



Z-SG STRAIN GAUGE INPUT MODULE / RS485 MODBUS RTU and ANALOG OUTPUT

Modbus



TECHNICAL DATA

GENERAL DATA

Power Supply	10-40 VDC, 19-28 VAC, 50-60 Hz
Power Consumption	2.5 W
Isolation	1500 VAC (3 way)
LED Indicators	Power Supply Error Data Transmission Data Receiving
Protection Degree	IP20 requires installation in a protective enclosure

THERMOMECHANICAL FEATURES

Operating Temperature	-10 to +65 °C
Housing	Nylon 6 with 30% glass-fiber, V0 self-extinguished class
Connections	Removable terminals block, plug in connectors, max wire size 2.5 mm ² Rear IDC10 connector for Z-PC backplane
Mounting	35 mm DIN rail guide 46277

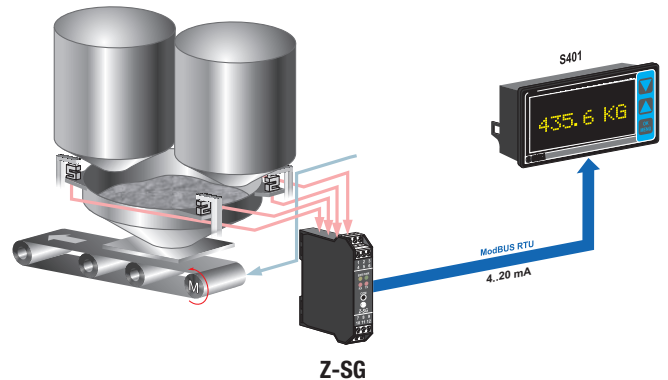
COMMUNICATION, PROCESSING, MEMORY

Interfaces	2 wire RS485 (requires Z-PC DIN bus connector)
Speed	Up to 115 kbps
Protocol	ModBUS RTU slave
Communication Time	< 10 ms (@ 38400 baud)
Distance	Up to 1200 m
Connectivity	Max 32 nodes
Data Memory	EEPROM for configuration parameters, retention time 40 years

I/O, ACCURACY, CONFIGURATION, APPROVALS

Channel	1 input, 1 output
Type	INPUT One analog channel for load cell and excitation supply. Up to 4 (350 Ω) or 8 (1000 Ω) strain gauge load cells, connection for 4 or 6 wires, impedance equal to 87 Ω. OUTPUT One analog retransmission channel of the net weight as current (0-20, 4-20 mA) or voltage (0-5, 0-10 V). One Logic Input or Output for tare or weight limit. Sensitivity: 1 to 64 mV/V
Resolution	24 bit
Accuracy	Linearity: 0.01% full scale, Calibration 0.01% full scale
Thermal Drift	25 ppm/K
Programming	Z-NET4 (IEC 61131 software) Push button and DIP switches, or EASY SETUP software and S117P1 programming kit
Approvals	CE, EN 61000-6-4/2002, EN 61000-6-2/2002, EN 61010, EN 60742, IEC 61131

APPLICATION EXAMPLE



ORDER CODES

Code	Description
Z-SG	Strain gauge input module / analog output and RS485 MODBUS RTU
Software, Adapter	EASY SETUP software, S117P1 USB to Serial Converter
Accessories	Z-PC DIN rail bus system (required for Modbus), SG-EQ4 summation box