

# Compact Digital Indicators

Enable reading in N, Pa or mm



# WDS-180A/185AS1

- ◆ Two models are available for constant voltage or constant current type.
- ◆ Suitable for simple measurement of load, pressure or displacement in combination with a transducer.
- ◆ Indicates measured values in  $\mu\text{m/m}$  or  $\text{mV/V}$ .
- ◆ Measure mode enables direct reading of physical quantities in proper engineering unit.
- ◆ Actual load calibration or sensitivity registration calibration is possible.
- ◆ WDS-180A provides TEDS reading circuit for easy and error-free setup.
- ◆ Compact and lightweight (66.5 mm x 92.0 mm x 28.0 mm, approx. 180 g)
- ◆ Operates on 2 pieces of AA size dry cell which is available anywhere.

# Specifications

## Conditioner Section

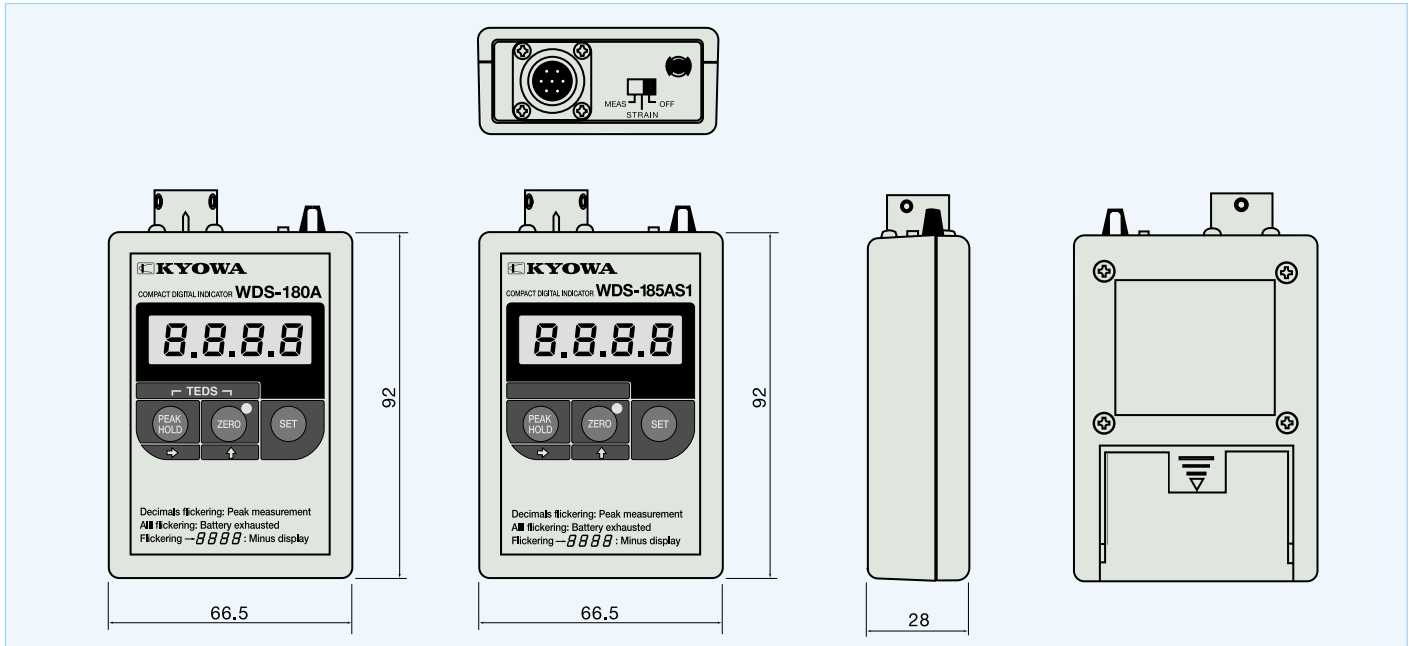
Number of Measuring Channels: 1  
 Applicable Transducers: Strain-gage transducers (full-bridge)  
 Applicable Bridge Resistance  
 WDS-180A: 60 to 1000  $\Omega$   
 WDS-185AS1: 350  $\Omega$   
 Bridge Excitation  
 WDS-180A: 1 V (constant voltage)  
 WDS-185AS1: 2 mA (constant current)  
 Measuring Range:  $\pm 5$  mV/V ( $\pm 10000$   $\mu\text{m/m}$ ),  
 including zero adjustment range  
 Digital Zero Compensation: Possible in the measuring range  
 Sampling Rate: Approx. 3 times per second  
 Calibration Modes:  
 Actual load calibration  
 Sensitivity registration calibration  
 In addition, the WDS-180A enables calibration by reading TEDS information or by reading TEDS and registered profile data. (WDS-185AS1 is not provided with TEDS reading circuit.)  
 Indication: 7-segment LCD  
 Character height: 8.9 mm  
 Decimal point: Can be set at any desired place (in measure mode only).  
 (Once set, the decimal point is fixed and not floated.)  
 Indication range: -9999 to 9999 (minus is indicated by flickering the center segment of thousands' place digit.)  
 Indication Accuracy:  $\pm(0.05\% \text{ rdg.} + 5)$   $\mu\text{m/m}$

Indication Modes:  
 Strain mode: Switchable between  $\mu\text{m/m}$  and mV/V  
 Measure mode: Proper engineering unit through multiplication by calibration coefficient  
 Minimum Scale Value: Switchable to 1, 2 or 5 (in measure mode)  
 Peak Hold: Holds a maximum value during measurement.  
 Auto Power OFF: Can be set in a range of 1 to 99 minutes or none.  
 Low Battery Indication: All digits of LED indicator flicker (battery voltage 2.3 to 1.9 V).

## General


Operating Temperature/Humidity Range:  
 -5° to 40°C, 20 to 85% RH (noncondensing)  
 Storage Temperature Range: -10° to 60°C  
 Power Supply: AA size dry cell x 2  
 Continuous Operation: 24 hours or longer (with manganese dry cells)  
 Note: Approx. 100 hours with alkaline dry cells for measurement of 120  $\Omega$  transducers at a room temperature of 25°C with LED turned off.  
 Dimensions: 66.5(W) x 92.0(H) x 28.0(D) mm (excluding protrusions)  
 Weight: Approx. 180 g (with manganese dry cells built in)  
 Standard Accessory: Hook to attach a strap  
 Option:  
 Voltage monitor output  $\pm 4.0$  V FS

## Dimensions



JQA-0821  
 JQA-EM4824

Specifications are subject to change without notice for improvement.

**Safety precautions**  Be sure to observe the safety precautions given in the instruction manual, in order to ensure correct and safe operation.

Reliability through integration  


**KYOWA ELECTRONIC INSTRUMENTS CO., LTD.**

Overseas Department:  
 2-4-3, Hitotsubashi, Chiyoda-ku, Tokyo 101-0003, Japan  
 Phone: +81-3-5226-3553 Facsimile: +81-3-5226-3566  
 http://www.kyowa-ei.com  
 e-mail: overseas@kyowa-ei.co.jp

Cat. No. K-60-C1-E

Manufacturer's Representative