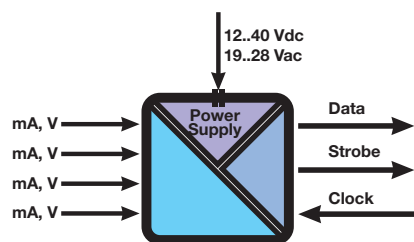




# Z-4AI-D

## 4-CH DC CURRENT-VOLTAGE A/D CONVERTER



Z-4AI-D allows to acquire up to N.4 analogue inputs (ma or V) through a PLC with only digital input/output. The PLC interface is based on three PNP-type signals suited for connection to most PLCs available in the market.

The interface is composed of a CLOCK signal generated by the PLC (transistor output), a DATA signal and STROBE signal generated by the module.

### TECHNICAL SPECIFICATIONS

#### General Data

Power supply	19..40 Vdc / 19..28 Vac / 50-60 Hz
Power consumption	2,5 W
Isolation	1.500 Vac (3 way)
Power transducers	Yes
Status Indicators	Power supply, error, data transmission, data reception, input status
Protection Degree	IP20
Operating Temperature	0..+55 °C
Dimension (W x H x D)	17.5 x 100 x 112 mm
Mounting	35 mm DIN rail guide

#### Communication, Memory Process

PLC communication	3-wire synchronous serial: CLOCK, DATA, STROBE, standard levels 24V pnp.
PLC type	Interface for PLC on standard digital I/O (only DC).
Sampling time	Sampling time settable at 400 ms @ 14 bit + sign, 200 ms @ 13 bit + sign.
Distance	Up to 100 m (with shielded cable)

#### Signals

Channel Numbers	4
INPUT	VOLTAGE Bipolar with f.s. +/-10V DC or +/- 2V DC, input impedance 100 Kohm, resolution 14 / 13 bit + sign.
	CURRENT Bipolar with f.s. +/- 20 mA DC, input impedance 100 ohm, resolution 14 / 13 bit + sign.

#### Programming

The programming necessary for the PLC is extremely reduced: the SIEMENS S7-200 PLC requires one 10 lines of Ladder in order to read the analogue inputs; this corresponds to approx. 187 byte of programming space.

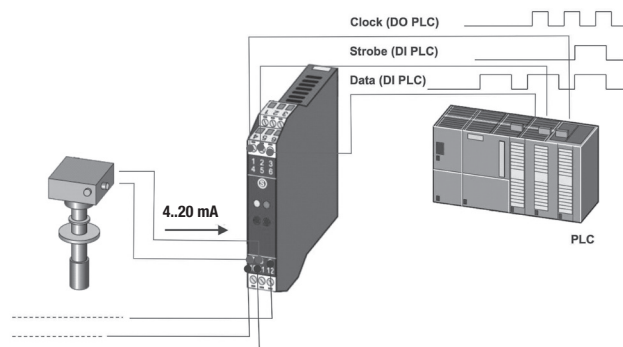
#### Software

It is not necessary to read all the channels: the programming tool can be used to decide which channels to be sent to the PLC. The tool also the selection of the module's various operating modes: field of measurement, filter, type of serialisation, type of data sent to the PLC, etc.

#### Standard

Approvals	CE
Norms	EN 50081-2; EN 55011; EN 50082-2; EN 61000-2-2/4; EN 50140/141; EN 61010-1



### APPLICATION NOTE






### ORDER CODES

Code	Description
Z-4AI-D	4-CH DC current-voltage A/D converter, 19..40 Vdc / 19..28 Vac

### ACCESSORIES & SOFTWARE

	
<b>Z-PC-DIN</b> Backplane for power & bus communication pg. 36	<b>Z-SUPPLY</b> Switching power supply pg. 36

### SIMILAR PRODUCTS

		
<b>Z-4TC-D</b> 4-CH thermocouples A/D converter pg. 46	<b>Z-4AI</b> 4-CH analog input module / ModBUS pg. 16	<b>Z-8AI</b> 8-CH analog input module / ModBUS pg. 17