

SX3310 series

DIN box strain gauge conditioner



Description

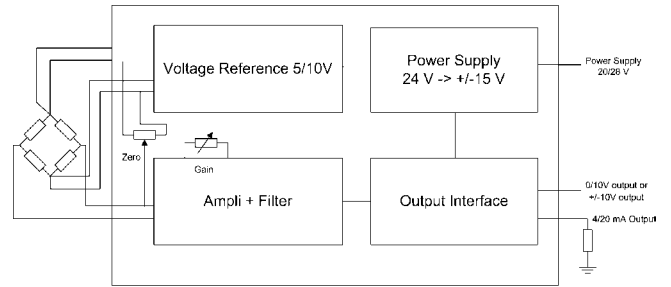
The SX3310 module is a strain gauge conditioner with very low bridge impedance (down to 120 ohms).

This module has a very simple and practical zero and scale adjusting with dip-switches and potentiometer.

Connections for power supply, transducer and output signals are made by screw terminals to facilitate maintenance and installation.

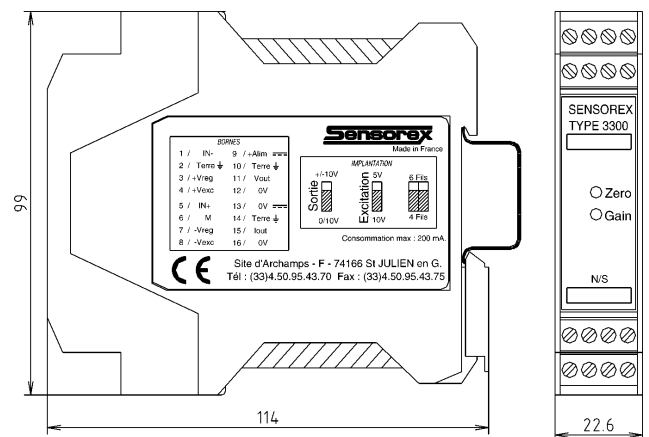
This industrial unit in polyamide PA PHOENIX EM type may be plugged into any common DIN EN track (EN 50022 standard).

Synoptic



E00106A

Interface drawing



E00107B

General characteristics

Power supply	24VDC ±8VDC
Transducer excitation	5VDC or 10VDC
Output signal	0/10V or ±10V and 4-20mA
Wiring transducer	4 or 6 wires

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Mechanical and environmental characteristics

Fixing	track DIN EN 50022
Dimensions (mm)	115x100x23
Box material	polyamide PA
Connecting	screw terminal
Protection	IP 20
Inflammability	V0 (UL94)
Vibration	2g (white noise)
Weight	approximately 130 g
Operating temperature	0°C to +70°C
Storage temperature	-40°C to +85°C
Temperature stabilization time	15 minutes

General specification at +25°C

Power supply

Power supply	24Vdc \pm 8Vdc
Max. consumption	150mA
Strain gauge excitation	5Vdc or 10Vdc

Strain gauge

Mini. impedance for 5VDC excitation	80 Ω
Mini. impedance for 10VDC excitation	120 Ω
Sensitivity	0.3 to 12 mV/V

Input amplifier

Current	5 nA
Impedance	10 ¹⁰ ohm typical

Gain

Maximum	8500
Minimum	80

Zero

Maximum for a 120 ohms impedance	\pm 3.25 mV/V
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Filter (3rd order)

Maximum	5000Hz \pm 10%
Minimum	3Hz \pm 10%

Voltage output

Maximum non linearity	gain=1000/ \pm 0.001% of full scale
Short circuit current	\pm 22mA
Output	0/10V or \pm 10V

Current output

Maximum non linearity	\pm 0.015% of full scale
Impedance	40M ohms typical
Load resistor (for 16VDC power supply)	max 600 ohms

Thermal drift

Input offset voltage drift	\pm 2.10 ⁻⁸ x gain ppm/°C/ FS
Sensitivity	150ppm/°C of signal

Selection guide

Product reference: 690 223 310 / SX3310 (alarm version): 690 210 326