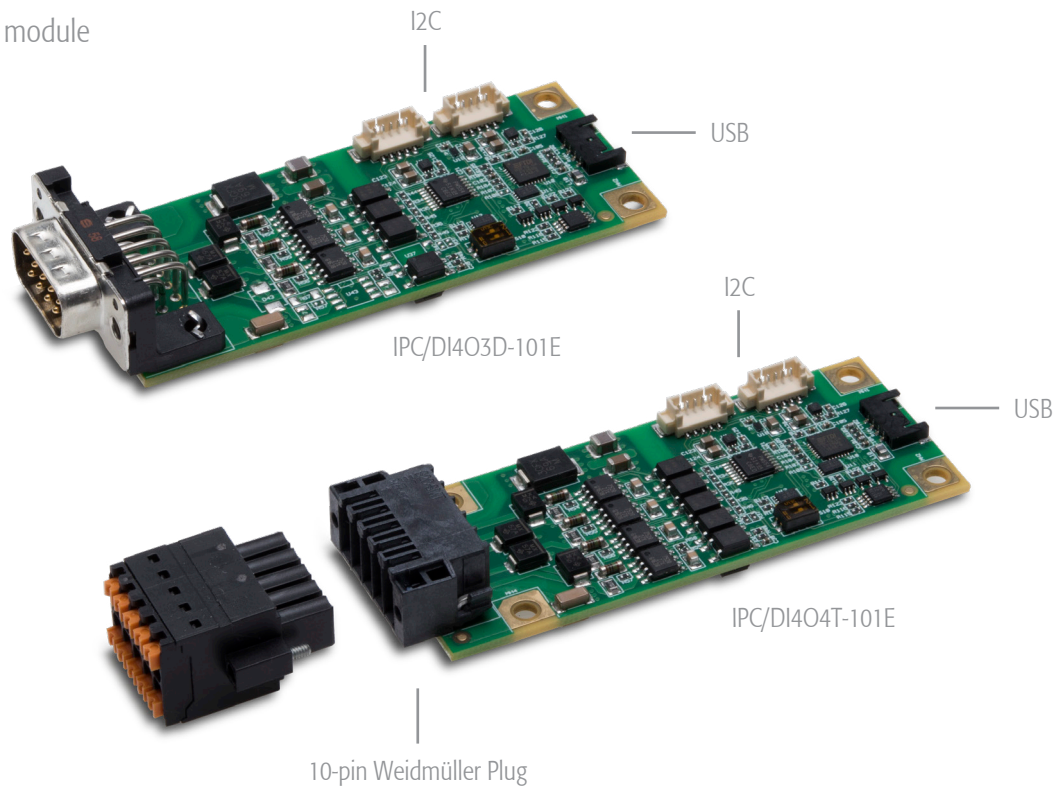


## IPC/DIO8 Series

Industrial digital I/O module



## IPC/DIO8

The IPC/DIO8 Series brings digital inputs and outputs to the Syslogic embedded products.

Depending on customer requirements, isolated digital inputs and outputs can be used standalone with this card, or directly be included into a Syslogic embedded system. Together this offers a flexible, low-cost, low-power I/O extension.

- Extended temperature range
- 24/7 continuous operation
- 4 digital inputs
- up to 4 digital outputs
- Galvanic isolation



### Product Highlights

Low Power  
Fanless design  
Industrial electronic design  
Operating temperature -40°C to +85°C  
Galvanic Isolation  
Long term availability

### Product Feature

4x 24V digital inputs  
4x 24V digital outputs  
USB or I2C data interface  
Compact dimensions  
DSUB9 or Terminal Block connection

### Markets / Applications

Industrial automation  
Railway industry  
Transportation and vehicle construction  
PLC replacement  
Cleantech  
Maritime

Order Code	IPC/DI403D-101E <sup>1</sup>	IPC/DI404T-101E <sup>1</sup>	IPC/DI402M-101E <sup>1</sup>
<b>Digital inputs</b>			
Digital current sinking 24VDC inputs	4	4	4
Input "0"	0 ... +5VDC	0 ... +5VDC	0 ... +5VDC
Input "1" (max. 5mA)	+10 ... +45VDC	+10 ... +45VDC	+10 ... +45VDC
Input frequency	0 - 2kHz	0 - 2kHz	0 - 2kHz
Galvanic isolation (process to Logic)	1500Vrms	1500Vrms	1500Vrms
<b>Digital outputs</b>			
Digital current sourcing 24VDC outputs (high side switch)	3	4	2
Process voltage	10 ... 45VDC	10 ... 45VDC	10 ... 45VDC
Channel output current (600mA / channel when all channel "on")	1A	1A	1A
Output current per group	2.4A	2.4A	2.0A
Transient overvoltage protection	600W	600W	600W
Overload and short circuit protection	•	•	•
Automatic thermal overload shutdown	•	•	•
Galvanic isolation (process to Logic)	1500Vrms	1500Vrms	1500Vrms
<b>Communication Interfaces</b>			
Process Interface Connection	DSUB9 male	2x5-Pin Terminal Block	M12 male, 8-Pin a-coded
Mating plug type for process interface connection	any DSUB9 female	Weidmüller B2CF 3.5/10/180F SN BK	any M12 female, 8-Pin a-coded
USB 2.0 interface (to host computer) <sup>2</sup>	•	•	•
I2C interface (to additional Syslogic I/O extensions) <sup>3</sup>	•	•	•
<b>Technical Data</b>			
Dimensions W x D x H [mm]	89 x 32 x 15	89 x 32 x 15	89 x 32 x 15
Net weight [gram]	42	42	42
USB input voltage, non-isolated (when powering over USB)	5VDC	5VDC	5VDC
I2C input voltage, non isolated (when powering over I2C)	3.3VDC / 5VDC	3.3VDC / 5VDC	3.3VDC / 5VDC
Power consumption typ. in Watt @ 5V	0.5	0.5	0.5
<b>Software support</b>			
Linux Kernel 2.4.x or higher	•	•	•
Windows Embedded Standard 7	•	•	•
Windows 10 IoT	•	•	•
<b>Environmental Conditions</b>			
Operating temperature (ambient)	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Storage temperature	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Conformal coating	optional	optional	optional
Shock: designed to meet EN60068-2-27	•	•	•
Vibration: designed to meet EN60068-2-6	•	•	•
EMI conformity EN55032/55035/61000-6-2/61000-6-4	•	•	•
MTBF ~200 000h @ 25°C (22.8 years)	•	•	•

<sup>1</sup> Please contact factory for minimum order quantities

<sup>2</sup> on internal connector | Mating plug type: Molex Pico-Lock 504051-0401 with AWG24 contacts 504052-0098

<sup>3</sup> on internal connector | Mating plug type: Molex Pico-Blade 51021-500 with AWG26 contacts 50079-8100

Product specifications subject to change without notice. | All data is for information purposes only and not guaranteed for legal purposes. Information in this data sheet has been carefully checked and is believed to be accurate. However, no responsibility is assumed for inaccuracies. Please refer to the user documentation for additional product specification.

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Version 1.1 | July 2021

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