Z-PC-LINE Z-SG

Strain gauge converter / RS485 Modbus

Z-PC LINE

Analogue I/O modules



- INPUT: 6-wire bridge connections, lowest value 87 Ω suitable for 1..4 loadcells (350 Ω) or 1..8 loadcells (1000 KΩ)
- 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

SENECA

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 mm²
IP Protection	IP 20
Approvals	CE
Standards	EN50081-2, EN50082-2, EN61010-1 ESD: 4KV IEC 61131 (plc fucntion)

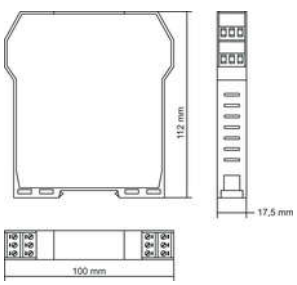
INPUT

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

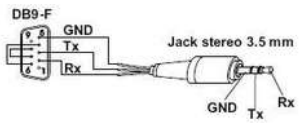
OUTPUT

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

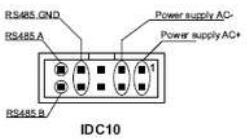
DIMENSIONS AND ELECTRICAL CONNECTIONS



RS232 SERIAL PORT (DB9-stereo jack 3,5 mm connection cable)



POWER SUPPLY AND RS485 SERIAL PORT



APPLICATION EXAMPLE

