



PEN RECORDER PR8111, PR8112





# *Portable, easy-to-use pen recorder built for the field*





- Easily portable Compact size
- Support for three power sources Can be powered with dry-cell batteries.
- Outdoor-ready Ships with a drip-proof cover.
- Pen-based Records data reliably.
- Easy enough for anyone to use Features simple operation.

PR8111: 1 pen, PR8112: 2 pens

## Take reliable measurements. Anywhere.

# Wherever you take them, the PR8111 and PR8112 will yield reliable measurement data that can be stored for extended periods of time.

### Measure up to 250V with high 1mV sensitivity

The PR8111/PR8112 can accommodate a variety of input signals thanks to a broad series of measurement ranges.

#### Measurement ranges: 17 ranges

 $\pm 1,\, 2.5,\, 5,\, 10,\, 25,\, 50,\, 100,\, 250,\, 500$  mV,  $\pm$  1, 2.5, 5, 10, 25, 50, 100, 250 V

### Support for three power sources to allow use anywhere

The PR8111/PR8112 can be powered using its AC adapter, dry-cell batteries\*1, or a DC power supply\*2.

- \*1: Requires six D size Alkaline batteries
- Continuous operating time: Approx. 50 h (using 1 pen) or approx. 25 h (using 2 pens)
- \*2: A connection cable is available by special order. Please contact your HIOKI representative.

### Simple dust- and drip-proof design for outdoor use

- A front cover protects measurement hardware from wind and dust (and keeps recording paper from blowing away in the wind).
- A drip-proof cover protects the instrument and recorded data from water droplets and dust (affording peace of mind in the event of a sudden rain shower).

### Instant confirmation of measurement operation by watching pen movements

The ability to view measurements being taken, even from a distance, allows you to immediately detect any malfunction.

### Reliable storage of important data

Pen-based operation provides a reliable record of measurement data.
Recording paper can be stored as-is for extended periods of time.







#### With the drip-proof cover on

# So simple, it just works.



### You need an instrument you can get out to the field easily and start using right away. The PR8111/PR8112 delivers.

#### Excellent portability

A more compact design means even better portability. (The PR8111/PR8112 is approximately half the size of previous HIOKI models by volume.)

Don't be fooled by their smaller footprint these instruments can use the same recording paper as their predecessors. Recording width: 150 mm



### Simple, intuitive operation

- Simple, intuitive controlsSettings that are visible
- at a glance

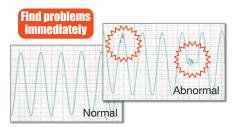




Operating panel (2-pen model)

### Find anomalies quickly

- You can check recorded waveforms in the field.
- Recordings can easily be compared to past data.



### PR8111/PR8112 Features



Pictured: PR8112 (2-pen model)

### The days of big, heavy pen recorders are over. Introducing a compact, lightweight instrument that's designed for simple ease of use.

### **Compact and lightweight**

Easily portable for outstanding mobility Dark gray color so dirt doesn't stand out

### Power supply LED

Provides a color-based indication of remaining battery life. Green: Ample remaining battery life Orange: Limited remaining battery life Red: Replace batteries.



### Simple operation

Intuitive knobs and switches Easy-to-understand operation: Each knob or switch controls a single function. No need to worry about how

to operate the instrument.



Support for Johnson, banana, and crimp-type terminals

### Front cover (standard)

Protects the recording hardware from wind and dust (removable).

### Channel 2 POWER switch (rear)

Allows you to turn off power to channel 2 (pen 2) to save energy when performing measurements with just one channel. Available on the PR8112 (2-pen model) only.





Check waveforms and make notes in the field.

Recording paper can be stored as-is for extended periods of time.

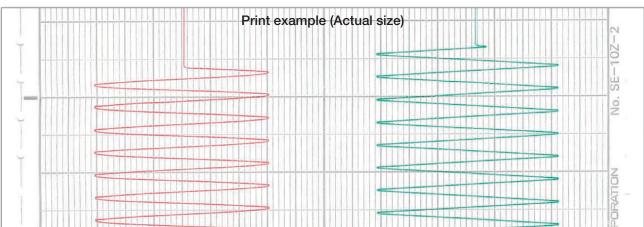
Recording paper width: 150 mm (Can use paper designed for use with previous models.)

### Applications

# Record output from measuring instruments

Record analog output from temperature/ humidity, pH, and other environmental measuring instruments, insulation testers, and sensors





### Specifications

Input unit (product guaranteed for one year)		Recording unit	
Operating method	Self-balancing	No. of pens	PR8111: 1 pen, PR8112: 2 pens
Input	DC Voltage (isolated input)	Recording method	Disposable felt pens
Measurement ranges	±1, 2.5, 5, 10, 25, 50, 100, 250, 500 mV,	Recording width	150 mm
	±1, 2.5, 5, 10, 25, 50, 100, 250 V 17ranges	Pen interval	5 mm±1 mm
Recording accuracy	±0.5% of effective recording width (excluding contraction and expansion of recording paper)	Pen speed	500 mm/s or greater (using AC adapter)
	(Including linearity in reference range; reference range of 250 mV)	Paper feed speed	10, 20, 30, 60, 120, 180, 300, 600 mm/m 10, 20, 30, 60, 120, 180, 300, 600 mm/h 16 ranges Accuracy: ±0.25%
Dead zone	±0.2% of effective recording width		
Inter-range error	±0.25% of effective recording width		
Input impedance	2 MΩ±1 %	Zero point movement range	Can be adjusted throughout each range's full area of movement.
Max. allowable input	250 V DC (V range) or 30 V DC (mV range)	Chart feed	300 mm/min, slow-up method
Max. rated voltage between	300 V DC/AC	Pen-lifting mechanism	Gang lift
terminals and ground Battery check		Orientation	Vertical
	3-stage LED display (green, orange, red) (when operating on dry-cell battery power) Accuracy is guaranteed even when red indicator is lit.	Recording paper	Fanfold plain paper SE-10Z-2 (length: 15 m) Roll plain paper SE-10 (length: 20 m)
Operating temperature and humidity	0 °C to 40 °C, 40 % to 80 % rh (non-condensating)		
Power supply	<ul> <li>(1) AC ADAPTER 9418-15: 100 to 240 V AC (50/60 Hz)</li> <li>(2) D Size alkaline battery × 6</li> <li>(When used with the AC adapter, the adapter takes precedence.)</li> <li>[Continuous use] (based on in-house testing conditions)</li> <li>PR8111: Approx 50h, PR8112: Approx 25h</li> <li>(3) DC power supply: 10 to 27V DC (cable available by special order)</li> </ul>		
Max. rated power	4VA (AC ADAPTER, DC POWER) or 3VA (dry-cell batteries)		
Dimensions	292 mm (11.5 in) W×177 mm (6.97 in) H×182 mm (7.17 in) D		
Mass	PR8111: 3.9 kg (137.6oz) , PR8112: 4.4 kg (155.2oz) (instrument only) PR8111: 4.8 kg (169.3oz) , PR8112: 5.3 kg (186.9oz) (with dry-cell batteries, recording paper, and pen(s))		
Storage temperature and humidity	-20 °C to 55 °C, 10 % to 80 % rh (non-condensating)		
Applicable standards	Safety: EN61010-1 EMC: EN61326-1 CLASS A, EN61000-3-2, EN61000-3-3		

PR8111 (1-pen model) PR8112 (2-pen model)

#### Accessories

FELT PEN PR8111: P-1201A (Red) PR8112: P-1201A (Red), P-1202A (Green) RECORDING PAPER × 1 (fanfold) AC ADAPTER 9418-15 × 1, Drip-proof cover × 1, Instruction manual × 1

### 



RECORDING PAPER SE-10Z-2 (fanfold) Width:170 mm (effective recording width: 150 mm) ×15 m, Set of 10



### RECORDING PAPER SE-10 (roll)

Width:170 mm (effective recording width: 150 mm)  $\times 20$  m, Set of 10



### FELT PENS

P-1201A (Red) P-1202A (Green) P-1203A (Blue) The PR8111/PR8112 uses the same recording paper and felt pens as previous HIOKI models (the EPR-3000 series and EPR-3500 series).