

# F490A

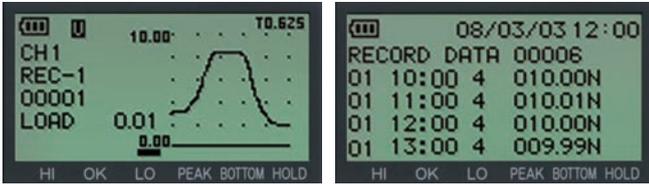
## PORTABLE DIGITAL INDICATOR



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

1	A	B	C	D	E	F
2	ID					
3	COUNT	DATE	TIME	CH	DATA	UNIT
4	1	2008/3/18	14:24:58	1	10.00N	
5	2	2008/3/18	14:25:06	1	9.997N	
6	3	2008/3/18	14:25:12	1	9.999N	
7	4	2008/3/18	14:25:14	1	9.999N	
8	5	2008/3/18	14:25:17	1	10.00N	
9	6	2008/3/18	14:25:20	1	9.999N	
10	7	2008/3/18	14:25:25	1	9.999N	
11	8	2008/3/18	14:25:29	1	10.00N	
12	9	2008/3/18	14:25:33	1	10.000N	
13	10	2008/3/18	14:25:37	1	9.999N	
14	11	2008/3/18	14:25:41	1	9.999N	
15	12	2008/3/18	14:25:43	1	9.999N	
16	13	2008/3/18	14:25:48	1	10.00N	
17	14	2008/3/18	14:25:52	1	9.999N	
18	15	2008/3/18	14:25:55	1	9.999N	
19	16	2008/3/18	14:25:58	1	9.999N	
20	17	2008/3/18	14:26:01	1	9.999N	
21	18	2008/3/18	14:26:06	1	9.999N	
22	19	2008/3/18	14:26:08	1	10.00N	

- A variety of display modes such as graph display or recorded data display is available.



Graph display

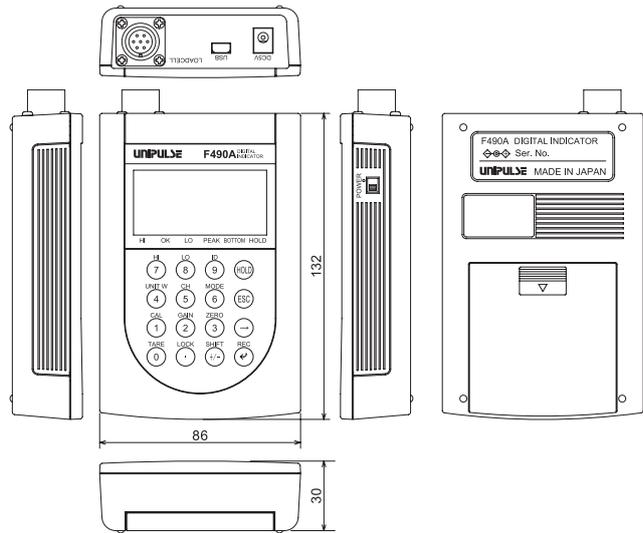
Recorded data display

- Hold function  
Peak/ Bottom/ Peak-to-Peak/ Sample (data monitoring range can be set)
- Multi calibration function  
6 channels of calibration values can be stored, which can be selected as desired according to the field sensor.

### Specifications

ANALOG	Excitation voltage	DC3V±10%; Output current: within 35mA
	Signal input range	−3.0 to +3.0mV/V
	Accuracy	Non-linearity ..... Within 0.02%/FS (at 3.0mV/V input) Zero drift ..... Within 0.3μV/°C RTI Gain drift ..... Within 5ppm/°C
	A/D converter	Speed ..... 80 times/sec Resolution ..... 24 bit approx. 1/30000 at 3.0mV/V input
DISPLAY	Display unit	128 x 64 dot black and white LCD
	Measured value	5 digits: −99999 to +99999; Character height: 14mm
	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	20,000 data
HOLD	Hold Mode: Peak Hold/Bottom Hold/Peak-to-Peak Hold/Sample Hold Data monitoring range: All ranges/level/level + time	
MEASURING MODE	Load measuring/counting	
INTERFACE	USB interface	
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 (5V, 1.6A for AC100V)
	Power consumption	Approx. 60mA (when a 120Ω sensor is connected, backlight OFF) Approx. 70mA (when a 120Ω 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 350Ω sensor with backlight OFF) Approx. 12 hours (when connected to 120Ω 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. 290g (including the 95g weight of battery)
	ATTACHMENTS	AA alkaline battery.....4 Sensor connector.....1 CD-ROM.....1 Operation Manual.....1
	OPTIONAL ACCESSORIES	AP0516: Special AC adapter (for AC100V) AP0520A: Special AC adapter (for free power source) CA81-USB: 1.8m miniUSB – computer USB cable

### External dimension



Unit: mm