

powerIO® - products

**powerIO®-Box**

Decentralized automation box.
230V power supply, ethernet communication, gateway function
2 x 230V outputs up to 6A
4 x M12 coupling A-coded for RS485
Connections incl. 24V/2A DC
Power supply (Port 1 to 4)
1 x optional slot (Port5)
1 x M12 service interface for commissioning with the App
Incl. shield clamp, ethernet, < microfuse (4A).

Typ
T1.B100

Art. -Nr.
100101

Euro/St.
1652,40



CODESYS® Runtime License
Extension for powerIO-Box
to USB dongle

T1.B100-CDS

100102

132,00

**powerIO®-Line**

Hybrid cable for connecting the
powerIO®-Boxes.
Power: 3 x 4.00 mm²
Data: 2 x (2 x 0.34 mm²), shielded
Yard ware, minimum order quantity 10m

T1.L100

100104

15,44/m

**powerIO®- Start Unit**

Switch, allows to connect up to 3x
powerIO®-Lines and 2x RJ45 Ethernet
cables for example controller, touch
panel or network.

T1.S110

100170

286,42

**powerIO®-Bluetooth Dongle**

For connecting to the "service" port of
the powerIO®-Box. Communication with
powerIO®-App for
commissioning/service of the
sensors/actuators.

T1.D100

100106

218,12

**powerIO®-Rio 1**

T1.R100

100107

439,54

Extension box with

- 6 x digital input
- 1 x analog input 0-10 V
- 1 x analog input passive
- 3 x digital outputs pot. free (I_{max} 16A)
- 4 x digital outputs 24V/0,5A
- 1 x analog outputs 0-10V

Outputs each with manual override (switch/pot). Addressable via rotary switch. Connection via Modbus RTU.

**powerIO®-Rio 4DI**

T1.R100-4DI

100186

163,00

Digital input module for the connection of messages (24V)

- 4x digital inputs with counter function
- Power supply

24V AC/DC

Connection via Modbus RTU.

**powerIO®-Rio 8DI**

T1.R100-8DI

100187

171,00

Digital input module for the connection of messages (24V)

- 8x digital inputs with counting function
- Power supply

24V AC/DC

Connection via Modbus RTU.

**powerIO®-BSK Modul ECO**

T1.BSK1-AMP-24-ECO

100174

129,21

Fire damper module for 1x 24V or 230V fire damper, without galvanic isolation (ECO)

- 2 digital inputs + 1 digital output relay 230V/5A
- BSK pluggable via AMP socket
- Power supply

24V AC/DC

- Casing IP54 (110x110x66mm)

Connection via Modbus RTU.

**powerIO®-BSK Modul ECO**

T1.BSK1-24-ECO

100175

129,21

Fire damper module for 1x 24V or 230V fire damper, without galvanic isolation (ECO)

- 2 digital inputs + 1 digital output relay 230V/5A
- power supply

24V AC/DC

- Casing IP67 (110x110x66mm)

Connection via Modbus RTU.

**powerIO®-BSK Modul**

Fire damper module for 2x
24V or 230V fire damper,
with galvanic isolation
- 4 digital inputs +
2 digital outputs relay 230V/16A
- BSK pluggable via AMP socket
- Power supply
24V AC/DC
- Casing IP54 (160x140x81mm)
Connection via Modbus RTU.

T1.BSK2-AMP-24

100176

182,42

**powerIO®-BSK Modul**

Fire damper module for 2x
24V or 230V fire damper,
with galvanic isolation
- 4 digital inputs +
2 digital outputs relay 230V/16A
- power supply
24V AC/DC
- Casing IP67 (160x140x81mm)
Connection via Modbus RTU.

T1.BSK2-24

100177

182,42

**powerIO®-BSK Modul**

Fire damper module for 2x
230V fire damper,
with galvanic isolation
- 4 digital inputs +
2 digital outputs relay 230V/16A
- BSK pluggable via AMP socket
- Power supply 230V AC
- Casing IP54 (160x140x81mm)
Connection via Modbus RTU.

T1.BSK2-AMP-230

100182

192,56

**powerIO®-BSK Modul**

Fire damper module for 2x
230V fire damper,
with galvanic isolation
- 4 digital inputs +
2 digital outputs relay 230V/16A
- power supply 230V AC
- Housing IP67 (160x140x81mm)
Connection via Modbus RTU.

T1.BSK2-230

100183

192,56

**powerIO®-HK-Verteiler**

T1.R300

100169

384,46

Suitable for installation on manifolds of heating/cooling/BKT.

Input for Modbus RTU via M12 connector 5-pin with A-coding.

- 8x digital output (e.g. thermal drives)
- 2x digital input
- 2x analog input passive PT1000

**powerIO®-Booster**

T1.R350

100144

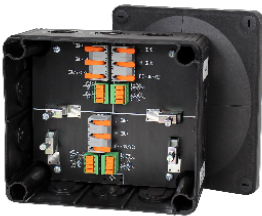
215,00

For power amplification on 24V side

Input U=230V AC

Output U=24V DC, I=2A

2 pcs. M12 connectors with 24V DC outputs each and Modbus RTU.

**powerIO®-Hub**

T1.H100

100108

195,00

Distributor for hybrid line powerIO-Line.

Input terminals for power and Ethernet

CAT6 hybrid cable with shield clamps

Output terminals for

2 pcs. Power and Ethernet CAT 6

Hybrid cable with shield clamps

HUB functionality for Ethernet CAT6

distribution via connection to expansion

board "Ethernet" at powerIO® box. Can

also be used to extend the powerIO®-

Line.

powerIO®-Y

T1.Yxxx

Enables the connection of 2 x RS485 participants with 24V power supply (LED). Is connected to the powerIO® box on port 1 to 4. Connection terminals for cross sections up to 1.00 mm² or pluggable via M12.



2 x Cable gland

T1.Y100

100109

27,54



Cable gland, 1 x M12 socket

T1.Y200

100110

42,96

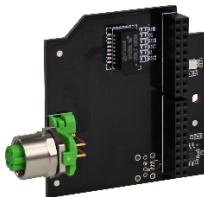


2 x M12 socket

T1.Y300

100111

58,38

**Expansion board: Ethernet**

T1.C100-ETH

100112

218,12

M12: 4-pin D-coded

Allows the connection of an M12 Ethernet cable. Integration of other IP participant with up to 100 Mbit/s.

**Expansion board: RS485**

T1.C100-RS485-24

100142

218,12

M12: 5-pole A-coded. Extended Port 5 by another RS485 COM port. With 24V on M12 pins as output voltage.

**Expansion board: RS232**

T1.C100-RS232-24

100143

286,42

M12: 5-pole A-coded. Extended Port 5 around a RS232 COM port. With 24V on M12 pins as output voltage.

powerIO® - Zubehör

	Typ	Art. -Nr.	Euro/St.
 RJ45 plug <-> M12 D-coded 4-pin plug Ethernet cable for direct connection to powerIO® expansion board "Ethernet".	T1.Z102	100114	79,32
 M12 A-coded 5-pin plug <-> open end Standard installation cable for connecting sensors/actuators to the powerIO®-Box. 5 x 0.25 mm ² shielded.			
Cable length 2 m	T1.Z104	100117	17,60
Cable length 5 m	T1.Z105	100118	20,35
Cable length 10 m	T1.Z106	100119	27,50
 M12 A-coded 5-pin plug <-> M12 A-coded 5-pin socket Standard installation cable for connecting sensors/actuators to the powerIO®-Box. 5 x 0.25 mm ² shielded.		100120	
Cable length 2 m	T1.Z107	100121	34,10
Cable length 5 m	T1.Z108	100122	38,50
 Installation line Installation line by the meter. 5 x 0.25 mm ² shielded. Corresponds to the same cable type/color code as M12 cable. Minimum order quantity 10m.	T1.Z109	100123	2,31/m
 M12 A-coded 5-pole Y-distributor Plug <-> 2x socket Allows two M12 plugs to be connected to one socket. Bus and voltage bridged. Can be plugged directly into the powerIO box to connect two sensors/actuators.	T1.Z122	100166	62,79
 M12 A-coded 5-pin Y-adaptor M12 5-pin A-coded socket/plug to plug	T1.Z110	100165	44,06
 Coupling M12 5-pin A-coded For self-assembly.	T1.Z111	100125	15,87



Plug M12 5-pin A-coded
For self-assembly.

T1.Z112

100126

14,63



Flange coupling M12 5-pin A-coded, front wall mounting

T1.Z113

100127

16,52



Flange plug M12 5-pin A-coded, front wall mounting

T1.Z114

100128

17,63



Flange coupling M12 5-pin A-coded, rear wall mounting

T1.Z115

100129

16,52



Flange plug M12 5-pin A-coded, rear wall mounting

T1.Z116

100130

16,52



M12 protective cap
Protection cap for unused M12 sockets

T1.Z117

100131

3,00



powerIO®-line jumper cable
Allows a powerIO® box to be bridged to continue Ethernet communication on the network.

T1.Z118

100132

8,00



Shield clamp
For shield connection of the powerIO®-Line to the powerIO®-Box. Included in the scope of delivery of the powerIO®-Box.

T1.Z100

100134

7,71

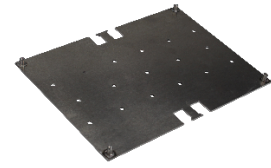


Ethernet connector
Ethernet connector for the powerIO®-Line on the powerIO®-Box or powerIO®-Start Unit. The Ethernet connectors are included in the scope of delivery of the powerIO®-Box.

T1.Z101

100135

10,40

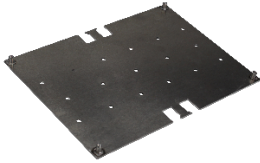


Installation plate powerIO®-Box T1
Aluminium installation plate for the T1 series. Allows easy preassembly for electrical installation. 4 threaded bolts for subsequent screwing on of the powerIO®-Box. With cut-out for mounting on pipes using lashing straps.

T1.Z119

100136

57,28



Installation plate powerIO®-Box T1 with magnets
Aluminium installation plate for the T1 series. Allows easy preassembly for electrical installation. 4 threaded bolts for subsequent screwing on of the powerIO®-Box. With premounted magnets for mounting for example on ventilation ducts.

T1.Z125

100171

80,42

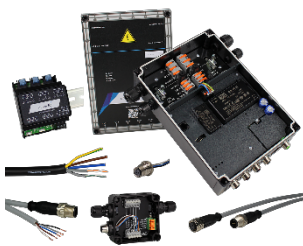


powerIO® Demo Case
The demo case clearly presents the powerIO® system and enables first tests on site. Case contains a powerIO® box, M12 cable, Modbus sensor, Modbus actuator.

T1.Z120

100137

Leihgabe



powerIO® - Starter Set*
This starter set consists of:
1 x powerIO® box (T1.B100)
1 x Start Unit (T1.S100)
20m powerIO®-Line (T1.L100)
5m installation cable (T1.Z109)
1 x M12 cable 2m (T1.Z104)
1 x M12 cable 5m (T1.Z105)
1 x M12 cable 10m (T1.Z106)
1 x M12 cable 2m (T1.Z107)
1 x M12 flange plug (T1.Z114)
1 x powerIO®-Y distributor (T1.Y200)
1 x powerIO® Bluetooth Dongle (T1.D100)

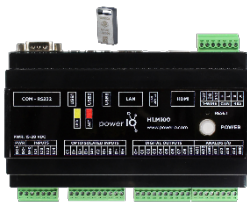
T1.Z121

100138

1652,40

* Purchase of the starter set only once per customer possible. Product not discountable.

HVAC-Automation Produkt

**IoT Gateway and CODESYS
Control for HVAC automation**

H1.M100

100145

454,00

IoT gateway and PLC controller (CODESYS optional) with 4x1.2 GHz processor and 8GB memory. 24V power supply, 12DI, 8DO, 4AI, 2AO, RS485 and RS232, LAN, 3xUSB. DIN rail mounting.

All prices are ex works, excluding packaging and shipping, plus applicable VAT.
Errors and omissions excepted.

With this price list all previous prices lose their validity!