

# Z-PC-LINE

## Z-SG

Strain gauge converter / RS485 Modbus

Z-PC LINE

Analogue I/O modules



CE

- ▶ INPUT: 4 or 6-wire bridge connections, lowest value  $87 \Omega$  suitable for 1..4 loadcells ( $350 \Omega$ ) or 1..8 loadcells ( $1000 \Omega$ )
- ▶ 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 64 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	
<b>Model</b>	<b>Z-SG</b>	Strain gauge converter / RS485 Modbus
<b>Software</b>	<b>Z-NET</b>	Configuration sw downloading from <a href="http://www.seneca.it">www.seneca.it</a>
<b>Bus accessories</b>	<b>Z-PC DINAL</b> (Terminal block for power & RS485 communication) <b>Z-PC DIN2 Z-PC DIN4 Z-PC DIN8</b> (2, 4, 8 slot block)	
<b>Cable</b>	<b>PM001600</b>	Connection cable
<b>K-LINE modules</b>	<b>K107A</b> (RS485 repeater), <b>K107B</b> (RS232-RS485 converter), <b>K107USB</b> (USB-RS485 din rail mounting), <b>S107USB</b> (portable)	

### GENERAL FEATURES

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

<b>RS485 interface</b>	2 wires, baud rate 1.200..115k
<b>RS232 interface</b>	Stereo jack, 2.400 baud, 8 data bit, no parity, 1 bit stop
<b>Protocol</b>	ModBUS RTU Slave
<b>Data memory</b>	EEPROM for all configuration data; storage time: 10 years
<b>Design</b>	Terminal housing for mounting on 35 mm DIN 46277
<b>DIP Switch</b>	Address setting, baud rate setting, digital input/output analog output, sensitivity
<b>Case</b>	"V0" self-extinguishing glass filled nylon case
<b>Dimensions</b>	17,5 x 100 x 112 mm (w x h x d)
<b>Weight</b>	140 g
<b>Operating temperature</b>	-10..+65 °C
<b>Connections</b>	Plug-in screw clamp terminal blocks, wires up to 2.5 mm <sup>2</sup>
<b>IP Protection</b>	IP 20
<b>Approvals</b>	CE
<b>Standards</b>	EN 61000-6-4, EN 610006-2, EN61010-1 EN 60742 ESD: 4KV IEC 61131 (plc function)

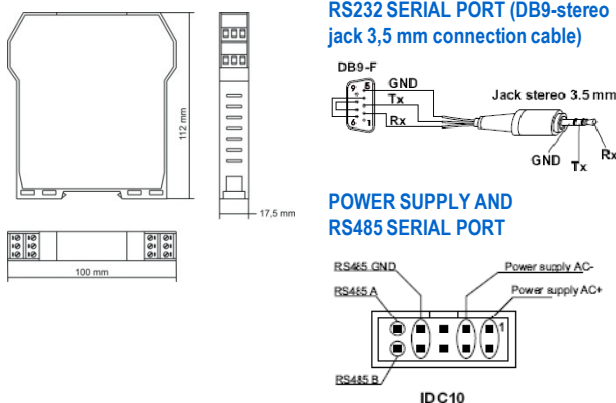
### INPUT

<b>Type</b>	ANALOG: Load cells (strain gauges), Voltage supply 5 Vdc, min impedance 87 Ohm, 4 or 6 –wire bridge connections, sensitivity from 1 to 64 mV, full scale: 5..320 mV  DIGITAL: tare calibration and span (max 30 V)
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### OUTPUT

<b>Type</b>	ANALOG: nr 1 channel: current 0..20, 4..20 mA or voltage 0..5, 0..10 Vdc, max error 0,1%, response time 5 ms  DIGITAL: nr 1 channel for stable weight or threshold (max 30 V, 50 mA)
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### DIMENSIONS AND ELECTRICAL CONNECTIONS



### APPLICATION EXAMPLE

