

Z-PC-LINE

Z-SG

Strain gauge converter / RS485 Modbus

Z-PC LINE

Analogue I/O modules



CE

- ▶ INPUT: 6-wire bridge connections, lowest value 87 Ω suitable for 1..4 loadcells (350 Ω) or 1..8 loadcells (1000 Ω)
- ▶ OUTPUT: N.1 channel current 0..20, 4..20 mA or voltage 0..10, 0.5 Vdc
- ▶ 1 DIGITAL INPUT/OUTPUT selectable for tare calibration or threshold weight
- ▶ SENSITIVITY: from 1 to 128 mV/V
- ▶ INTERFACE: RS485 serial communication with Modbus-RTU protocol
- ▶ DIP-switch or software programmable functions: full scale, exceed threshold, stable weight
- ▶ Galvanic isolation @ 1,5 KV
- ▶ Screw-fit terminals removable
- ▶ Din rail mounting
- ▶ Power supply: 10..40 Vdc, 19..28 Vac

TECHNICAL SPECIFICATIONS

Z-SG - Strain gauge converter / RS485 Modbus



ORDER CODES

Code	Description
Model	Z-SG Strain gauge converter / RS485 Modbus
Software	Z-NET Configuration sw downloading from www.seneca.it
Bus accessories	Z-PC DINAL (Terminal block for power & RS485 communication) Z-PC DIN2 Z-PC DIN4 Z-PC DIN8 (2, 4, 8 slot block)
Cable	PM001600 Configuration sw downloading from www.seneca.it
K-LINE modules	K107A (RS485 repeater), K107B (RS232-RS485 converter), K107USB (USB-RS485 din rail mounting), S107USB (portable)

GENERAL FEATURES

Power supply	10÷40Vdc, 19÷28 Vac
Status indicators	Power Supply Error Data sending Data receiving
Galvanic Isolation	1.500 Vac
Hot swapping	Yes
Power consumption	2,0 W
Humidity	30..90% at +40°C (non condensing)
Mounting	35 mm DIN 46277
Accuracy	0,01% calibration 0,01% linearity 0,0025% /°C Thermal coefficient
Sampling frequency	From 12,53Hz to 151,71 Hz
ADC	24 bit
Software	Tare calibration Span calibration Threshold setting Stable weight detection

RS485 interface	2 wires, baud rate 1.200..115k
RS232 interface	Stereo jack, 2.400 baud, 8 data bit, no parity, 1 bit stop
Protocol	ModBUS RTU Slave
Data memory	EEPROM for all configuration data; storage time: 10 years
Design	Terminal housing for mounting on 35 mm DIN 46277
DIP Switch	Address setting, baud rate setting, digital input/output analog output, sensitivity
Case	"V0" self-extinguishing glass filled nylon case
Dimensions	17,5 x 100 x 112 mm (w x h x d)
Weight	140 g
Operating temperature	-10..+65 °C
Connections	Plug-in screw clamp terminal blocks, wires up to 2.5 mm ²
IP Protection	IP 20
Approvals	CE
Standards	EN50081-2, EN50082-2, EN61010-1 ESD: 4KV IEC 61131 (plc function)

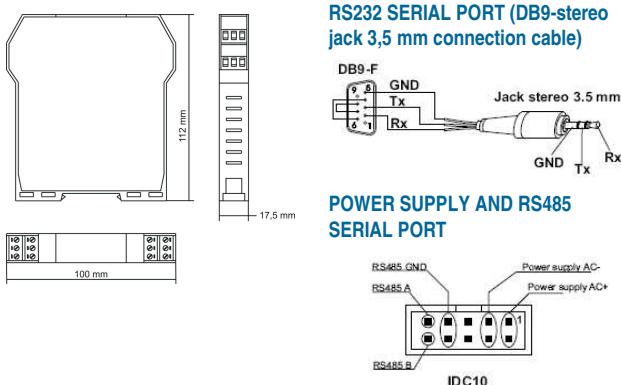
INPUT

Type	ANALOG: Load cells (strain gauges), Voltage supply of 5Vdc, lowest value 87 Ohm, 6 –wire bridge connections, from 1 to 128 mV. DIGITAL: Tare calibration and Span
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OUTPUT

Type	ANALOG: nr 1 channel: current 0..20, 4..20 mA or voltage 0..5, 0..10 Vdc DIGITAL: nr 1 channel for stable weight or threshold
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DIMENSIONS AND ELECTRICAL CONNECTIONS



APPLICATION EXAMPLE

