

# F490A

PORTABLE DIGITAL INDICATOR

Performance upgraded!



## Specifications

Analog	Excitation voltage	DC 3 V±10%, Output current: Within 35 mA
	Signal input range	-3.0 to +3.0 mV/V
	Calibration range	-3.0 to -0.05 mV/V, +0.05 to +3.0 mV/V
	Accuracy	Non-linearity: Within 0.02% FS (at 3.0 mV/V input) Zero drift: Within 0.3 μV/°C RT1 Gain drift: Within 5 ppm/°C
	A/D converter	Speed: Select from 80, 400, or 1200 times/sec. Resolution: 24 bit (binary) Approx. 1/30000 at 3.0 mV/V input
	Display	Display unit
Measured value		5 digits: -99999 to +99999, Character height: 14 mm
Status display		Status Display 1: R (Recording)/ A (AC adapter on use)/ U (USB in connection)/ N (NOV RAM reading)/ B (Backup battery abnormal) Status Display 2: HI/ OK/ LO/ PEAK/ BOTTOM/ HOLD
Record	Recording function	- Records when [REC] key is pressed - Records when stability is detected - Records the Hold value when the Hold is cancelled - Interval recording (records data at every fixed interval) - Records graph data (Records data displayed in graph)
	Recording media	Internal memory
	Recording method	Text form of CSV format
	Recording data	ID, number of recordings, recording date, recording time, measured channels, measured values, unit
	Number of recording data	20000 data
Hold	Peak/ Bottom/ P-P/ Sample	
	Data monitoring range: All ranges/ level/ level+time	
Measuring mode	Load measuring/counting	
Interface	USB interface	
Display mode	Measured value, graph, recorded data, measured value (in mV/V equivalent)	
General specifications	Power supply voltage	Internal power supply: AA alkaline battery or Nickel metal-hydride rechargeable battery (4 pcs) External power supply: Special AC adapter (5 V, 1.6 A for AC 100 V)
	Power consumption	Approx. 60 mA (when a 120 Ω sensor is connected, backlight OFF) Approx. 70 mA (when a 120 Ω sensor is connected, backlight ON)
	Backup power supply	Lithium battery for storing of setting values and recorded data (stores up to 5 years or more)
	Continuous usage duration	Approx. 30 hours (when connected to 350 Ω sensor with backlight OFF) Approx. 12 hours (when connected to 120 Ω sensor with backlight OFF)
	Operation condition	Temperature: Operation temperature range: -10 to +40°C Humidity: 80% RH or less (non-condensing)
	External dimension	86(W) × 132(H) × 30(D) mm (not including protrusions)
	Weight	Approx. 290 g (including the 95 g weight of battery)
Attachments	AA alkaline battery...4 Sensor connector...1 CD-ROM...1 Operation manual...1	
Optional accessories	AP0516: Special AC adapter (for AC 100 V). CA81-USB: 1.8 m USB Type-A - miniUSB cable, MACP-0520: Special AC adapter (for free power source), CBB-01-4W: 4-wire terminal block connector, TM400 AC CABLE EU: AC cable (for Europe)	
CE marking certification	EMC directives: EN61326-1 Safety standard: EN62311	

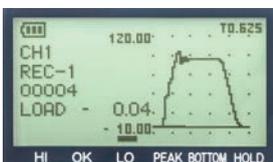


Perfect for inspection of load cell embedded into facilities & quick load check!

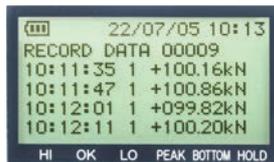
- Small, lightweight and power-saving design best for field use 86(W) × 132(H) × 30(D) mm with weight of approx. 290 g It can be continuously used for about 30 hours (when using 1 pc of 350 Ω sensor)
- The measured data can be ch in csv format in its internal memory. Recorded data can be referred to and copied using its USB interface.

ID	COUNT	DATE	TIME	CH	DATA	UNIT
1	1	2008/3/18	14:04:56	1	10 MN	
2	2	2008/3/18	14:05:06	1	9997 MN	
3	3	2008/3/18	14:05:12	1	9999 MN	
4	4	2008/3/18	14:05:14	1	9999 MN	
5	5	2008/3/18	14:05:17	1	10 MN	
6	6	2008/3/18	14:05:20	1	9999 MN	
7	7	2008/3/18	14:05:25	1	9999 MN	
8	8	2008/3/18	14:05:29	1	10 MN	
9	9	2008/3/18	14:05:33	1	10000 MN	
10	10	2008/3/18	14:05:37	1	9999 MN	
11	11	2008/3/18	14:05:41	1	9999 MN	
12	12	2008/3/18	14:05:43	1	9999 MN	
13	13	2008/3/18	14:05:48	1	10 MN	

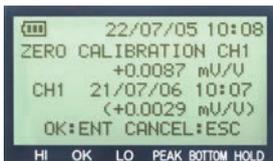
- Equipped with a variety of information display such as graph, recorded data, measured value (in mV/V equivalent) etc.



Graph



Recording data



Calibration value

Last calibration date/time & zero point of that time can be checked. Load cell malfunction can be found immediately.

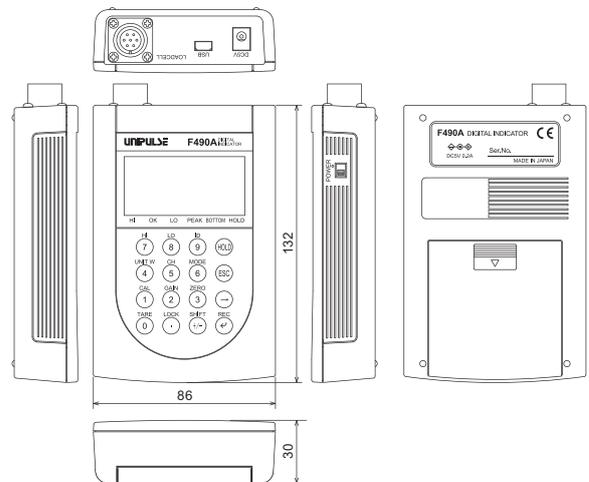


Measured value (in mV/V equivalent)

Display sensor output in terms of mV/V. Useful for sensor maintenance checkup.

- Hold function  
Peak/ Bottom/ P-P/ Sample (data monitoring range can be set)
- Multi calibration function  
Stores 6 channels of calibration value; selectable arbitrary calibration value according to sensors at fields

## External dimension



Unit: mm



With a 4-wire terminal block connector (sold separately), a cable with loose ends is easily connectable