

Compact67

IP67 Extensible Distribution I/O Modules



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Compact67



Description

The Compact 67 I/O modules for fieldbus provide a reliable solution for connecting industrial controllers to I/O devices in harsh environments.

Compact67 I/O modules with IP67 housing and standardized installation can operate in harsh dust, underwater, and vibration condition. These features make them ideally suited for many applications, such as material handling equipment and automated assembly machinery etc.

The functions of supporting PNP and NPN signal input, embedded bright LED diagnosis help maintenance personnel to easily judge I/O, module and network status.

Features

- Classic design realizes space savings for directly mounting to machine
- Fast and reliable plug and socket connection MiniChange (7/8"), MicroChange (M12)
- Support PNP and NPN input
- Free selection I/O configuration
- LED status indication
- Online diagnosis of modules and channels

04 / Profibus

FCDP-1600P-M12	16 input, PNP, 8 x M12
FCDP-0808P-M12	8 input+8 output, PNP, 8 x M12
FCDP-16UP-M12	16 configurable input/output, PNP, 8 x M12

06 / Profinet

FCPN-1600P-M12	16 input, PNP, 8 x M12
FCPN-0808P-M12	8 input+8 output, PNP, 8 x M12
FCPN-16UP-M12	16 configurable input/output, PNP, 8 x M12
FCPN-1600P-M12-F	16 input, PNP, 8 x M12
FCPN-0808P-M12-F	8 input+8 output, PNP, 8 x M12
FCPN-16UP-M12-F	16 configurable input/output, PNP, 8 x M12

08 / DeviceNet

FCDN-1600P-M12	16 input, PNP, 8 x M12
FCDN-0808P-M12	8 input+8 output, PNP, 8 x M12
FCDN-16UP-M12	16 configurable input/output, PNP, 8 x M12

10 / CC-Link

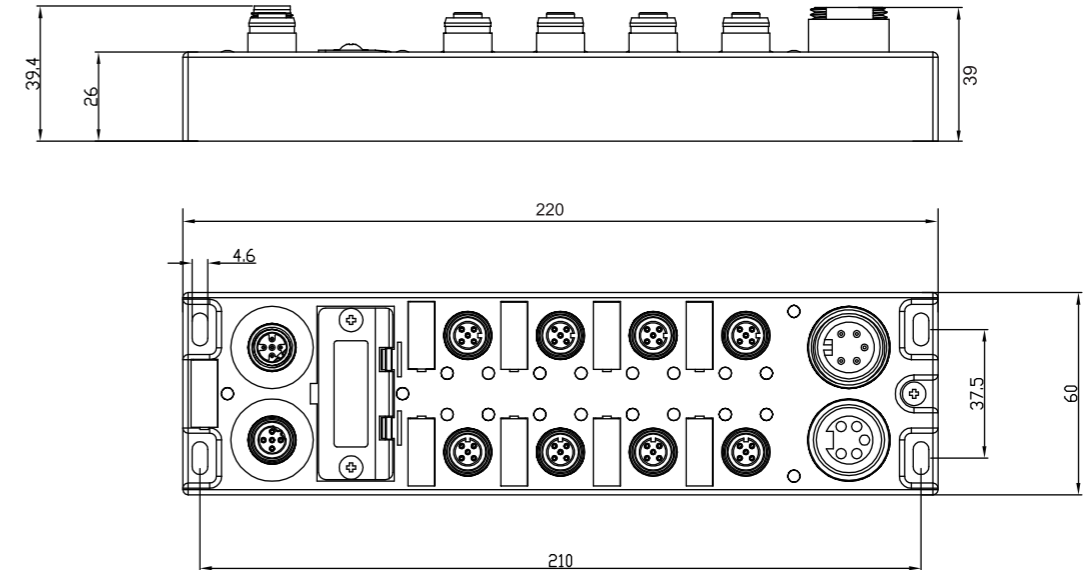
FCCL-1600N-M12	16 input, NPN 8 x M12
FCCL-0808N-M12	8 input+8 output, NPN 8 x M12
FCCL-16UN-M12	16 configurable input/output, NPN 8 x M12
FCCL-1600P-M12	16 input, PNP 8 x M12
FCCL-0808P-M12	8 input+8 output, PNP 8 x M12
FCCL-16UP-M12	16 configurable input/output, PNP 8 x M12

- Integrated structure design
- Free selection input and output channels
- Short-circuit and overload protection

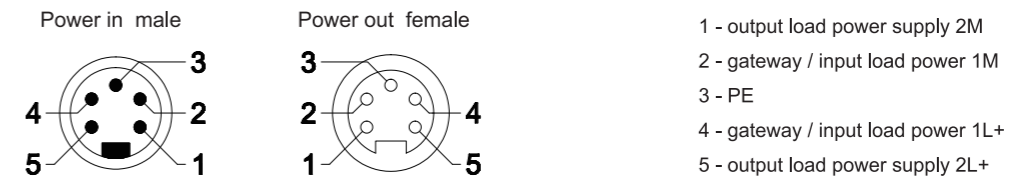


Ordering data			
Type	FCDP-1600P-M12	FCDP-0808P-M12	FCDP-16UP-M12
I/O Configurations	16 input PNP, 8 x M12	8 input+8 output, PNP, 8 x M12	16 configurable input/output, PNP, 8 x M12
Fieldbus			
Transfer protocol	Profibus-DP		
Operating mode	Sync- and freeze mode are support		
Transfer rate	9.6Kbps...12Mbps		
Address settings	1...125, rotary switch		
Power supply			
Supply voltage	24 VDC (18...30V)		
Module consumption current	Max. 200 mA		
Output supply current	Total max. 8 A		
Electrical isolation	Module / Ui and Uo voltage isolation		
Port type			
Power supply	2 x 7/8" 5pin, male+female		
Bus communication	2 x M12 B-code 5pin, male+female		
Signal connection	8 x M12 A-code 4pin, female		
Electrical parameters			
Number of input channels	16	8	Max.16
Input supply current	Max.200 mA per channel		
Input signal type	PNP sensor, stroke switch, dry contact, etc.		
Input delay	2.5 ms		
Number of output channels	-	8	Max.16
Output rated current	Max. 2 A per channel, total max. 8 A		
Output signal type	Indicator, miniature solenoid valve, etc.		
Output switching frequency	Resistive load 100 Hz, inductive load 5 Hz		
Diagnostics			
Communication status	LED indicator, communication message		
Supply monitoring	Yes, low voltage alarm		
Short-circuit and overload protection	Yes, LED indicator		
General data			
Protection class	IP67		
Temperature range	Operating temperature -25...+70 °C, storage temperature -40...+85 °C		
Mounting method	4-hole screw mounting		
Dimensions	60 x 220 x 39 mm		

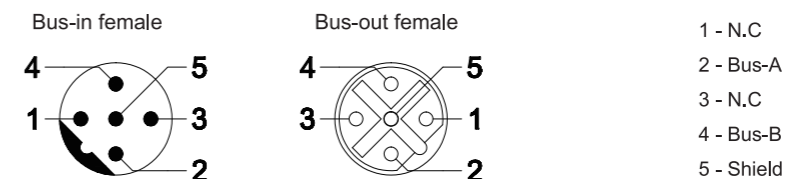
Dimensions



Power port diagram



Bus port diagram



Signal port diagram



<ul style="list-style-type: none"> ■ Integrated structure design ■ Free selection input and output channels ■ Short-circuit and overload protection 			
	Ordering data		
Type	FCPN-1600P-M12	FCPN-0808P-M12	FCPN-16UP-M12
I/O Configurations	16 input, PNP, 8 x M12, star topology	8 input+8 output, PNP, 8 x M12, star topology	16 configurable input/output, PNP, 8 x M12, star topology
Type	FCPN-1600P-M12-F	FCPN-0808P-M12-F	FCPN-16UP-M12-F
I/O Configurations	16 input, PNP, 8 x M12, star topology, ring topology, FSU	8 input+8 output, PNP, 8 x M12, star topology, ring topology, FSU	16 configurable input/output, PNP, 8 x M12, star topology, ring topology, FSU
Fieldbus	Profinet		
Transfer protocol	Profinet		
Operating mode	Autonegotiation, automatic MDI/MDIX		
Transfer rate	10/100 Mbps		
Address settings	Profinet, DCP		
Power supply	Module / Ui and Uo voltage isolation		
Supply voltage	24 VDC (18...30V)		
Module consumption current	Max. 200 mA		
Output supply current	Total max. 8 A		
Electrical isolation	Module / Ui and Uo voltage isolation		
Port type	2 x 7/8" 5pin, male+female		
Power supply	2 x M12 D-code 4pin, female		
Bus communication	8 x M12 A-code 4pin, female		
Electrical parameters			
Number of input channels	16	8	Max.16
Input supply current	Max.200 mA per channel		
Input signal type	PNP sensor, stroke switch, dry contact, etc.		
Input delay	2.5 ms		
Number of output channels	-	8	Max.16
Output rated current	Max. 2 A per channel, total max. 8 A		
Output signal type	Indicator, miniature solenoid valve, etc.		
Output switching frequency	Resistive load 100 Hz, inductive load 5 Hz		
Diagnostics	LED indicator, communication message		
Communication status	LED indicator, communication message		
Supply monitoring	Yes, low voltage alarm		
Short-circuit and overload protection	Yes, LED indicator		
General data	IP67		
Protection class	IP67		
Temperature range	Operating temperature -25...+70 °C, storage temperature -40...+85 °C		
Mounting method	4-hole screw mounting		
Dimensions	60 x 220 x 39 mm		

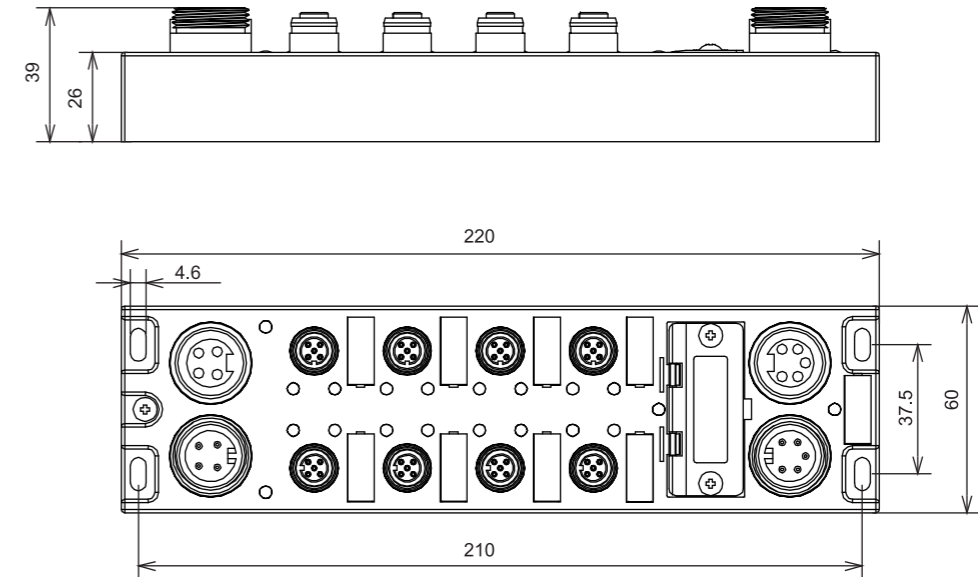
Dimensions
Power port diagram
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Power in male</p> </div> <div style="text-align: center;"> <p>Power out female</p> </div> </div> <ul style="list-style-type: none"> 1 - output load power supply 2M 2 - gateway / input load power 1M 3 - PE 4 - gateway / input load power 1L+ 5 - output load power supply 2L+
Bus port diagram
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Bus-in female</p> </div> <div style="text-align: center;"> <p>Bus-out female</p> </div> </div> <ul style="list-style-type: none"> 1- emitter TD+ 2 - receiver RD+ 3 - emitter TD- 4 - receiver RD-
Signal port diagram
<div style="text-align: center;"> <p>Signal port female</p> </div> <ul style="list-style-type: none"> 1 - power supply 24V+ 2 - signal input / output B 3 - power supply GND 4 - signal input / output A

- Integrated structure design
- Free selection input and output channels
- Short-circuit and overload protection

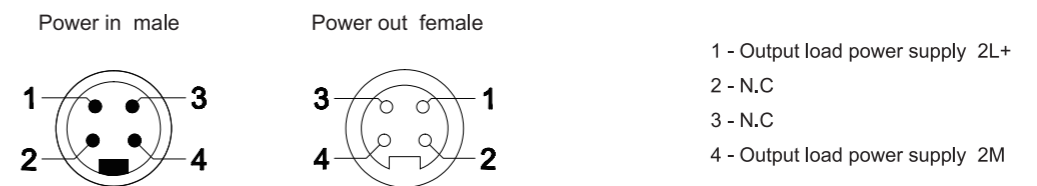


Ordering data			
Type	FCDN-1600P-M12	FCDN-0808P-M12	FCDN-16UP-M12
I/O Configurations	16 input PNP, 8 x M12	8 input+8 output PNP, 8 x M12	16 configurable input/output, PNP, 8 x M12
Fieldbus			
Transfer protocol	DeviceNet		
Operating mode	Polling; change of state; cyclic		
Transfer rate	125, 250, 500 kbps		
Address settings	0...63, rotary switch		
Power supply			
Supply voltage	24 VDC (18...30V)		
Module consumption current	Max. 200 mA		
Output supply current	Total max. 8 A		
Electrical isolation	Module / Ui and Uo voltage isolation		
Port type			
Power supply	2 x 7/8" 4pin, male+female		
Bus communication	2 x 7/8" 5pin, male+female		
Signal connection	8 x M12 A-code 4pin, female		
Electrical parameters			
Number of input channels	16	8	Max.16
Input supply current	Max.200 mA per channel		
Input signal type	PNP sensor, stroke switch, dry contact, etc.		
Input delay	2.5 ms		
Number of output channels	-	8	Max.16
Output rated current	Max. 2 A per channel, total max.8 A		
Output signal type	Indicator, miniature solenoid valve, etc.		
Output switching frequency	Resistive load 100 Hz, inductive load 5 Hz		
Diagnostics			
Communication status	LED indicator, communication message		
Supply monitoring	Yes, low voltage alarm		
Short-circuit and overload protection	Yes, LED indicator		
General data			
Protection class	IP67		
Temperature range	Operating temperature -25...+70 °C, storage temperature -40...+85 °C		
Mounting method	4-hole screw mounting		
Dimensions	60 x 220 x 39 mm		

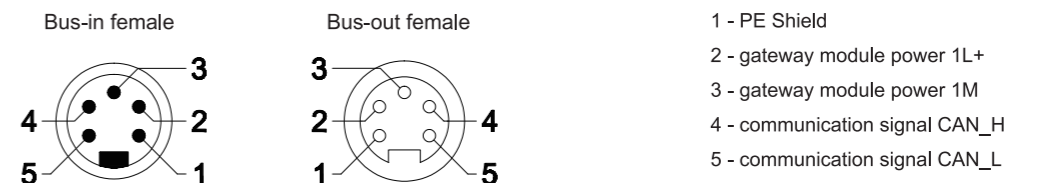
Dimensions



Power port diagram



Bus port diagram



Signal port diagram

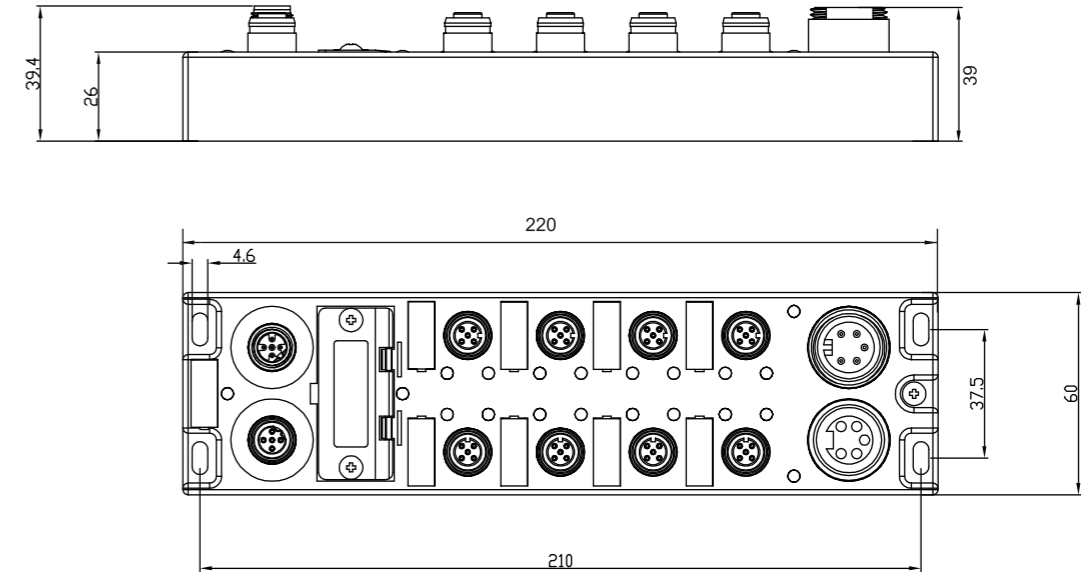


- Integrated structure design
- Free selection input and output channels
- Short-circuit and overload protection

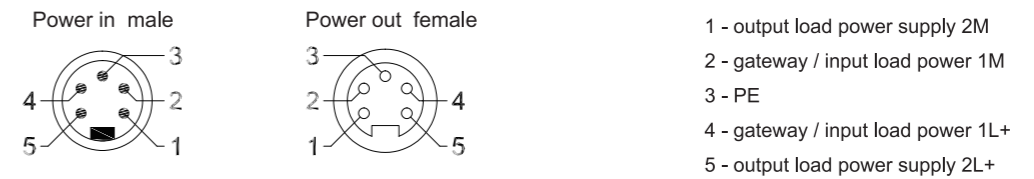


Ordering data			
Type	FCCL-1600P-M12	FCCL-0808P-M12	FCCL-16UP-M12
I/O Configurations	16 input PNP, 8 x M12	8 input+8 output PNP, 8 x M12	16 configurable input/output, PNP, 8 x M12
Type	FCCL-1600N-M12	FCCL-0808N-M12	FCCL-16UN-M12
I/O Configurations	16 input NPN, 8 x M12	8 input+8 output NPN, 8 x M12	16 configurable input/output, NPN, 8 x M12
Fieldbus			
Transfer protocol	CC-Link		
Operating mode	Remote device station (4 station)		
Transfer rate	156Kbps...10Mbps		
Address settings	1...64, rotary switch		
Power supply			
Supply voltage	24 VDC (18...30V)		
Module consumption current	Max. 200 mA		
Output supply current	Total max. 8 A		
Electrical isolation	Module / Ui and Uo voltage isolation		
Port type			
Power supply	2 x 7/8" 5pin, male+female		
Bus communication	2 x M12 A-code 5pin, male+female		
Signal connection	8 x M12 A-code 4pin, female		
Electrical parameters			
Number of input channels	16	8	Max.16
Input supply current	Max. 200 mA per channel		
Input signal type	PNP / NPN sensor, stroke switch, dry contact, etc.		
Input delay	2.5 ms		
Number of output channels	-	8	Max.16
Output rated current	Max. 2 A per channel, total max. 8 A		
Output signal type	Indicator, miniature solenoid valve, etc.		
Output switching frequency	Resistive load 100 Hz, inductive load 5 Hz		
Diagnostics			
Communication status	LED indicator, communication message		
Supply monitoring	Yes, low voltage alarm		
Short-circuit and overload protection	Yes, LED indicator		
General data			
Protection class	IP67		
Temperature range	Operating temperature -25...+70 °C, storage temperature -40...+85 °C		
Mounting method	4-hole screw mounting		
Dimensions	60 x 220 x 39 mm		

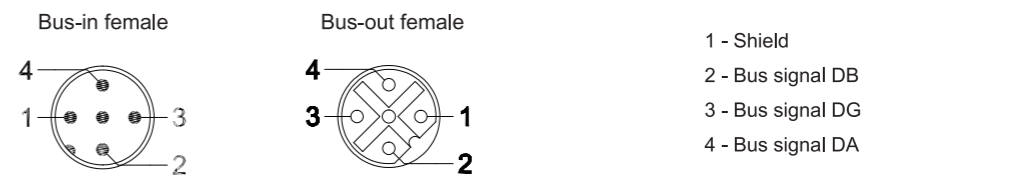
Dimensions



Power port diagram



Bus port diagram



Signal port diagram

