

RMH-301B

Digital Strain Recorder

- Collected saving date by USB memory



Suitable for long-term measurement in the absence of personnel under the environment without external power supply

- Small and lightweight
- Equipped with a display used to confirm setting conditions and measured values
- Easy to collect data by USB memory

Digital strain recorder RMH-301B is a battery-powered data collection device with low power consumption, suitable for long-term measurement in the absence of personnel at the places without external power supply such as long-distance mountainous and heavy-snowfall area.

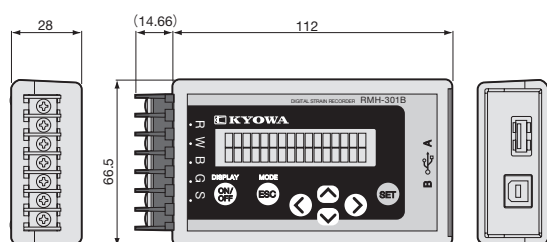
Enables to Strain gage civil engineering transducers and civil engineering transducers with tempmeas function and of single-channel measurement.

Equipped with operation panel and display enables operation relating to measuring condition setting and measurement.

Data can be collected via USB memory. Data can be easily reclaimed at site just by inserting USB disk. In addition to original forms, data can be saved in CSV format.

The optional software (RMH-390A) can be used to control computers and collect data through USB interface.

Dimension



Specifications

■ Hard ware	
Number of Measuring Channel :	1
Applicable transducer :	Strain gage transducer
	Strain gage civil engineering transducer
	Civil engineering transducer with tempmeas function
Applicable bridge resistance :	350Ω (Full bridge system)
Cable length :	0.5mm ² 4-conductor shielded cable maximum 2.0km
Gage factor :	Fixed 2.00
Bridge current :	Approx DC 2.19mA (constant current)
Temperature measurement current :	DC 0.24mA (constant current)
Measuring range :	Strain capacity : ±20000μm/m
	Temperature : -30.0 to +70.0°C
Resolution :	Strain measurement : 1μm/m
	Temperature : 0.1°C
Measuring accuracy :	Strain capacity : ±0.1%FS
	Temperature : ±0.5°C
Data storage :	Strain capacity : 30720 times
	Temperature : 30720 times
	Strain + temperature: 20475 times
Clock :	Year (2 digits of the Gregorian calendar), Month, Date, Hour, Minute
Measuring interval :	1 to 59 minute (with 1 minute as the unit)
	1 to 99 hour (with 1 hour as the unit)
Display :	LCD (16 digits×2 lines)
Operation :	Arrow keys, ON/OFF, SET, ESC
Interface :	USB1.1
Power supply :	DC 6 to 15V
Current consumption :	100mA during operation and below
	100μA under standby status
Input specifications :	M3 bolt suitable to crimp terminal RAV, 1.25-3 equivalents
Operating temperature range :	-20 to 50°C
Operating humidity range :	10 to 95%RH (no-condensing)
Operating environment :	No external interference caused by grime and large-capacity motors, etc.
Dimensions :	112(W) × 28(H) × 66.5(D) mm (excluding protrusions)
Weight :	Approx 180 g
■ Control software (RMH-390A) optional accessories	
Setting function :	Setting of data collection conditions (measuring name, measuring point number, final measuring channel) setting of channel conditions (transducer name, measuring point mode, initial value, calibration factor and unit)
Collection function :	Measurement start (measurement start time, interval measurement time and measurement times) Measurement stop Data collection (USB, RS-232C) (measuring data is automatically saved as data collection pass)
USB storage function :	Entering measuring conditions Data collection
Data display :	Initial data display/physical quantity display value display (display channel and display period setting) Time series chart display (maximum 3 charts: display channel: display period setting, line type and color selection, automatic and calibration) Print (printer printing documents)
Data editing :	Measuring data editing (editing of title and data parts)
Data conversion :	Converted to ASCII format
Check function :	Self diagnosis of measurer (inspection of A-D, cell voltage, transducer and ROM/RAM) test measurement real-time monitoring
Others :	Address book setting, Communications condition setting, Time setting and Help function
■ Operating environment	
OS :	Microsoft Windows (32bit, Japanese version) 2000 Professional, XP Home Edition XP Professional, Vista
Interface :	USB Interface (RMH-301B) CD-ROM or DVD (for software installation)
CPU :	Pentium III, 1GHz or higher
Memory required :	RAM 512MB or more
Hard disk :	Hard disk capacity or more 20MB (for installation, excluding that for data) spare capacity or more 10MB (excluding that for saving measuring data)
Graphic :	High resolution video or more Super VGA (800×600) adaptor and monitor or more 1024×768, or more full-color
Others :	Keyboard and Microsoft Mouse or interchangeable pointing device

Optional Accessories	Battery pack	RB-5A (5Ah)
		RB-10A (10Ah)

