 I/O platform" catalog.

(1) Number of slots taking the processor module, I/O modules, and application-specific modules (excluding power supply module).

(2) Power consumption of anti-condensation resistor(s).

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Angled connector on extension cordsets

Standard cordsets and connection accessories

Description	Use	Composition	Type of connector	Length	Reference	Weight kg/lb
X-bus extension cordsets total length 30 m/ 98.425 ft max. (1)	Between two BMXXBE1000H rack expansion modules	2 x 9-way SUB-D connectors	Angled	0.8 m/ 2.625 ft	BMXXBC008K	0.165/ 0.364
				1.5 m/ 4.921 ft	BMXXBC015K	0.250/ 0.551
				3 m/ 9.843 ft	BMXXBC030K	0.420/ 0.926
				5 m/ 16.404 ft	BMXXBC050K	0.650/ 1.433
				12 m/ 39.370 ft	BMXXBC120K	1.440/ 3.175
			Straight	1 m/ 3.281 ft	TSXCBY010K	0.160/ 0.353
				3 m/ 9.843 ft	TSXCBY030K	0.260/ 0.573
				5 m/ 16.404 ft	TSXCBY050K	0.360/ 0.794
				12 m/ 39.370 ft	TSXCBY120K	1.260/ 2.778
				18 m/ 59.055 ft	TSXCBY180K	1.860/ 4.101
				28 m/ 91.864 ft	TSXCBY280KT (2)	2.860/ 6.305
Cable reel (1)	Length of cable to be fitted with TSXCBYK9 connectors	Ends with flying leads, 2 line testers		100 m/ 328.084 ft	TSXCBY1000	12.320/ 27.161

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TSXTLYEX

Connection accessories

Description	Use	Composition	Reference	Weight kg/lb
Line terminator (Sold in lots of 2)	Required on both BMEXBP/ BMXXBP●●●0H modules at each end of the daisy chain	2 x 9-way SUB-D connectors marked A/ and /B	TSXTLYEX	0.050/ 0.110
X-bus straight connectors (Sold in lots of 2)	For ends of TSXCBY1000 cables	2 x 9-way SUB-D straight connectors	TSXCBYK9	0.080/ 0.176
Connector assembly kit	For fitting TSXCBYK9 connectors	2 crimping pliers, 1 pen (3)	TSXCBYACC10	—

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BMECRA31210C

Communication

"Conformal Coating" EIO drop adapter

Description	SERVICE port	Reference	Weight kg/lb
Modicon X80 EIO drop adapter for Ethernet + X-bus racks	1	BMECRA31210C	—

PFS16164



TCSEGA23F14FK

Ruggedized Profibus DP network gateway

Description	Protocols	Physical layer	Reference	Weight kg/lb
Profibus Remote Master (PRM) module	Modbus TCP	1 Ethernet switch, 2 x 10BASE-T/100BASE-TX ports	TCSEGA23F14FK	—
	Profibus DP V1 and Profibus PA (via gateway)	1 isolated RS 485 Profibus DP port		

Standard connection accessory

Description	Details	RS 232 interface	Reference	Weight kg/lb
Cordset for DCE terminal (modem, etc.)	Equipped with 1 x RJ45 connector and 1 x 9-way male SUB-D connector Length 3 m/9.843 ft	Simplified 4-wire (RX, TX, RTS and CTS)	TCSMCN3M4M3S2	0.150/ 0.331
		Full 8-wire (except RI signal)	TCSXCN3M4F3S4	0.165/ 0.364

(1) Module and cordsets do not operate properly at temperatures **lower than -25 °C/-13 °F**.

(2) Cable supplied with a set of 2 TSXTVSY100 electrical transient suppressors.

(3) To fit the connectors on the cable, you also need a wire stripper, a pair of scissors, and a digital ohmmeter.