

# 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.

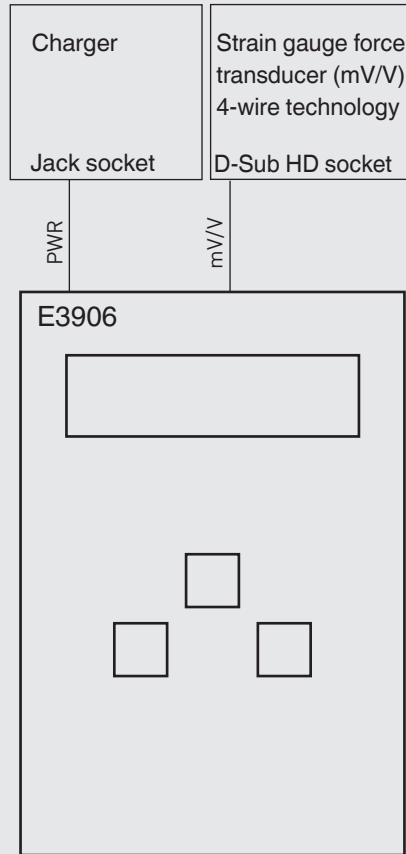
An integrated maximum value memory and a signal inversion function can be switched on and off at any time using a button.

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	
<b>Display</b>	Max value display
LC display	4½-digit
Digits	Output max. -19,999 to +19,999 digits
<b>Refresh rate</b>	2.5 sec
<b>Input signal</b>	Resistance thermometry bridge in 4-wire technology
<b>Bridge resistance</b>	350 ... 2,000 Ω
<b>Measuring range</b>	0.35 ... 3.5 mV/V
<b>Sensor supply</b>	DC 4 V, max. 15 mA
<b>Measurement accuracy</b>	< 0.2 % of FS ±3 digits
<b>Setting</b>	DIP switch and potentiometer
<b>Rated temperature range</b>	10 ... 35 °C
<b>Service temperature range</b>	5 ... 45 °C
<b>Storage temperature range</b>	-10 ... 70 °C
<b>Supply voltage</b>	
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)
<b>Ingress protection</b>	IP40
<b>Electromagnetic compatibility</b>	EN 61000-6-2:2005 EN 61000-6-3:2007
<b>Dimensions (L x W x H)</b>	125 x 80 x 40 mm
<b>Weight</b>	Approx. 250 g
<b>Accessories (available as an option)</b>	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

