

Mobile digital amplifier for strain gauge

Characteristics



Input: 2 strain gauge full bridges (350 ohms)
 Input sensitivity: 0,1...5 mV/V
 Sensor supply: 5 VDC
 Analogue output: 4...20 mA / 0...10 V
 Digital output: 2 interface RS232
 Data format: ASCII
 Voltage supply: internal accumulator / external supply
 Resolution: 12 / 14 / 15 / 16 bit
 Combined error: 0,2% of end scale value
 Indication: LCD-display
 Memory: peak value
 Degree of protection: IP 54
 Adjustment: with RS232 interface and software
 with programming keys of display
 Optionally: adaptor for connection of strain gauge sensor
 Supplied with: connection plugs / protection kit

Technical data

Input

Amplifier 1 / 2: 1 strain gauge full bridge (350 ohms)
 Sensitivity: 0,1...5 mV/V (programmable)
 Interface: RS232 (for programming)

Output

Analogue: each amplifier 2 outputs (programmable)
 0...10 V and 4...20 mA (standard)
 optionally 2...10 V or 0...20 mA
 working resistance <500 Ohm
 load resistor > 600 Ohm
 Current: working resistance <500 Ohm
 Voltage: load resistor > 600 Ohm
 Interface: 1x RS232 (each amplifier)
 data format: ASCII (can be read out with any
 terminal program)
 Sensor supply: 5 VDC 30 mA maximum (each amplifier)

Indication

Display: microprocessor based multifunction indicator
 with backlighting (to switch on)
 Function: 4 keys for programming
 Indication: current values / minimum/maximum values
 / diagnostic values

Adjustment

Interface: RS232 with programming software
 Keys: 4 keys of display module
 Tare: key on display PCB
 Measuring rate: 10 ms...5 s (programmable)
 Filter: 10 ms...5 s (programmable)

Accuracy

Resolution: 12 / 14 / 15 / 16 bit
 at measuring rate: 128 / 32 / 16 / 8 per second
 Combined error: +/- 0,2% of end scale value
 Temperature coeff.: <50 ppm/K

Power supply

Voltage: accumulator pack 6 round cells R6 (NiMH)
 Capacity: 7,2 V 2 Ah
 Power consumption: approx. 1 W
 Battery charger: input: 230 VAC
 output: 12 V / 300 mA

Ambient conditions

Operating temperature: -10...+60°C
 Storing temperature: -20...+70°C

Mechanics

Enclosure: mobilCase 181 x 138 x 32/38 mm
 Material: extruded aluminium profile
 Colour: silver anodised
 Degree of protection: IP 54
 Weight: approx. 900 g (with accumulator)
 Connection: 2x strain gauge: Binder 723 series, 7-pole
 panel jack, 09 0128 99 07)
 analog output: 1x Binder 723 series, 8-pole
 panel jack (09 174 90 08)
 RS232 output: 2x SUB-D jack 9-pole
 charging plug: pin ø2,1 mm

Accessories

Protection kit: 2 TPE covering caps with adjustable and
 sturdy shoulder strap (supplied with device)
 Connection plugs: 2 Binder 423 series 7-pole
 1 Binder 423 series 8-pole
 (supplied with device)
 Battery charger for internal accumulator
 Adaptor for connection of load cells
 V24 connection cable with software

Applications

The mobile measuring amplifier is suitable to check function of load / force measuring cells in existing installations (eg measuring of differences). The serial interfaces supply data for recording the whole measurements.



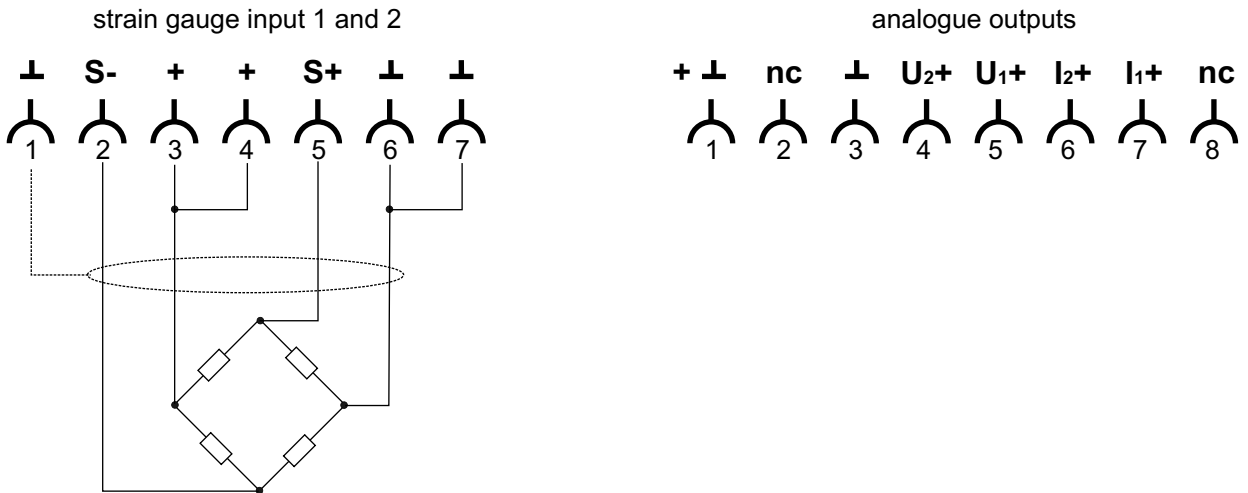
Ordering code

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| D | M | X | X | X | X | X | X | - | X | X | X |
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| | | |
|----------------------|---|---|
| Model: | 2 amplifiers | 0 |
| Voltage supply: | accumulator 2Ah | 0 |
| Interface: | RS232 | 0 |
| Display: | mit | 1 |
| Enclosure: | mobilCase 181x138x33/38 | 0 |
| Adjustment: | factory-set* | 0 |
| Other / accessories: | special model | 0 |
| | V24 programming cable and software | 1 |
| | battery charger for internal accumulator | 2 |
| | adaptor for connection of measuring cells | 3 |

*Factory-set: sensitivity: 3 mV/V / analogue output: 0...10 V and 4...20 mA / resolution: 16 bit / measuring rate: 5/s / filter: 1s

Connection



Dimensions (in mm)

