

P-*e*X SERIES

DIN-Mounted M-Bus extenders



The **P-Ex** Series makes it possible to expand your **PE** series with up to 256 extra M-Bus slaves. The units can also be connected with any existing M-Bus system. The **P-Ex** Series is equipped with the unique IR Pass Through function, making the products stackable.

READY TO USE

The **P-Ex** Series is ready to use with no configuration required in the field. The possibility of stacking the **P-Ex** Series, enables one **PE** series to handle multiple M-Bus 2-wire buses isolated from each other. After installation, the **P-Ex** Series shows an indication if the installation was successful and no short-circuit was detected on the bus. The RS232 interface on **P-Ex10S**, **P-Ex11S**, **P-Ex12S** and **P-Ex13S** enables communication to any system using M-Bus over RS232.

STANDARD OPEN PROTOCOLS

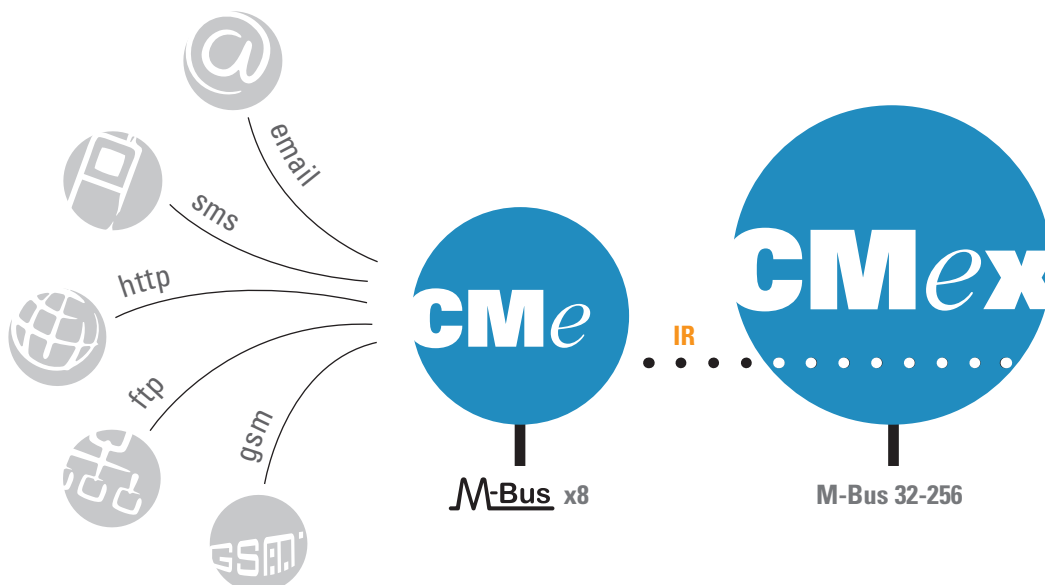
The standard open protocol design works with any software supporting the M-Bus standard. Its transparent M-Bus dataflow require no manufacture specific protocols.

FLEXIBLE

The **P-Ex** Series contains modules with various functions to meet a great variety of customer demands. The series contains for example I/O modules and D/A modules to read input signals or control output signals.

COST EFFECTIVE

The modular and expandable design allows the customer to select a suitable level based on price and functionality. The low initial cost and the possibility to add modules to existing installations provide a future proof solution.



Mechanics	PEX10-11	PEX10S-11S-12S-13S
Casing material	Polyamide	
Protection class	IP20	
Dimensions	90 x 65 x 35 mm	90 x 65 x 108 mm
Weight	100 g	220 g
Connection M-Bus	Pin terminal solid wire 0.6-0.8 Ø mm	Pin terminal solid wire 0.6-0.8 Ø mm and screw terminal cable 0-2.5 mm², 0.5 Nm tightening torque
Mounting	DIN Mounted	
Power supply	Screw terminal cable 0-2.5 mm², 0.5 Nm tightening torque	

Electrical	PeX10-11	PeX10S-11S-12S-13S
Nominal Voltage	100-240 VAC	
Voltage range	-10 % to +10 % of nominal voltage	
Frequency	50/60 Hz	
Power consumption (max)	3 W	25 W
Power consumption (nom)	1.5 mA x M-Bus slaves + 1 W	
Installation category	CAT 3	

Environmental	
Operating temperature range	-30 to +55 °C
Storage temperature range	-40 to +85 °C
Operating humidity max	80 % RH temperatures up to 31 °C, decreasing linearly to 50 %RH at 40 °C
Pollution	Degree 2
Operating altitude	0-2000 m
Usage	Indoor use only, can be extended with IP67 enclosure for outdoor use

User interface

Green LED	Power
Red LED	Error
Yellow LED	RX
Yellow LED	TX
Push button	Not used

M-Bus

PeX10 PeX11 PeX12 PeX13

M-Bus standard	EN 13757			
M-Bus baud rate	300 and 2400 Bit/s			
Maximum connected M-Bus meters	32	64	128	256
Maximum cable length	1000 m/5000 m*		5000 m	
Max load capacitance	1.5 uF			
Light collision detect	>28 to 500 mA			
RS232 to M-Bus	No/Yes*		Yes	
Break signal length M-Bus 2-wire and right IR interface	45 ms			
Nominal voltage	28 VDC/42 VDC*		42 VDC	
Maximum idle current	55 mA	100 mA	200 mA	400 mA
IR Interface	Yes			
Pass Through	Yes. Maximum of 4 CMeX10 Series products side by side			
Compatibility	All standard M-Bus meters, all ABB meters with IR interface, PeX Series products			

*For **PeX10S** and **PeX11S**

Approvals

EMC	EN 61000-6-2, EN 61000-6-3
Safety	EN 61010-1, CAT 3

PeX10 series

	Number of meters	RS232	Cable length	Number of DIN-modules
PeX10	32	No	1000	2
PeX11	64	No	1000	2
PeX10S	32	Yes	5000	6
PeX11S	64	Yes	5000	6
PeX12S	128	Yes	5000	6
PeX13S	256	Yes	5000	6