

WDS-190AS1/191AS1

Compact Digital Indicator

●Direct read out of physical values

3
-106

MEASURING INSTRUMENTS



WDS-190AS1

WDS-191AS1

Suitable for simple measurement and checking of load, pressure or displacement transducer.

- Backlight enables usage even in dark places.
- Displays data in 5 digits, units, status, and low power.
- Measures 2.5 Hz phenomena at 50 Hz sampling speed.
- WDS-191AS1 records data in CSV format.
- Powered by 2 AA batteries
- Lightweight

The Compact Digital Indicators display and record the output data of strain-gage transducers, such as load cells, pressure transducers, displacement transducers, and torque transducers etc.

Type

Models	Option
WDS-190AS1	—
WDS-191AS1	With record functions

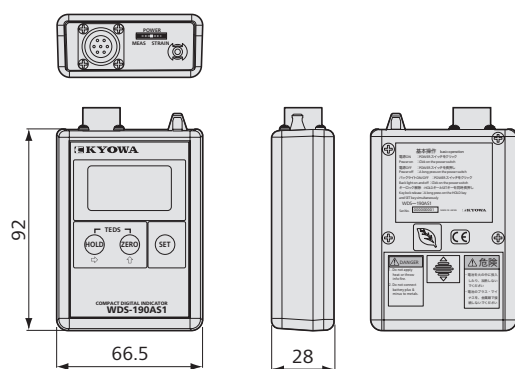
Specifications

Channels	1
Applicable Transducers	Strain-gage transducers
Applicable Bridge Resistance	60 to 1000 Ω
Bridge Excitation	2 V DC
Measuring Range	±5 mV/V (±10000 × 10 ⁻⁶ strain), including zero adjustment range
Digital Zero	Executes digital zero within measuring range
Sampling Speed	Approx. 50 times/s
Calibration Modes	Actual load calibration Sensitivity registering calibration TEDS calibration by TEDS data or calibration files
Indication	LCD 128 x 64 with ON/OFF backlight Range: -99999 to 99999, freely set decimal point Units: Any one
Indication Accuracy	Within ± (0.05% of reading + 5) × 10 ⁻⁶ strain
Indication Modes	Strain mode: Switchable between × 10 ⁻⁶ strain and mV/V Range: -9999.9 to 9999.9 Measure mode: Proper engineering units
Smoothing Functions	Moving average: 1, 2, 4, 8, 16, 32, 64, and 128 times Minimum scale: 1, 2, 5, 10, 20, 50, and 100 steps Zero-near-zero: 0 to 9
Peak Hold	Digitally holds a max. value during measurement.
Recording by 191AS1	USB 2.0 (Micro USB), CSV file, memory: 2 GB Data is recorded on every pressed key REC, and saved as CSV files including time, part names, count values, units, limit values, ON/OFF. Part names and counts are set freely.
Comparators of 191AS1	Upper limit x1
Power Saving	Auto off by preset time 0 to 99 min and none Backlight off by preset time 0 to 60 s and none
Low Battery	Battery mark lights in 1/1, 1/2, 1/4, and flickers in low battery. Calibration or recording is prohibited when the light flickers.
Compliance	Directive 2014/30/EU (EMC) Directive 2011/65/EU (RoHS)
Operating Temperature	-10 to 40°C
Operating Humidity	20 to 85% (Non-condensing)
Storage Temperature	-10 to 60°C
Power Supply	2 AA-alkaline batteries
Operating Time	72h continuously operates (With alkaline batteries) (When backlight off and 350-ohm transducers at 25 °C)
Dimensions	66.5 W × 92.0 H × 28.0 D mm (Excluding protrusions)
Weight	Approx. 110 g (Excluding batteries)

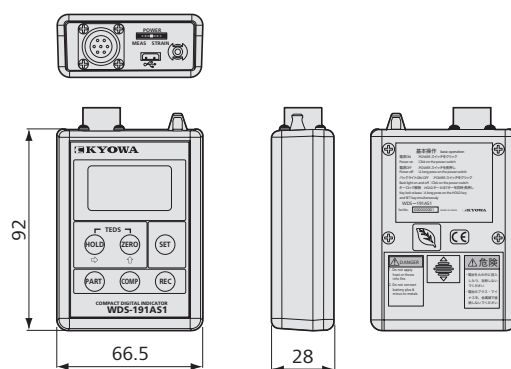
Standard Accessories 2 AA manganese batteries

Optional Accessories Input cable U-16
Soft case WDS-500-CASE (With shoulder strap)
Bridge box DB-120C-2/3

Dimensions



WDS-190AS1



WDS-191AS1



Instrumentation Amplifiers

Outline

Amplifier

Checker

Other