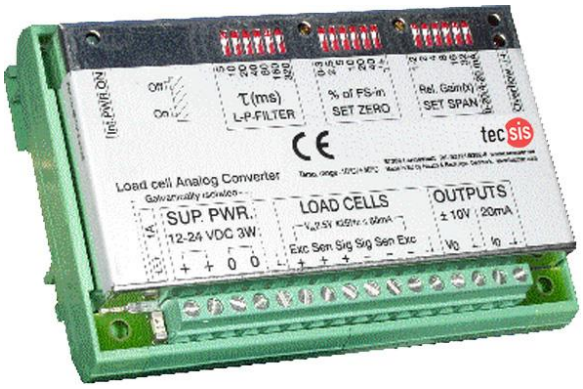
Analogue amplifier with parallel Output 0/4 … 20 mA and 0…10 V



Description

Analogue measuring amplifiers condition the output signal of strain gauge force transducers to displays or a connected control system. The parallel outputs of 0..10 Volt and 0(4)..20 mA enable the signal processing to be done directly in the SPS control system.

The strain gauge module should be installed in a control cubicle on the customer's side in accordance with the VDE regulations and wired in accordance with the connection diagram. All connections are pressed onto the module housing. The amplifier module works with 6 conductor technology, if load cells with 4 conductor technology are connected then the connections (+) supply/Exc. with (+) sense and (-) supply/Exc. with (-) sense must be connected (bridged).

Features

- Parallel output from 0/4 … 20 mA and +/- 10 V
- Safety circuit as cable rupture detection
- Active low-pass filtering from 0.5 Hz to 32 Hz
- Function control via LED indication
- Parallel connection of up to 4 load cells
- Electrolytic isolation
- Housing with clips for mounting on top hat rail

Applications

- Industrial weighing technology
- Force measurement in automation systems
- Force monitoring on machines

Specific information

- Cable rupture detection

Model: EZE14

Technical data

Model	**EZE14**
Output	
- Signal	0/4 … 20 mA and -10 … 0 … 10 V simultaneously usable
- Accuracy	0.01%
- Burden	Output voltage: >500Ω Output current: <500Ω
Input	
- Signal	0.75 … 7.5 mV; 6-wire;
- Sensor supply	2.5 VAC, 450 Hz, max. 30 mA active sensor switching for cable lengths up to 100 m
- Limit frequency	at 40 dB / decade 0,5, 1, 2, 4, 8, 16, 32 Hz selectable
Setting	
- Zero point	up to approx. 80% continuously adjustable
- Amplification	coarse and fine adjustable
Power requirement	12 ... 24 VDC +10/-15%, max. 60 mA, electrolytically isolated
Nominal temperature range	-10°C … +50°C
Service temperature range	-10°C … +50°C
Storage temperature range	-20°C … +60°C
Temperature effect	
- Zero point	0.01% / 10 K
- Measuring span	0.02% / 10 K
Noise emission	acc. to EN 61326
Noise immunity	acc. to EN 61326
Protection type (acc. to EN 60529/IEC 529)	IP 40
Electrical connection	Screw terminal
Housing	for top hat rail mounting
- Material	Tin-plated metal / plastic
- Dimensions (W x H x D)	105 x 76 x 62 mm (EN50.022 – 35X7.5)
Weight	approx. 200 g
Safety switching	Cable rupture detection

Dimensional drawing