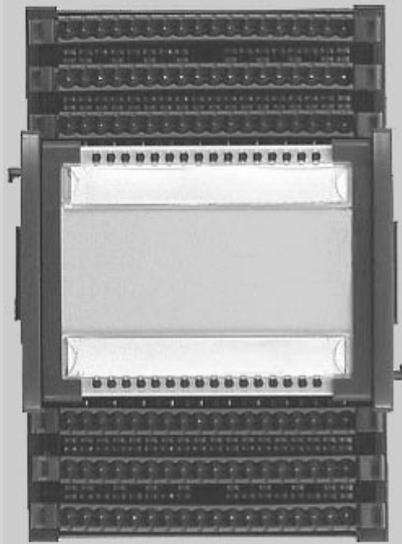




# IO 100

## I/O extension module



16 digital inputs

16 digital inputs/outputs, individual configuration

### **PROFILE**

The IO 100 is part of the P-open series and provides compact I/O extension for the PU 100 range of PLCs. The unit features 16 on-board digital inputs, and 16 digital I/O which can be configured individually as inputs or outputs.

With its compact dimensions of 124 x 170 mm, and a depth of 85,5 mm, the IO 100 is ideally suited for mounting close to the process in de-centralized systems.

The housing is designed for clip-on mounting to standard DIN rails. System extensions are easily implemented by connecting the IO 100 to its master PLC (PU 10x) via a cable which plugs into the module's extension bus (E-bus). See the specifications of the relevant PLC module for the max. possible number of extension I/O.

### **Selective I/O energization**

Supply of the inputs/outputs is provided via the connecting terminals at the signal level. The supply voltage is 24 VDC.

The I/O's can be divided into 6 groups, each with its own supply. This enables the I/O of a specific group to be disabled by means of an external switching device.

### **Convenient field connections**

Electrical wiring from the machine or process is taken directly to the terminal strips at top and bottom of the modules. The terminal strips are of the plug-in type, allowing system pre-wiring as well as fast module exchange.

Furthermore, the following alternatives are available for the terminal strips:

- Screw terminals
- Screwless spring-clamp terminals
- Crimp terminals.

Inputs/outputs are connected using the 3-wire principle. Front panel LEDs indicate the signal status of every I/O, and the module's operational status. The LED positions are directly associated with the corresponding I/O's.

Inscription labels on the terminal strips allow clear identification of each I/O.

## TECHNICAL DATA

### Configuration

Pre-configured

### Digital I/O

16 digital inputs for 24 VDC.

16 digital I/O, individually configurable as 24 VDC inputs/outputs (max. 0,5 A for outputs).

Connection: 3-wire technique

All digital outputs are short-circuit proof and have reverse-polarity protection.

### Status LEDs / diagnostics

32 red LEDs show the switching status of the digital I/O.

### Interface

#### E-bus

For connection to the master PLC.

## POWER SUPPLY

### Module supply

24 VDC, max. 0,15 A (to EN 61 131-2)

### I/O energization

24 VDC (to EN 61 131-2), divided into 6 groups

### Galvanic isolation

Between module electronics and digital I/O

## ENVIRONMENTAL CONDITIONS

### Permissible temperature

For operation: 5...50°C

### Climatic category

KUF to DIN 40 040

Relative humidity:  $\leq 85\%$  yearly average, no condensation

### Shock and vibration

#### Vibration test Fc

to DIN 60068-2-6 (5...50 Hz)

Unit in operation: 1g or 0,075 mm

Unit not in operation: 1,5g or 0,15 mm

#### Shock test Ea

to DIN IEC 60068-2-27 (15g, 11 ms)

## ELECTROMAGNETIC COMPATIBILITY

### Electromagnetic immunity

Complies with EN 50 082-2

### Electromagnetic radiation

Complies with EN 50 081-2

## GENERAL

### Housing

Front dimensions: 124 x 170 mm

Depth: 85,5 mm

Module spacing: B = 113/118,5 mm

Protection mode: IP 20

### CE-marking

Fulfils the European Directives for electromagnetic compatibility and low voltage.

### Electrical connections

Choice of screw terminals (Phoenix type FRONT-MSTB 2,5/18-ST-5,08), screwless spring-clamp connection, or crimp terminals.

All terminal types simply plug onto the connector strips of the IO 100.

### Electrical safety

Tested to IEC 348 (VDE 0411)

Protection class III (protective low voltage)

### Mounting method

Clip-on rail mounting (NS 35/7,5 „top-hat“ rails to DIN EN 50 022)

**Weight:** approx. 0,49 kg

### Accessories

Operating instructions

## ORDERING DATA

Description	Order no.
<b>Extension module IO 100</b>	<b>9407 701 00001</b>

## ACCESSORIES

Description	Order no.
<b>18-pole screw terminal strip</b> Phoenix type FRONT-MSTB 2,5/18-ST-5,08	<b>9407 799 00001</b>

PMA  
Prozeß- und Maschinen-  
Automation GmbH  
P.O. Box 31 02 29  
D-34058 Kassel  
Tel.: +49 - 5 61 - 5 05 14 03  
Fax: +49 - 5 61 - 5 05 16 61  
e-mail: [export@pma-online.de](mailto:export@pma-online.de)  
Internet: <http://www.pma-online.de>

Your local representative: