Low-cost input module for source or sink operation with 16 inputs, electrically connected.
Suitable for most electronic and electromechanical switching elements at 24 VDC.

Technical data

<table>
<thead>
<tr>
<th>Number of inputs</th>
<th>16 electrically connected, source or sink operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input voltage</td>
<td>24 VDC (15 … 30 VDC) smoothed or pulsed</td>
</tr>
<tr>
<td>Input current</td>
<td>4 mA per input at 24 VDC</td>
</tr>
<tr>
<td>Input delay</td>
<td>typically 8 ms</td>
</tr>
<tr>
<td>Resistance to interference</td>
<td>2 kV under capacitive coupling (whole trunk group)</td>
</tr>
<tr>
<td>Internal current consumption (from +5 V bus)</td>
<td>1…72 mA, typically 36 mA</td>
</tr>
<tr>
<td>Internal current consumption (from V+ bus)</td>
<td>0 mA</td>
</tr>
<tr>
<td>External current consumption</td>
<td>max. 64 mA (all inputs=1) at 24 VDC</td>
</tr>
<tr>
<td>Terminals</td>
<td>Spring terminal connection (not pluggable), for wires up to max. 0.5 mm² (1 × AWG 20)</td>
</tr>
</tbody>
</table>

LEDs and connection terminals

PCD2.E165

Bus connector
Bus interface and Threshold switch
Input circuits
LEDs (3 colour)
Screwless terminals
Spring terminal
For every 2 inputs, a 3-colour LED is fitted:

<table>
<thead>
<tr>
<th>LED is</th>
<th>E0</th>
<th>E1</th>
<th>E2</th>
<th>E3</th>
<th>E4</th>
<th>E5</th>
<th>E6</th>
<th>E7</th>
<th>E8</th>
<th>E9</th>
<th>E10</th>
<th>E11</th>
<th>E12</th>
<th>E13</th>
<th>E14</th>
<th>E15</th>
</tr>
</thead>
<tbody>
<tr>
<td>off</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>red</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>green</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>yellow</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Input circuits and terminal designation**

**Source operation (positive logic):**

If both inputs 0 and 1 are switched on, the yellow (orange) LED lights up.

**Input level**

- 30 Vcc
- 24 Vcc
- 15 Vcc
- 5 Vcc
- 0 Vcc

**Sink operation (negative logic):**

Switch closed (+ at input): signal state "H", LED lights up.
Switch open: signal state "L", LED off.

Switch closed (- at input): signal state "L", LED off.
Switch open: signal state "H", LED lights up.

**Watchdog:** This module can interact with the watchdog, if it is used on base address 240. In this case, the last input with address 255 cannot be used.

**I/O modules and I/O terminal blocks may only be plugged in and removed when the Saia PCD® and the external +24 V are disconnected from the power supply.**

**Further information can be found in the document: "27-600 ENG Manual I/O-Modules for PCD1 / PCD2 and PCD3"**
ATTENTION
These devices must only be installed by a professional electrician, otherwise there is the risk of fire or the risk of an electric shock.

WARNING
Product is not intended to be used in safety critical applications, using it in safety critical applications is unsafe.

WARNING - Safety
The unit is not suitable for the explosion-proof areas and the areas of use excluded in EN61010 Part 1.

WARNING - Safety
Check compliance with nominal voltage before commissioning the device (see type label).
Check that connection cables are free from damage and that, when wiring up the device, they are not connected to voltage.
Do not use a damaged device!

NOTE
In order to avoid moisture in the device due to condensate build-up, acclimatise the device at room temperature for about half an hour before connecting.

CLEANING
The device can be cleaned in dead state with a dry cloth or cloth soaked in soap solution.
Do not use caustic or solvent-containing substances for cleaning.

MAINTENANCE
These devices are maintenance-free. If damaged during, no repairs should be undertaken by the user.

Observe this instructions (data sheet) and keep them in a safe place.
Pass on the instructions (data sheet) to any future user.

WEEE Directive 2012/19/EC Waste Electrical and Electronic Equipment directive
The product should not be disposed of with other household waste. Check for the nearest authorized collection centers or authorized recyclers. The correct disposal of end-of-life equipment will help prevent potential negative consequences for the environment and human health.

EAC Mark of Conformity for Machinery Exports to Russia, Kazakhstan or Belarus.
## Order details

<table>
<thead>
<tr>
<th>Type</th>
<th>Short description</th>
<th>Description</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCD2.E165</td>
<td>Digital input module, 16 inputs, 24 VDC</td>
<td>Digital input module, 16 inputs, 24 VDC, source and sink operation, 8 ms input delay</td>
<td>40 g</td>
</tr>
</tbody>
</table>