

# PEN RECORDER PR8111, PR8112

Recorders



## 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.**

ISO 9001  
JMI-0216ISO14001  
JQA-E-90091[www.hioki.com](http://www.hioki.com)HIOKI company overview, new products, environmental considerations  
and other information are available on our website.**PR8111: 1pen, PR8112: 2pens**\*The PR8111/PR8112 is approximately half the size of  
previous HIOKI models by volume.

# 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

±1, 2.5, 5, 10, 25, 50, 100, 250, 500 mV, ± 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 dry-cell 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.



# 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

Compact  
Lightweight



[ PR8112 ]

[ Previous HIOKI model: EPR-3500s ]

## ■ Simple, intuitive operation

- Simple, intuitive controls
- Settings that are visible at a glance

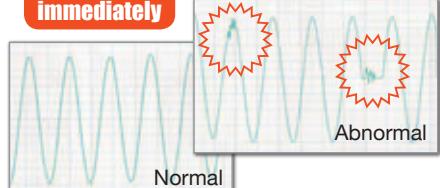
Start using it  
right away



## ■ Find anomalies quickly

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

Find problems  
immediately



Normal

Abnormal

## PR8111/PR8112 Features

*The days of big, heavy pen recorders are over.*

*Introducing a compact, lightweight instrument that's designed for simple ease of use.*

**PR8111**

1 pen

**PR8112**

2 pens

Pictured: PR8112  
(2-pen model)

### 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.



### 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.

### 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.

### Inputs (rear)



Support for Johnson, banana, and crimp-type terminals

### Recording hardware



Check waveforms and make notes in the field.

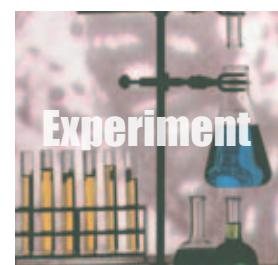
Recording paper can be stored as-is for extended periods of time.

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

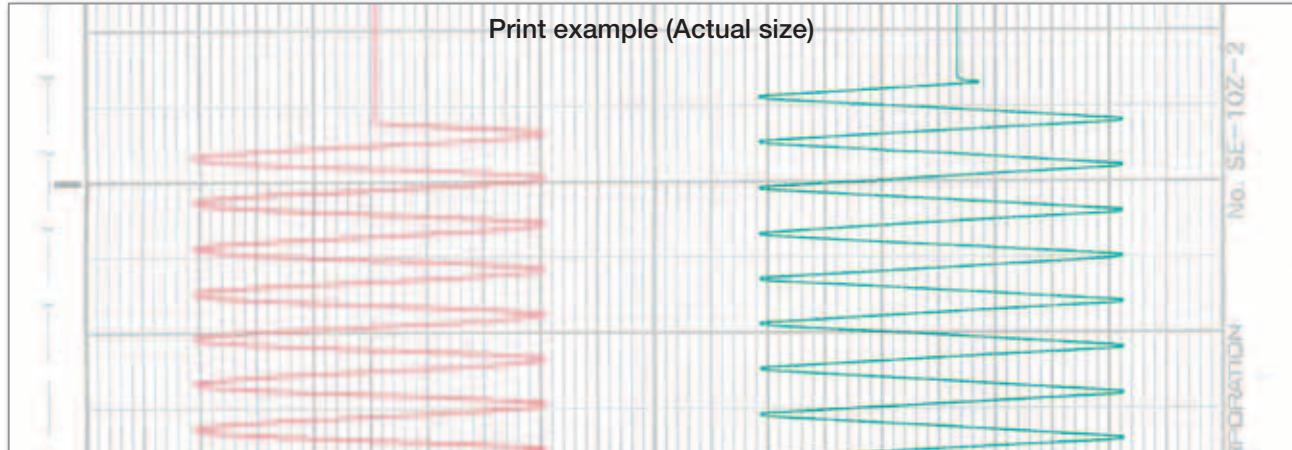
## Applications

### Record output from measuring instruments

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



### Print example (Actual size)



# ■ Specifications

## Input unit (product guaranteed for one year)

Operating method	Self-balancing
Input	DC Voltage (isolated input)
Measurement ranges	±1, 2.5, 5, 10, 25, 50, 100, 250, 500 mV, ±1, 2.5, 5, 10, 25, 50, 100, 250 V 17ranges
Recording accuracy	±0.5% of effective recording width (excluding contraction and expansion of recording paper) (Including linearity in reference range; reference range of 250 mV)
Dead zone	±0.2% of effective recording width
Inter-range error	±0.25% of effective recording width
Input impedance	2 MΩ±1 %
Max. allowable input	250 V DC (V range) or 30 V DC (mV range)
Max. rated voltage between terminals and ground	300 V DC/AC
Battery check	3-stage LED display (green, orange, red) (when operating on dry-cell battery power) Accuracy is guaranteed even when red indicator is lit.
Operating temperature and humidity	0 °C to 40 °C, 40 % to 80 % rh (non-condensating)
Power supply	(1) AC ADAPTER 9418-15: 100 to 240 V AC (50/60 Hz) (2) D Size alkaline battery × 6 (When used with the AC adapter, the adapter takes precedence.) [Continuous use] (based on in-house testing conditions) PR8111: Approx 50h, PR8112: Approx 25h (3) DC power supply: 10 to 27V DC (cable available by special order)
Max. rated power	Using AC adapter: 18VA (including AC adapter) or 4VA (main unit only) Using DC power supply: 4VA Using dry-cell batteries: 3 VA
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, EN61010-2-030 EMC: EN61326-1 CLASS A, EN61000-3-2, EN61000-3-3

## Recording unit

No. of pens	PR8111: 1 pen, PR8112: 2 pens
Recording method	Disposable felt pens
Recording width	150 mm
Pen interval	5 mm±1 mm
Pen speed	500 mm/s or greater (using AC adapter)
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%
Zero point movement range	Can be adjusted throughout each range's full area of movement.
Chart feed	300 mm/min, slow-up method
Pen-lifting mechanism	Gang lift
Orientation	Vertical
Recording paper	Fanfold plain paper SE-10Z-2 (length: 15 m) Roll plain paper SE-10 (length: 20 m)



Pictured: PR8111  
(1-pen model)

## PR8111 (1-pen model)

## PR8112 (2-pen model)

### Accessories

FELT PEN PR8111: P-1201A (Red)

PR8112: P-1201A (Red), P-1202A (Green)

RECORDING PAPER SE-10Z-2 ×1 (fanfold)

AC ADAPTER 9418-15 ×1, Drip-proof cover ×1, Instruction manual ×1

## ■ OPTION



The PR8111/PR8112 uses the same recording paper and felt pens as previous HIOKI models (the EPR-3000 series and EPR-3500 series).



**HEADQUARTERS:**  
81 Koizumi, Ueda, Nagano, 386-1192, Japan  
TEL +81-268-28-0562 FAX +81-268-28-0568  
http://www.hioki.com / E-mail: os-com@hioki.jp

**HIOKI USA CORPORATION:**  
TEL +1-609-409-9109 FAX +1-609-409-9108  
http://www.hiokiusa.com / E-mail: hioki@hiokiusa.com

**HIOKI (Shanghai) SALES & TRADING CO., LTD.:**  
TEL +86-21-63910090 FAX +86-21-63910360  
http://www.hioki.cn / E-mail: info@hioki.com.cn

**HIOKI INDIA PRIVATE LIMITED:**  
TEL +91-124-6590210 FAX +91-124-6460113  
E-mail: hioki@hioki.in

**HIOKI SINGAPORE PTE. LTD.:**  
TEL +65-6634-7677 FAX +65-6634-7477  
E-mail: info-sg@hioki.com.sg

**HIOKI KOREA CO., LTD.:**  
TEL +82-42-936-1281 FAX +82-42-936-1284  
E-mail: info-kr@hioki.co.jp

DISTRIBUTED BY