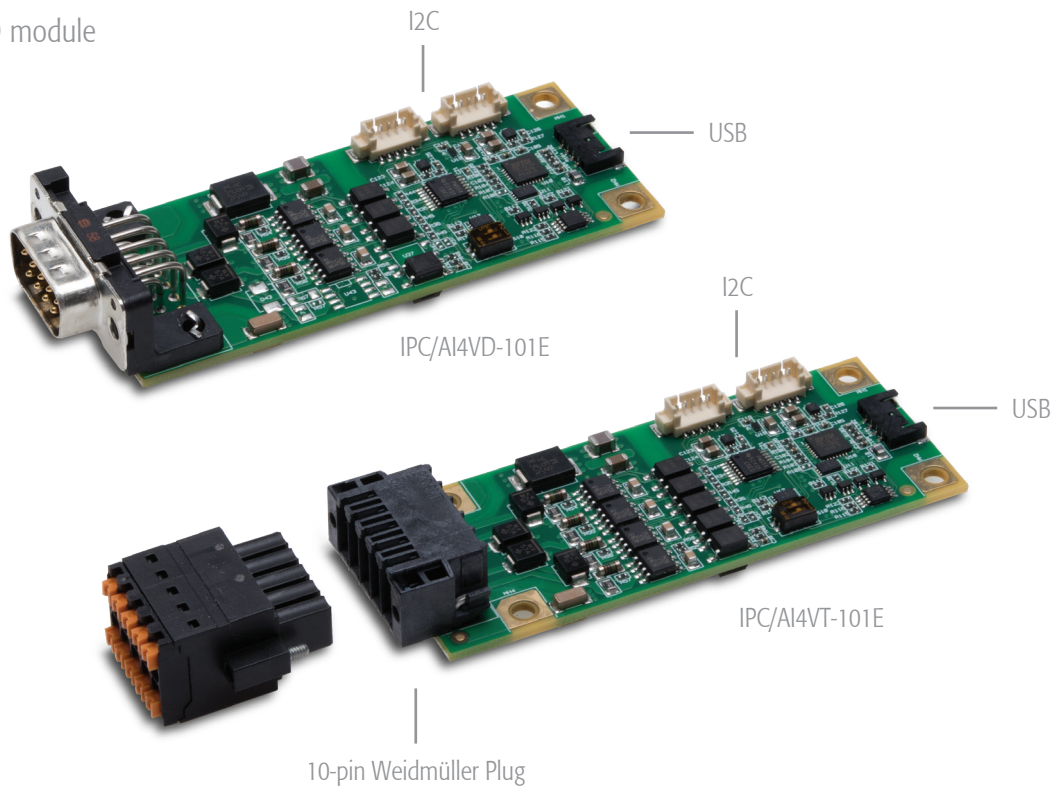


IPC/AIO4 Series

Industrial analog I/O module



IPC/AIO4

The IPC/AIO4 Series brings analog inputs to Syslogic embedded products.

Depending on customer requirements, isolated analog inputs or 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 analog inputs**
- **16 bit resolution**
- **Galvanic isolation**



Product Highlights

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

Product Feature

4 analog inputs
Bipolar and Unipolar input range
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/AI4VD-101E ¹	IPC/AI4VT-101E ¹
Analog inputs		
Analog input channels	4	4
Ranges unipolar (software selectable), common ground	0-10.24VDC 0-5.12VDC 0-2.56VDC	0-10.24VDC 0-5.12VDC 0-2.56VDC
Ranges bipolar (software selectable), common ground	±10.24VDC ±5.12VDC ±2.56VDC	±10.24VDC ±5.12VDC ±2.56VDC
Resolution	16 bit	16 bit
Sampling Rate	max. 500 ksps	max. 500 ksps
Differential nonlinearity	±1.5 LSB	±1.5 LSB
Gain Error	±0.05%FSR	±0.05%FSR
Overvoltage protection	12VDC	12VDC
Input impedance	1 Mohm	1 Mohm
Galvanic isolation (process to Logic)	1000Vrms	1000Vrms
Analog outputs		
up to 4 analog outputs on request	- ¹	- ¹
Communication Interfaces		
Process Interface Connection	DSUB9 male	2x5 Pin Terminal Block
Mating plug type for process interface connection	any DSUB9 female	Weidmüller B2CF 3.5/10/180F SN BK
USB 2.0 interface (to host computer) ²	•	•
I2C interface (to additional Syslogic I/O extensions) ³	•	•
Technical Data		
Dimensions W x D x H [mm]	89 x 32 x 15	89 x 32 x 15
Net weight [gram]	42	42
Input voltage non-isolated (over USB or I2C)	5VDC	5VDC
Power consumption typ. in Watt @ 5V	0.5	0.5
Software support		
Linux Kernel 2.4.x or higher	•	•
Windows Embedded Standard 7	•	•
Windows 10 IoT	•	•
Environmental Conditions		
Operating temperature (ambient)	-40°C to +85°C	-40°C to +85°C
Storage temperature	-40°C to +85°C	-40°C to +85°C
Conformal coating	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)	•	•

¹ Please contact factory for minimum order quantities

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

³ 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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