

Hand-held strain gauge measuring instrument

For force transducers or load cells in mobile test equipment

Model E3906

WIKA data sheet AC 50.04

Applications

- Measuring and control systems
- Calibration service

Special features

- Suitable for mV/V signals
- Displayed values freely scalable
- Maximum value memory



Hand-held strain gauge measuring instrument,
model E3906

Description

The model E3906 hand-held strain gauge measuring instrument is used in combination with force transducers or load cells with mV/V output signals. It is used for force or weight testing or calibration in mobile test equipment.

The cost-effective hand-held measuring instrument features a 4½-digit, freely scalable LC display for strain gauge signals with 0.35 up to 3.5 mV/V.

It can be operated either with standard batteries or rechargeable batteries as well as a plug-in mains power supply with integrated battery charging function. The battery-saving mode with timer (15 min) automatically switches the instrument off.

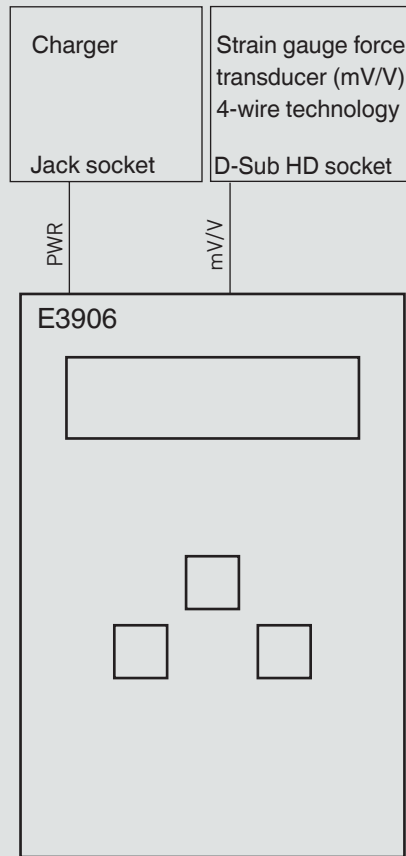
An integrated maximum value memory and a signal inversion function can be switched on and off at any time using a button.

A further button switches the 100-% control on, if this is present in either the force transducer or load cell. With this function, without needing further adjustment overhead, the hand-held strain gauge measuring instrument can be calibrated to a sensor or the calibration can be checked.

Specifications

Model E3906	
Display	Max value display
LC display	4½-digit
Digits	Output max. -19,999 to +99,999 digits
Refresh rate	2.5 sec
Input signal	Resistance thermometry bridge in 4-wire technology
Bridge resistance	350 ... 2,000 Ω
Measuring range	0.35 ... 3.5 mV/V
Sensor supply	DC 4 V, max. 15 mA
Measurement accuracy	< 0.2 % of FS ±3 digits
Setting	DIP switch and potentiometer
Rated temperature range	10 ... 35 °C
Service temperature range	5 ... 45 °C
Storage temperature range	-10 ... 70 °C
Supply voltage	
Mains operated	DC 6 V min. 600 mA Residual ripple 100 mV
Battery operation	4 x type micro AAA (LR03) with 1.5 V Operating time with 50 % duty cycle > 50 h
Battery power	4 x type NiMH micro AAA (LR03) with min 600 mAh and 1.2 V Operating time with 50 % duty cycle > 40 h (4 x micro 750 mAh)
Ingress protection	IP40
Electromagnetic compatibility	EN 61000-6-2:2005 EN 61000-6-3:2007
Dimensions (L x W x H)	125 x 80 x 40 mm
Weight	Approx. 250 g
Accessories (available as an option)	Set of rechargeable batteries 4 x AAA, 1.2 V, 800 mAh Desktop power supply for mains operation and battery charging

Functions



D-Sub HD sensor socket (15-pin)
(high density)

Assignment:

Pin 1: Supply –
Pin 8: Supply +
Pin 10: Control
Pin 11: Signal +
Pin 12: Signal –
Pin 13: Shield

