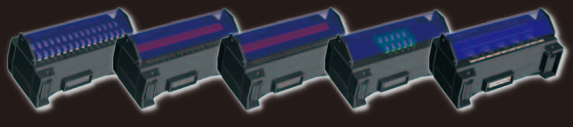
HIOKI

MEMORY HiLOGGER LR8450

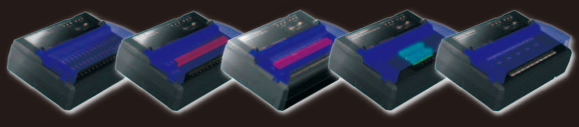
NEW Preview

Wireless data logging at 1 ms

330-channel portable logger available with your choice of plug-in and wireless units



Plug-in units



Wireless units

LR8450, LR8450-01, and plug-in units : Q1 2020

Wireless units : Q2 2020

*Wireless units require the LR8450-01.

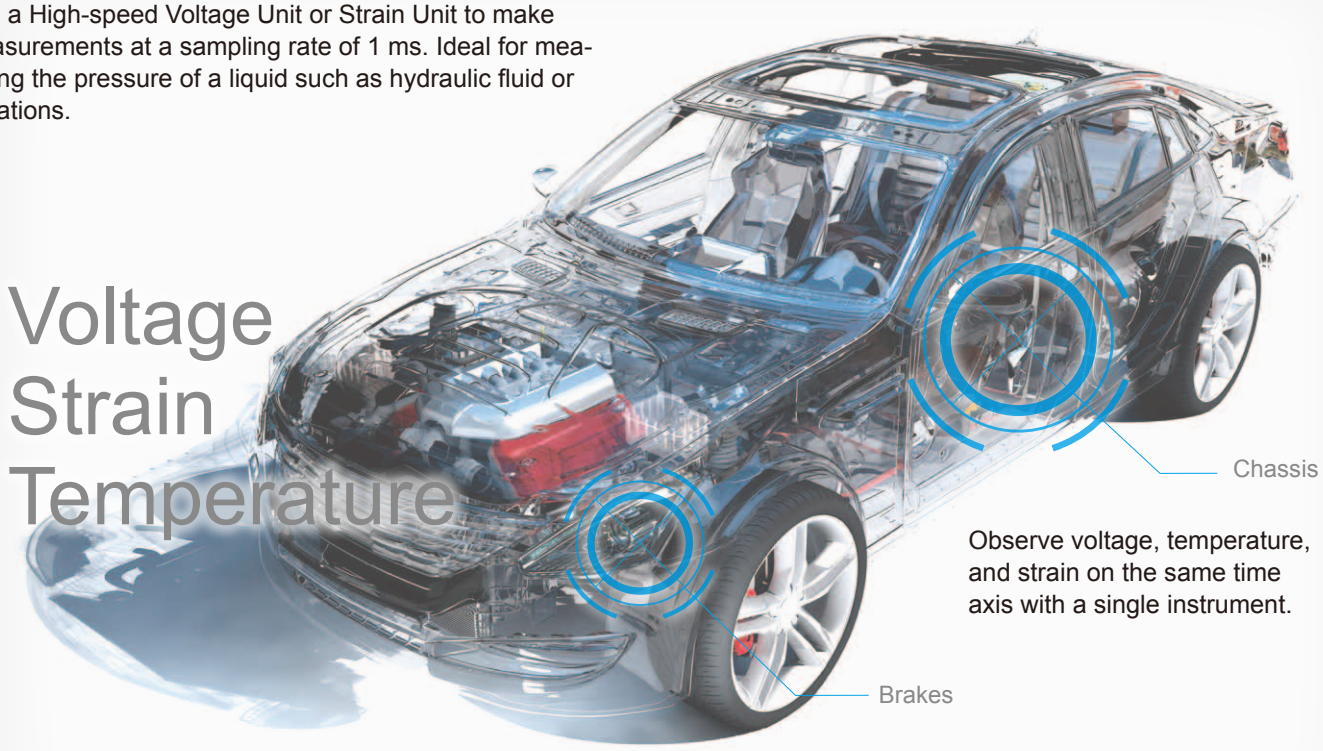
CE 3year Warranty

Multichannel 1 ms sampling*

Measure dynamic strain wirelessly

*Maximum temperature measurement sampling rate: 10 ms+

Use a High-speed Voltage Unit or Strain Unit to make measurements at a sampling rate of 1 ms. Ideal for measuring the pressure of a liquid such as hydraulic fluid or vibrations.



Observe voltage, temperature, and strain on the same time axis with a single instrument.

Q Is it possible to measure strain wirelessly?

Typically, wiring for strain gauges ends up being several meters long, and multi-channel setups are prone to wire breaks and hard to install…

A Yes, you can measure strain wirelessly with a 1 ms sampling rate.

Connect the LR8450 to a total of up to 11 strain units, including 4 plug-in units and 7 wireless units. Since each unit provides 5 channels of input, you can measure strain across a total of 55 channels.

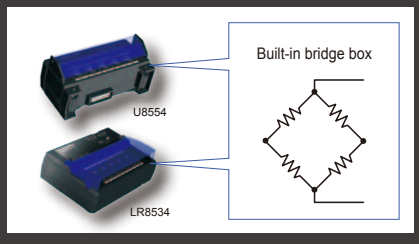
*Wireless units require the LR8450-01.

Compact, A4-size profile

Thanks to a thin, A4-size form factor, the logger can be placed anywhere. The small size is also convenient for on-board testing in vehicles.

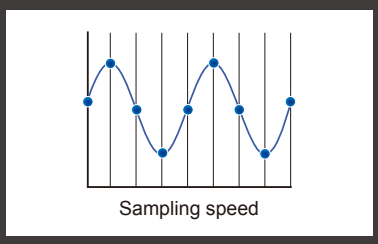
Plug-in strain gauges

STRAIN UNIT consist of a built-in bridge box so that strain gauges can be connected directly to the input terminals.



No drop-off in sampling speed

Each unit has its own A/D converter, ensuring you realize the maximum sampling speed even when you add more units.



Log up to 330 channels

Add channels freely via either plug-in or wireless units.

Connect a maximum of 11 units at once, including 4 plug-in units and 7 wireless units.

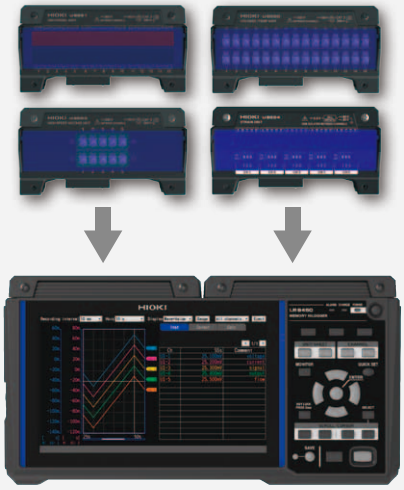
330 channels: Four U8552 (30-channel) units and
seven LR8532 (30-channel) units (using LR8450-01 with wireless LAN)





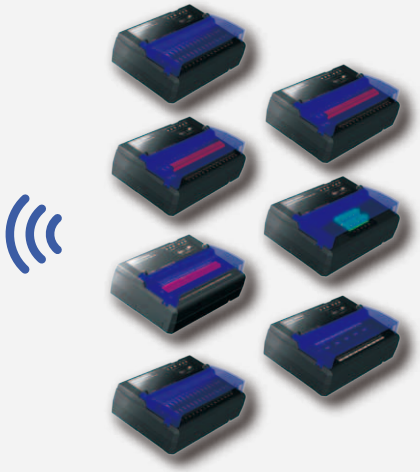
Plug-in units

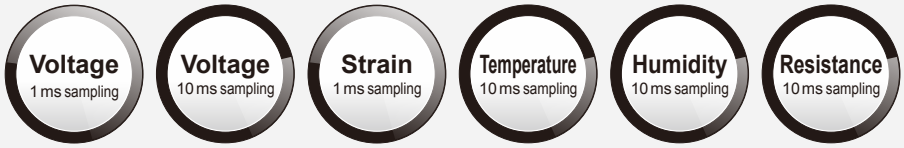
Connect one to four plug-in units (select from five models).



Wireless units

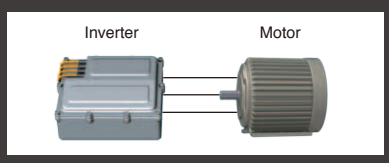
Then connect up to seven wireless units (select from five models; use with LR8450-01 only).





Capture measured values that don't fluctuate

Compared to legacy products, the impact on measured values of high applied voltages and frequencies during temperature measurement of inverters and high-frequency furnaces has been significantly reduced.



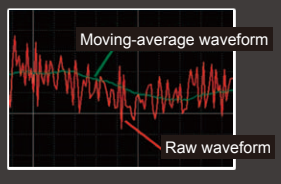
Configure filters on a unit-by-unit basis

The logger lets you configure filters for each individual unit. Filter operation is linked to the data refresh rate.

Reduce the effects of noise by lowering the data refresh rate of only those units that measure slow signals such as temperature and then applying a strong filter to their data.

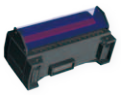
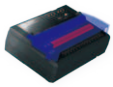
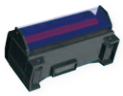
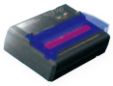
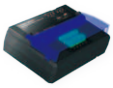
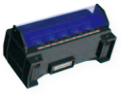
Access moving averages in real time

Moving averages provide an effective way to view fluctuating waveforms while eliminating the effects of instantaneous noise. With the LR8540, you can calculate moving average while measurement is in progress. And since you can save the resulting moving average data to a different channel from the raw waveform, you can also review the raw waveform at the same time.



Product specifications	LR8450-01 (Wireless LAN equipped model, main unit only)	LR8450 (Standard model, main unit only)
Maximum number of connectable units	4 plug-in units + 7 wireless units	4 plug-in units
	Units sold separately. Purchase one or more optional units as the logger is not capable of standalone measurement.	
Number of expandable channels	Max. 330 (U8552 × 4 plug-in units + LR8532 × 7 wireless units)	Max. 120 (U8552 × 4 plug-in units)
Display	7-inch TFT color LCD	
LAN interface (1000Base-T)	✓	
Wireless LAN interface	✓ (Can connect wirelessly to PC or tablet when not using any wireless units)	–
USB interface (data transfer)	✓	
USB interface (USB drive, keyboard, hub)	✓	
SD card slot	✓	
Pulse input	8 channels	
Warning output	8 channels	
Operating temperature range	Logger and plug-in units: -10°C to 50°C Wireless units: -20°C to 60°C	
PC application	Logger Utility	

Measurement units (optional)

Product	Plug-in model	Wireless model	Specifications
VOLTAGE/TEMP UNIT	U8550 	LR8530 	• Number of channels: 15 (scanning) • Maximum sampling (data refresh) rate: 10 ms • Measurable parameters: Voltage, thermocouple, humidity (when using the Z2000 Humidity Sensor) • Input terminals: Terminal block with M3 screws
UNIVERSAL UNIT	U8551 	LR8531 	• Number of channels: 15 (scanning) • Maximum sampling (data refresh) rate: 10 ms • Measurable parameters: Voltage, thermocouple, humidity (when using the Z2000 Humidity Sensor), resistance thermometer sensor (Pt100, PT1000, JPt100), resistance • Input terminals: Push-button terminal block
VOLTAGE/TEMP UNIT	U8552 	LR8532 	• Number of channels: 30 (scanning) • Maximum sampling (data refresh) rate: 10 ms (when using 15 or fewer channels) 20 ms (when using 16 to 30 channels) • Measurable parameters: Voltage, thermocouple, humidity (when using the Z2000 Humidity Sensor) • Input terminals: Push-button terminal block
HIGH SPEED VOLTAGE UNIT	U8553 	LR8533 	• Number of channels: 5 (scanning) • Maximum sampling (data refresh) rate: 1 ms • Measurable parameters: Voltage • Input terminals: Terminal block with M3 screws
STRAIN UNIT	U8554 	LR8534 	• Number of channels: 5 • Maximum sampling (data refresh) rate: 1 ms • Measurable parameters: Strain (1-gauge/2-wire, 1-gauge/3-wire, 2-gauge adjacent sides, 4-gage), voltage • Built-in bridge box (120 Ω, bridge voltage of 2 V DC) • Input terminals: Push-button terminal block

The LR8450-01 and each wireless unit emit radio waves. Use of radio waves is subject to licensing requirements in certain countries. Using it in a country or region other than the above may violate the law and may result in legal penalties for the operator. Wireless certification countries: Japan, United States, Canada, European Union and Others

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All information correct as of Dec. 2, 2019. All specifications are subject to change without notice. info_LR8450E1-9ZB Printed in Japan