



MEMORY HiLOGGER LR8450, LR8450-01

Visualizing Energy Loss with Multipoint Current Consumption Measurement

To reduce EV energy loss and extend driving range, it's necessary to make high-accuracy measurements. This ensures that non-drivetrain energy is also used efficiently.

By combining the Hioki Memory HiLogger LR8450 with a current module and AC/DC current sensor, you can measure and record current at multiple points. Analyzing data accurately is key to reducing energy consumption.

Compact contactless clamp-on sensor: just 77 mm long

NEW
AC/DC CURRENT SENSOR CT7812 (2A AC/DC)
CT7822 (20A AC/DC)



Measurable conductor diameter: φ5mm



Compact, contactless, and high-accuracy

Multiple sensors can be easily installed, even in confined spaces and locations with complex wiring.



Broad operating temperature range

Thanks to the operating temperature range of -40°C to 85°C, low-level DC current can be measured with a high degree of accuracy, even in environments where the ambient temperature varies.

Two current module types: Wireless and plug-in

NEW
WIRELESS CURRENT MODULE
LR8536



Up to five sensors can be connected to a single current module. Wireless modules can operate on battery power for 5 hours or more.

NEW
CURRENT MODULE
U8556



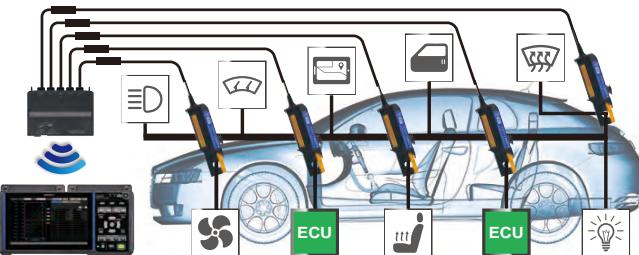
Five channels can be measured simultaneously with a sampling speed of up to 1 ms. As a result, you can capture even momentary changes in current value.

Current sensing solutions

1 Extended, simultaneous recording of multipoint current data

Reduce energy consumption

- Simultaneously record up to 55 channels of multipoint AC/DC current measurement data (when using the LR8450-01)
- By ascertaining how much current is used at a particular location, you can make improvements to use energy efficiently and reduce energy use
- Measure a broad range of current magnitudes, from large, high-current-consumption pumps and air-conditioning compressors to low-current-consumption interior accessories and ECUs



2 Slide-action clamp/release sensors

Dramatically reduce man-hours

- Compact, contactless clamp-on sensors can be easily connected to cables in confined locations
- Use a wireless module to dramatically reduce wiring man-hours



3 Simultaneous recording of various phenomena

Comprehensively analyze entire vehicles

- Simultaneously verify minuscule current of ECUs in sleep-mode
- Combine with an extensive range of available LR8450 measurement modules to simultaneously record variations in driving conditions and current consumption
- Entire vehicle analysis by combining CAN signal data with measured current consumption and other phenomena such as vibrations and temperature

Principal Specifications

NEW AC/DC Current Sensors	
AC/DC CURRENT SENSOR CT7812	AC/DC CURRENT SENSOR CT7822
Rated current	2 A AC/DC
Measurable conductor diameter	φ5 mm or less
Output rate	0.1 V/A
Operating temperature range	-40°C to 85°C (-40°F to 185°F)
Cord length	4 m
Connector type	Hioki PL14

NEW Current Modules	
WIRELESS CURRENT MODULE LR8536	CURRENT MODULE U8556
Type	Wireless (Battery operation: 5 h or more)
Number of channels	5 (simultaneous sampling of all channels)
Data refresh period	1 ms
Measurement targets	DC current, AC current (RMS) Varies with current sensor used
Input terminal	Hioki PL14

Data Loggers	
MEMORY HiLOGGER LR8450-01	MEMORY HiLOGGER LR8450
Type	Model with wireless LAN
Maximum number of connectable modules	4 plug-in modules + 7 wireless modules Modules are sold separately
Maximum number of current channels	Up to 55 With U8556(plug-in) x 4 + LR8536(wireless) x 7
Pulse input	8 channels
Alarm output	8 channels

Combined accuracy

■ AC/DC CURRENT SENSOR CT7812

Range	Resolution	Instantaneous value (DC)
2.0000 A	0.0002 A	±0.38% rdg. ±0.0037 A
200.0 mA	0.1 mA	±0.38% rdg. ±2.4 mA

■ AC/DC CURRENT SENSOR CT7822

Range	Resolution	Instantaneous value (DC)
20.000 A	0.002 A	±0.38% rdg. ±0.037 A
2.000 A	0.001 A	±0.38% rdg. ±0.024 A

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