HIOKI

POWER ANALYZER PW4001

NEW

Precision and Portability Perfectly Combined

CE 3 year Warranty

RAAD INGENIEROS
TRANSFORMANDO A MÉXICO CON ENERGÍA

Redesigned for modern EV testing

Lab-grade precision Field-ready

Power Analyzer PW4001

feature

Basic accuracy	± 0.04%
Frequency bandwidth	600 kHz
Data update rate	1 ms

Engineered for the tasks you face—wherever you work

16-bit, 2.5 MHz
Widedynamic rangewith high-resolution ADC

–20°C to +50°C
Wide operating temperature range enables installation right inside the chamber.

External power source
AvailableDC 10.5Vto28V battery

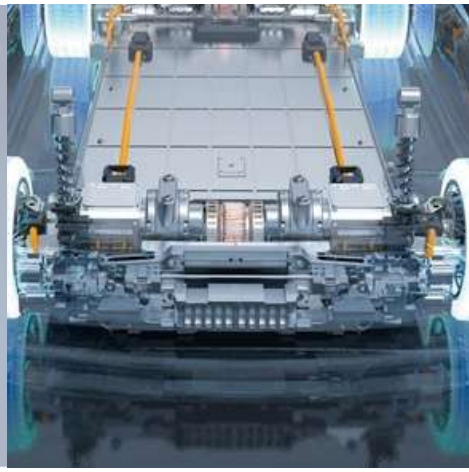
Input & output
Acquire voltagevia OBD-II, integrate measured data with ECU signals

Benefit

Benef it 01 Capture transient power changes with high precision

Evaluate motor and inverter efficiency with 1 ms data updates and 600 kHz bandwidth. Even transient power losses are measured accurately.

- Capture motor power fluctuations with millisecond precision
- Evaluate efficiency for high-frequency inverters
- ***Automatically detect charge and regeneration to calculate efficiency***



Benef it 02 Reduce setup time in drive range testing

Ensure accurate measurements even at –7 °C. With direct CAN voltage input and flexible, vehicle-side installation, test setup is faster and safer.

- Accuracy maintained at –7 °C. Install directly in cold chambers
- Use a compact setup near the vehicle and expand channels with synced units
- Acquire battery voltage via CAN—safe and simple

Benef it 03 Use it on the road Designed for real-world driving tests

Measure power without vehicle modification. OBD-II input and 10.5 V to 28 V DC power supply make in-vehicle use easy.

- Operates from –20°C to +50°C—ready for harsh environments
- Run on DC power for easy in-vehicle installation
- Use OBD-II CAN bus for safe, real-time vehicle data acquisition

Benef it 04 Ensure production quality with waveforms and numbers

Combining waveforms and numerical values ensures reliable, quantifiable quality in mass production.

- Verify efficiency with ±0.04% accuracy at DC and 50 Hz/60 Hz
- Direct voltage input up to 1500 VDC
- 2.5 MHz sampling enables waveform evaluation of switching events

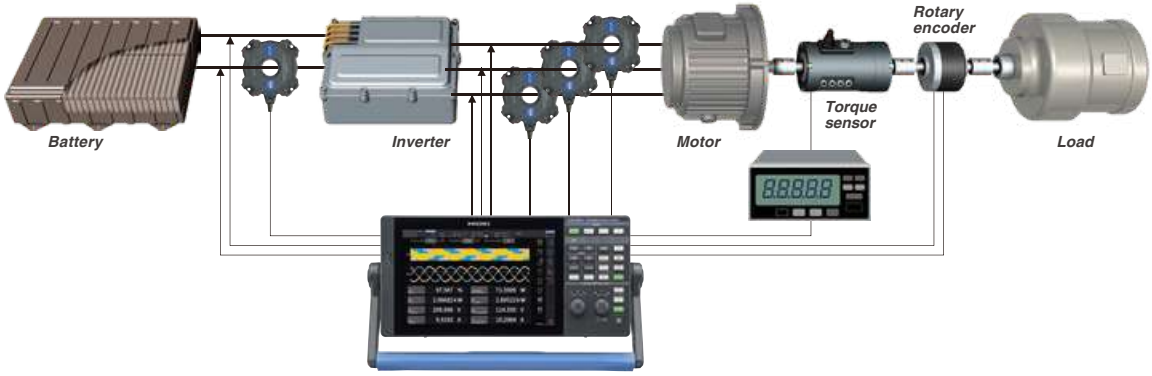
Benef it
01

Capture transient power changes with high precision

Obtain high-resolution, real-time data on powertrain dynamics

Wideband performance that matches real-world motors

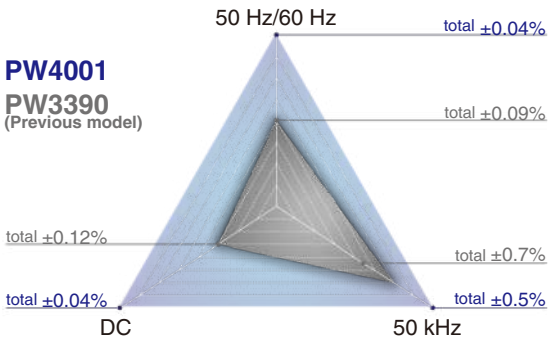
Today, most motor inverters operate at carrier frequenciesaround 10kHz to 20 kHz. Accurate evaluation of power losses requires a power analyzer that can measure harmonic components far beyond the carrier frequency. Despite its compact size, the PW4001 offers a 600 kHz bandwidth, ensuring accurate measurement of high-frequency components. It enables reliable efficiency evaluation across various inverter-driven motors.



Industry-leading precision

The PW4001 delivers Hioki's top-class accuracy of ±0.04% at DC and 50/60 Hz. It also maintains excellent measurement accuracy across a wide frequency range, enabling precise evaluation of power conversion efficiency. When combined with Hioki's current sensors, total system basic accuracy is within ±0.1% using through-type sensors*, and within ±0.3% using high-accuracy clamp sensors such as the CT683X* and CT684X series.

***Some exceptions apply. See data sheet for details.**



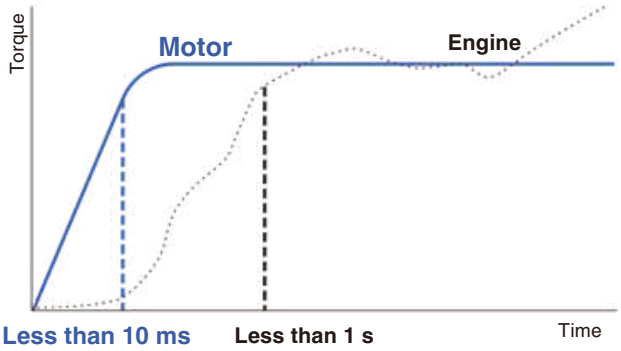
Dynamic powertrain behavior with millisecond precision

1 ms data update

The PW4001 provides measurement data with a 1 ms update rate, enabling precise acquisition of steep power transitions and high-speed control phenomena inherent in modern powertrain systems. This capability offers more than just high-speed data acquisition, it ensures measurement integrity with maintained accuracy, even under rapidly changing electrical conditions.

Data update rate: 1 ms, 10 ms, 50 ms, 200 ms

Averaging and user-definedoperations are unavailable when the data update interval is set to 1 ms.
When the data update interval is 1 ms, add ±0.1% of the range to the voltage, current, and active power accuracy.

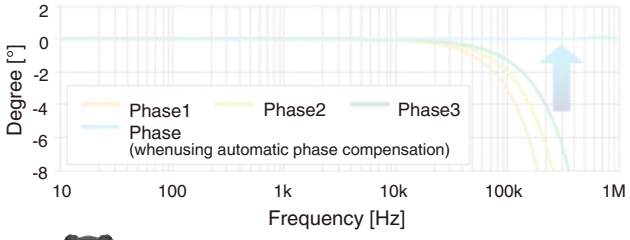


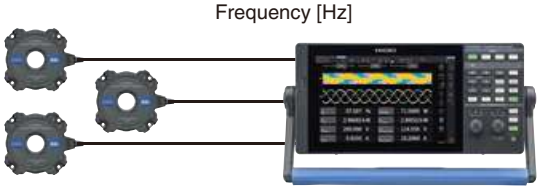
Never lose accuracy due to current sensor phase delay

Automatic phase compensation with sensor-specific calibration

The PW4001 features automatic phase compensation using factory-calibrated sensor profiles, ensuring accurate power measurement across a wide frequency range. Unlike conventional analyzers that use a uniform correction curve, Hioki individually characterizes each current sensor during production. These unique phase characteristics are stored and utilized in real time, ensuring compensation reflects the actual behavior of each sensor.

Example of the automatic phase compensation for the AC/DC current sensor



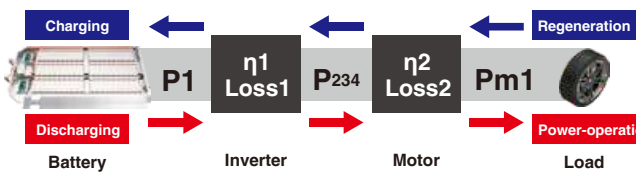


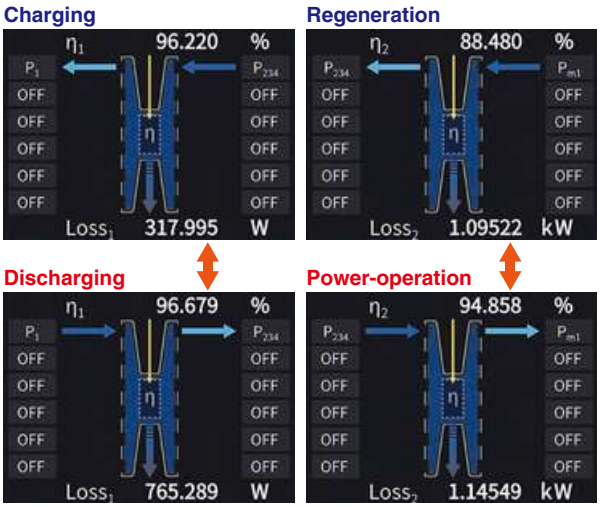
Automatically detects charge and regeneration for accurate efficiency calculation

Automatic switching of efficiency calculation based on power flow

The PW4001 detects charging/discharging and power- operation/regeneration states , automatically switching energy flow direction. This prevents efficiency readings from exceeding 100% during regenerative operation.

η: power efficiency **Loss**: power loss





Benef it
02

Reduce setup time in drive range testing

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–20°C ready. More flexible at the test site.

Low-temperature compliance with certified accuracy

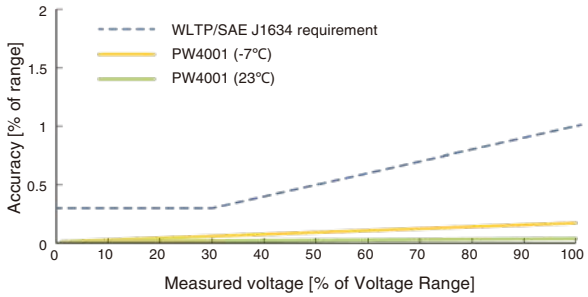
WLTP regulations require low-temperature testing at–7°C.
With an operating range of –20°C to +50°C, the PW4001 maintains certified accuracy even when installed directly in cold test chambers — ensuring full compliance without compromise.

Simplifying WLTP and SAE J1634 measurements for engineers

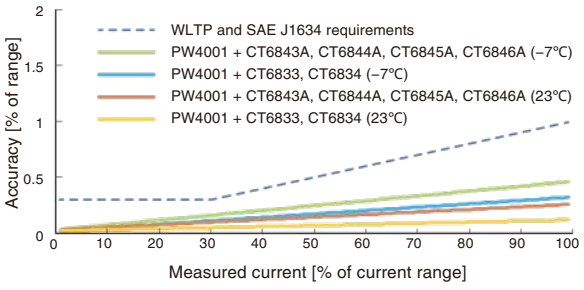
Achieving accurate EV range and energy consumption testing under WLTP standards

PW4001 meets WLTP/SAE J1634 requirement

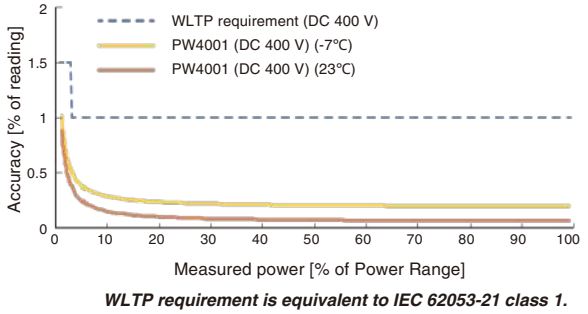
Voltage accuracy



Current accuracy



Power integration accuracy



WLTP requirement is equivalent to IEC 62053-21 class 1.

CT6833
200A (rms)
CT6834
500A (rms)

Measurementaccuracy
±0.07% of reading
Frequency range
DC to 50 kHz

CT6843A
200A (rms)
0.2% of reading
DC to 700 kHz

CT6844A
500A (rms)
0.2% of reading
DC to 500 kHz

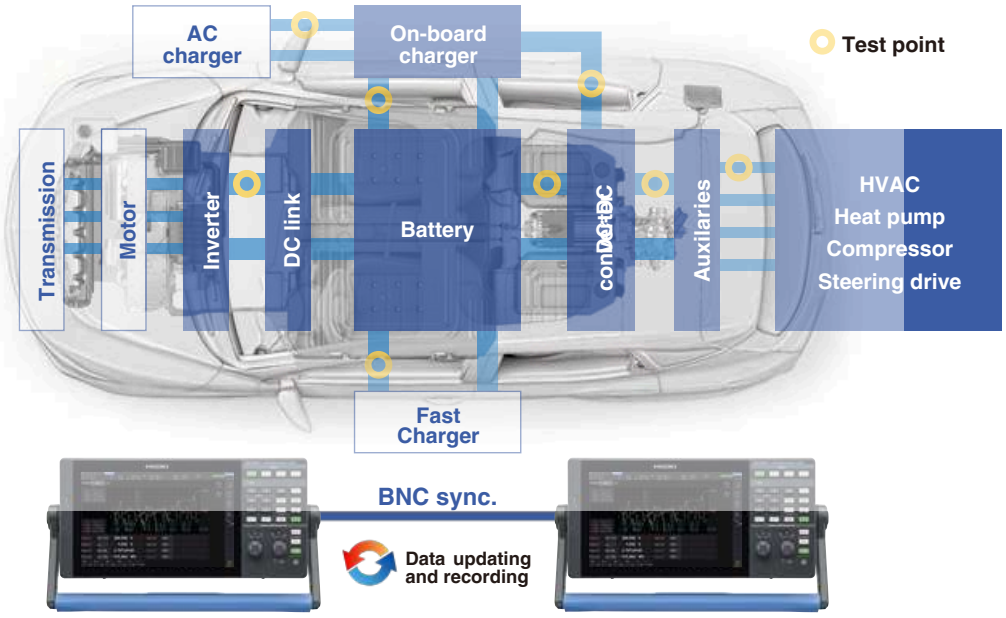
CT6845A
500A (rms)
0.2% of reading
DC to 200 kHz

CT6946A
1000 A (rms)
0.2% of reading
DC to 100 kHz

Scalable to match the growing complexity of power systems

Synchronized power measurement across 32 points

Understanding vehicle power consumption in detail requires increasing the number of measurement points. With BNC synchronization, up to eight PW4001 units can align both integration start and sampling timing—enabling simultaneous measurement at up to 32 points. This allows engineers to evaluate the entire power network of complex EV systems with high accuracy and time alignment.

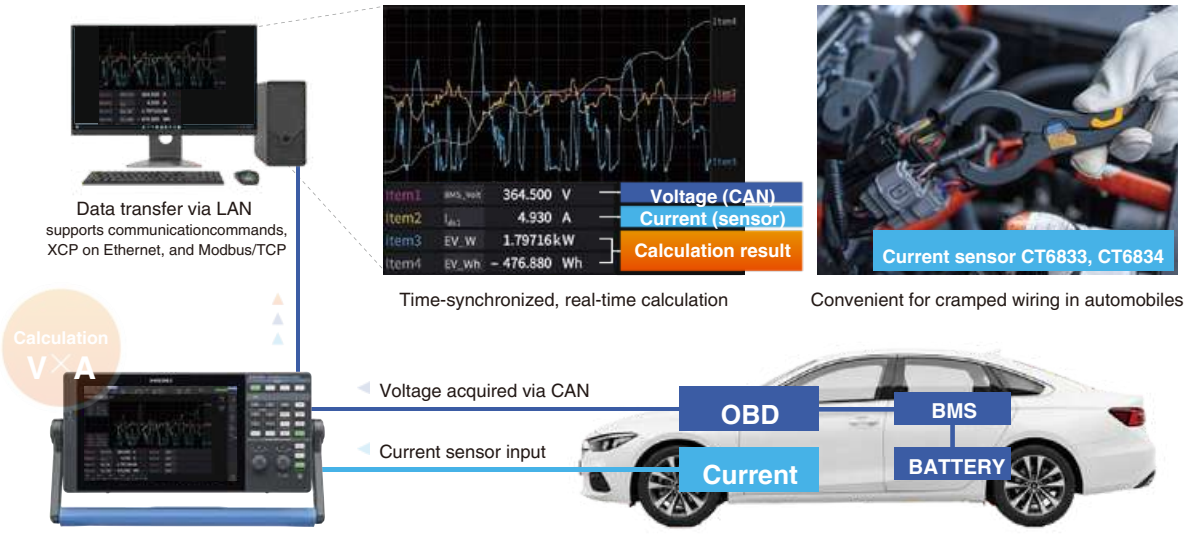


Faster, safer testing—no high-voltage probing required

Faster testing with vehicle voltage via CAN

In final vehicle testing, connecting voltage probes to high-voltage lines is both complex and risky. Traditionally, engineers retrieved voltage values via CAN from the BMS and manually merged them with current measurements after testing. With the PW4001, direct CAN voltage acquisition and current measurement occur simultaneously. Power calculations are performed in real time using time-synchronized data—eliminating the need for manual merging and reducing setup and test times significantly.

Utilizing Vehicle On-Board CAN Data to Simplify WLTP Energy Consumption Evaluations



Benef it
03

Use it on the road
Designed for real-world driving tests

Trusted lab accuracy — now in real road conditions.

Power consumption testing in real driving conditions

WLTP andEPA testsare conducted on chassisdynamometers using standardized driving cycles. However, real roads are unpredictable—gradient, stop-and-go traffic, rapid acceleration, and ambient temperature changes all affect vehicle performance. Real Driving Emissions (RDE) testing captures these real-world variations, making it essential for evaluating true energy consumption and ensuring compliance under actual usage conditions.

Simplify RDE Testing with Seamless Energy Consumption Analysis

Reliable accuracy in harsh test environments

Driving tests in real conditions expose measurement systems to vibration, temperature fluctuations, and load changes. In such environments, sensor noise immunity and environmental durability are essential.
Without high-precision instruments, subtle changes in current or power may go undetected—leading to inaccurate evaluations and missed issues in performance.

Vibration resistance
vibration acceleration: 45 m/s² (4.6 G)

External DC powered 10.5 V - 28 V

(PW4001-04,PW4001-05)

No portable AC power supply needed—the PW4001 runs directly on 12 V or 24 V DC power, making it easy to install in vehicles for road testing.

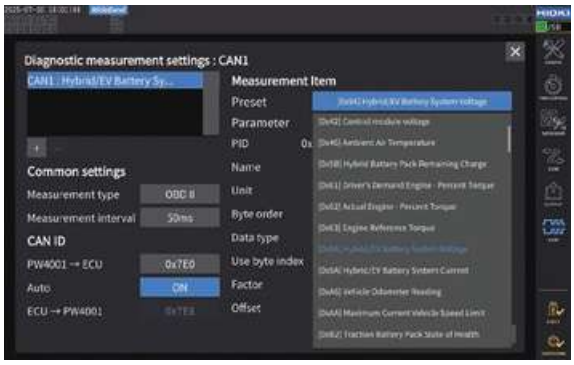
Test real-world power consumption without risky modifications

Power consumption measurement via CAN

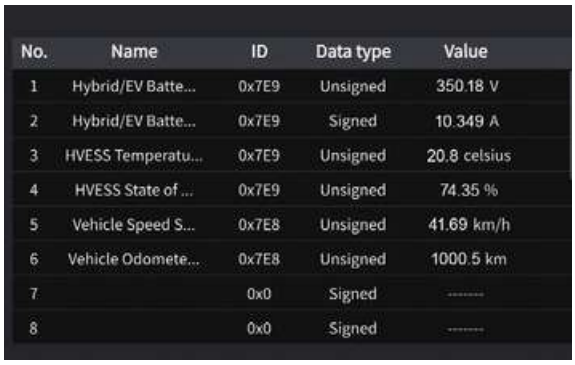
The PW4001 offers a safer, smarter solution: Using Diagnostic ID (DID)-based CAN communication, it retrieves battery voltage directly via the OBD-II port, calculating real-time power without touching high-voltage lines. You can also log custom CAN signals—such as vehicle speed, distance traveled, or gear status—alongside power data for deeper analysis of driving behavior and electrical load.

OBD-II PW4001

Communication: Supports ISO 15765-2 DoCAN
*DoCAN: Diagnostic Communication over CAN



OBD standard:
select SAE J1979, SAE J1979-2 parameters



No.	Name	ID	Data type	Value
1	Hybrid/EV Batte...	0x7E9	Unsigned	350.18 V
2	Hybrid/EV Batte...	0x7E9	Signed	10.349 A
3	HVESS Temperatu...	0x7E9	Unsigned	20.8 celsius
4	HVESS State of ...	0x7E9	Unsigned	74.35 %
5	Vehicle Speed S...	0x7E8	Unsigned	41.69 km/h
6	Vehicle Odomete...	0x7E8	Unsigned	1000.5 km
7		0x0	Signed	------
8		0x0	Signed	------

Each parameter can be checked at a glance
Diagnostic measurement supports logging of up to 6 IDs

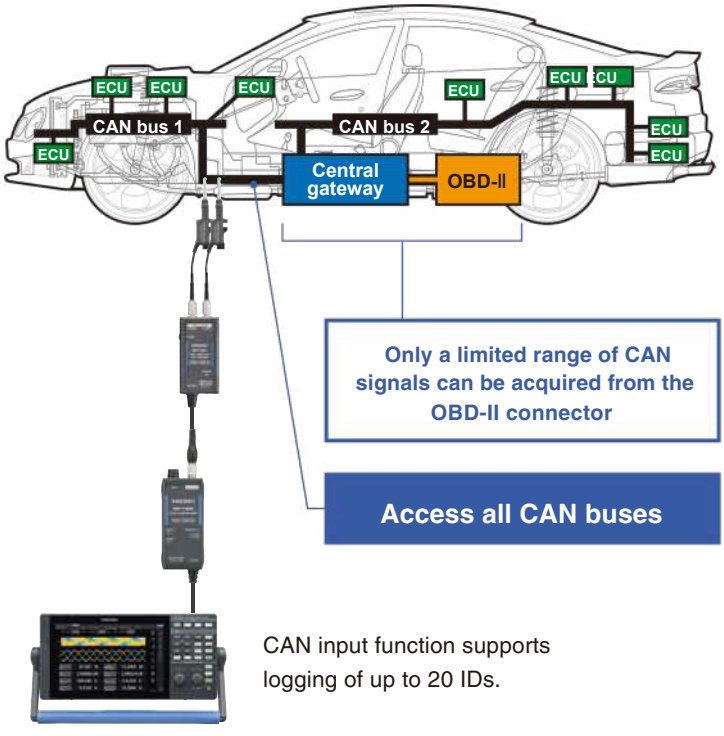
ECU data acquisition—no cable modification required

Non-contact CAN sensor SP7001

Capture CAN bus signals without modifying vehicle wiring.
Enables integration of real-time power data with ECU signals not accessible via OBD-II.

One-handed operation to open the probe tip

Hook the open end to the CAN bus

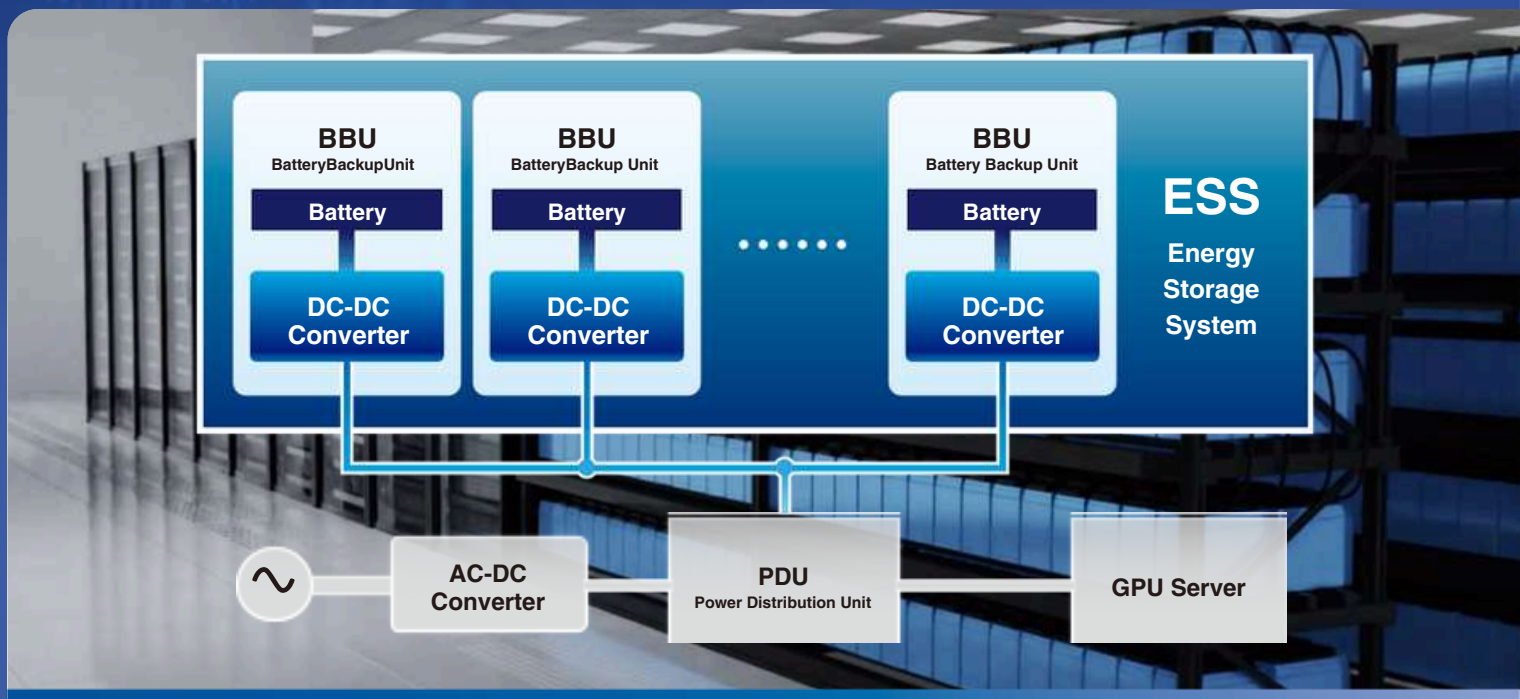


CAN input function supports logging of up to 20 IDs.

Benef it
04

Ensure production quality with waveforms and numbers

Just the precision you need—no more, no less



High-efficiency power conversion for data center ESSs

The growth of AI is increasing the power consumption of datacenters, creating a demand for highly energy-efficient equipment and components. Among these, the DC-DC converters used in ESSs are critical components that determine the charging and discharging efficiency of ESSs and directly impact a data center's energy cost. ESS system with multiple DC-DC converters — where even a 0.1% efficiency gain makes a critical difference.

How Do You Measure a 0.1% Efficiency Improvement in ESS DC-DC Converters?

±0.04% DC accuracy for development testing. Compact and cost-effective for production testing.

In development testing, the PW4001 delivers world-class DC accuracy, enabling precise measurement of power conversion efficiency and losses in DC-DC converters.

In production testing, measurement accuracy is more than a spec—it proves product quality. In addition, the PW4001 is more compact and cost-effective than conventional power analyzers.

Efficiency testing in development and production

Capture not just values—but the input and output waveforms

Waveform trigger & cursor

During power outages, multiple battery units must begin supplying power within a defined time. To ensure DC-DC converters switch correctly between charge and discharge modes, it's essential to record current waveforms, not just numerical results. A high-precision, high-speed power analyzer enables accurate waveform capture, enhancing the reliability and quality of testing.

High-precision DC ripple observation with 16-bit resolution

The PW4001's 16-bit resolution makes it possible to observe fine ripple components on DC signals with exceptional clarity. This capability is essential for evaluating converter stability and efficiency with high precision.

Capture waveforms

Sampling up to 2.5 MS/s
Level and Event trigger for waveform capture

Principal test parameters

- *Input/output voltage*
- *Input/output current*
- *Input/output active power*
- *Charge/discharge energy*
- *Conversion efficiency*
- *etc.*

U_{dc1}	53.0351 V
I_{dc2}	23.689 A
P_2	1.2563 kW
η_1	80.237 %

Ripple measurement with cursor function

Direct voltage input up to 1500 VDC

The PW4001 supports 1500 VDC CAT II and 1000 VDC CAT III for safe measurement with direct input of high voltages. For development/production testing of DC-DC converters for next generation data centers with 800 VDC architecture (HVDC architecture), no additional equipment such as differential probes is required.

Measurements across a wide current range

DC-DC converters in ESS applications operate in two distinct modes:

Discharge mode

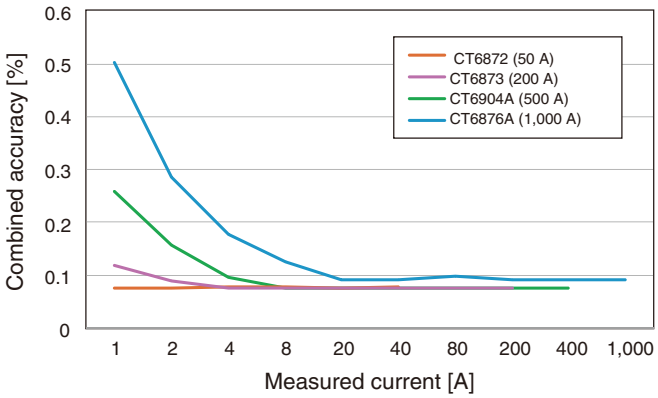
Delivers several hundred amps to the grid or local load during peak hours.

Charge mode

Slowly recharges at 10 A or less, typically overnight, to protect battery health and reduce grid impact.

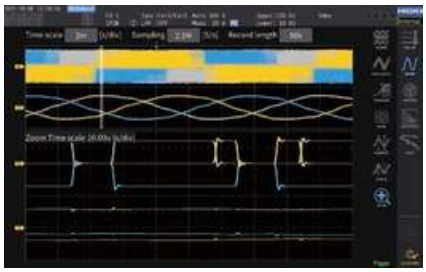
This means the current spans from just a few amps to several hundred amps, depending on the mode.

Hioki offers a lineup of current sensors to accommodate measurement requirements in a variety of applications.



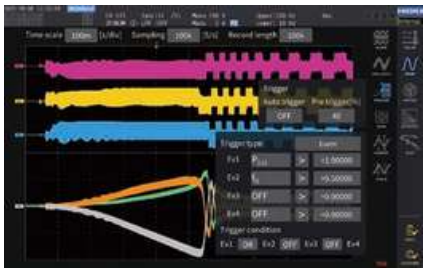
Waveform observation

All-in-one oscilloscope versatility, engineered for power



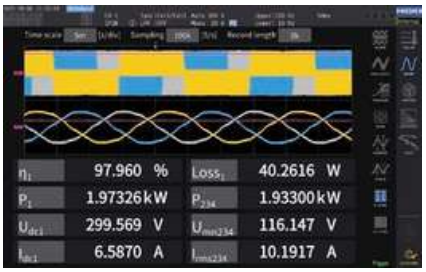
Zoom & Cursor measurement

Analyze finedetailsoftransientsand switching behavior.



Level & Event trigger

Capture onlytheeventsyoucare about, without noise.



Waveform + Value display

Seenumericaltrendsandwaveformsin sync.

Record waveforms and parameters

High-capacity waveform storage

Recordlong eventswithout missingkeytransitions.

Recording length	*5 megawords*
2.5 MS/s	*2 s*
100 kS/s	*50 s*

Long-term trend graphs

Track behavioracrossdrivecycles or endurance tests.

- ***Plot up to 8 items simultaneously in the trend graph***
- ***16-channel output available with the optional D/A output***
- ***Output waveforms at up to 1 MHz sampling***

8-CH oscilloscope-like visibility with true power accuracy

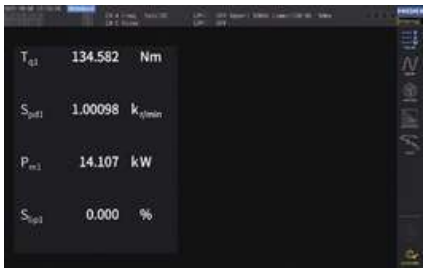
The PW4001 is the ideal entry model for engineers who want to go beyond viewing waveform and start accurate power efficiency testing.

Oscilloscope or Power Analyzer? Make the Right Call

- **Features 4 voltage and 4 current channels—like an 8-channel scope—but purpose-built for power.**
- **Eliminates the need for differential probes, reducing cost compared to most 8-CH oscilloscopes.**
- **Comes with a setup guide screen to ensure correct power measurement from the start.**

Analysis & Calculation

Insights for faster design improvement



Motor analysis

View torque, RPM,and power in real time for motor tuning.

Harmonic analysis up to 500th order

Deepinsight into power quality, visualized in both graph and list view.

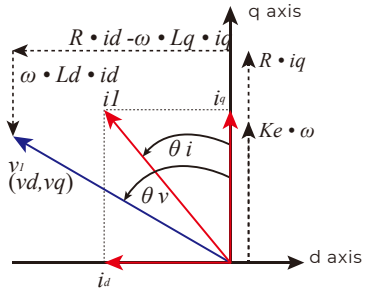
Four-circuit vector analysis

Instantlysee powerflow andphase angles across complex wiring.

id/iq & electrical angle calculation for real-time motor control validation

User-defined formula (UDF)

Runupto20 custom calculationsinreal time. Convert 3-phase motor current to id/iq for control validation.

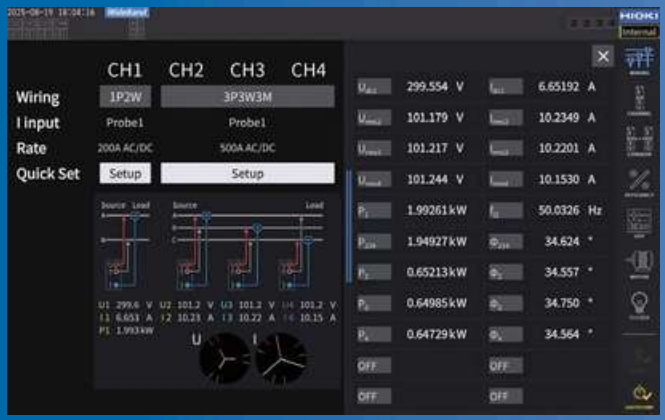


$$Ld = \frac{vq - Ke \cdot \omega - R \cdot iq}{\omega \cdot id} \quad Lq = \frac{R \cdot id - vd}{\omega \cdot iq}$$

Motor parameter calculation

Accuratelymeasureoperating Ldand Lq values, essential for synchronous motor control, even under varying current conditions.

Prevent setup errors, start power measurements with confidence



Wiring guide

Avisual checkprevents wiring mistakes, even in complex 3-phase setups.

Easy signal settings

Justclickthe signaltype(e.g., DC, AC, PWM) to automatically set zero-crossing detection and filtering

Interface

Flexible and easy system integration

Model	Standard function	D/A output	Motor analysis	External power source
PW4001-01	4 ch, 15 GB internal memory, CAN interface	-	-	-
PW4001-02		✓	-	-
PW4001-03		-	✓	-
PW4001-04		-	-	✓
PW4001-05		✓	✓	✓

Isolated voltage input

- Direct input AC 1000 V, DC 1500 V
- Available 5000 V AC/DC High voltage divider VT1005

Portable and compact design

- 4.6 kg
- 360° handle

External power source

(PW4001-04, PW4001-05)

- DC 10.5 V to 28 V

Control key

10.1-inch WXGA

- Color TFT LCD touchscreen

USB flash drive

Internal storage, 15 GB

- Real-time data recording

Motor analysis

(PW4001-03, PW4001-05)

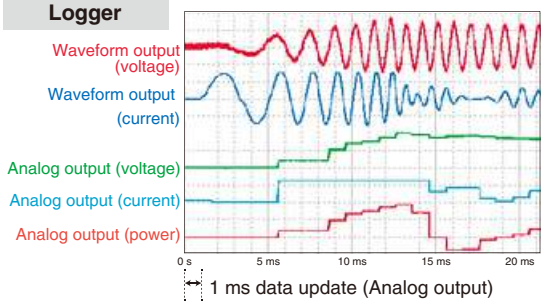
- Supports up to 2 motors
- Torque sensor: voltage or frequency input
- Rotary encoder: pulse or frequency input

Waveform & D/A output

(PW4001-02,PW4001-05)

- Real-time waveform output, 1 MHz
- Converts measurement data to analog voltage
- Integrates with external loggers

Logger



Interface

- LAN
- USB 2.0 (communication)
- EXT. control
- BNC sync.
- CAN, CAN FD

LAN integration for test systems

- 100BASE-TX/1000BASE-T
- SCPI, Modbus/TCP, XCP-on-Ethernet
- Seamless integration with automated test environments

Up to 32-channel sync via BNC

Synchronize integration and sampling across up to 8 PW4001 units via BNC, enabling simultaneous measurement and recording on 32 channels.

Data updating and recording

Software

Smart software connectivity—no code, no complexity

HTTP server function

Access and control the PW4001 from any browser—no coding required.

PW data receiver

Retrieve 1 ms data in real time with ease—no complex setup needed.

Data recording interval	Maximum number of power parameters
1 ms	50 items
10 ms	500 items
50 ms	2500 items
100 ms	5000 items
Over 200 ms	10000 items

Gennect One

Centralize control and data from multiple Hioki instruments via LAN.

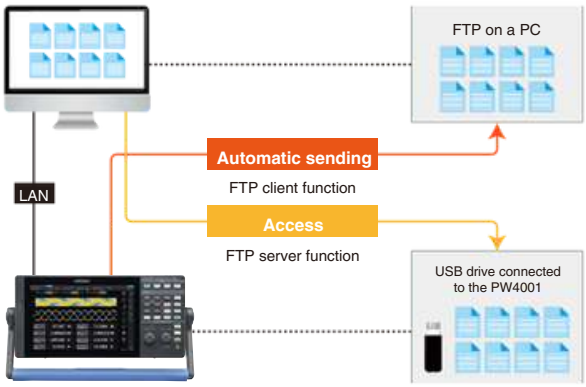
- **Logging and dashboard, up to 1 s interval**
- **Remote controlling**
- **File acquisition**

Download GENNECT One SF4000 to your PC

(Firmware V1.20 or later)

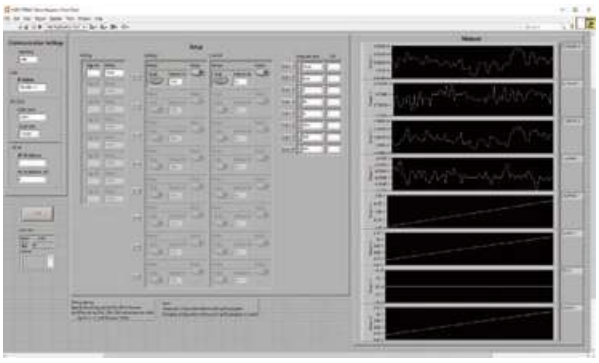
FTP server and client function

Use the PW4001's internal storage like a remote file server.



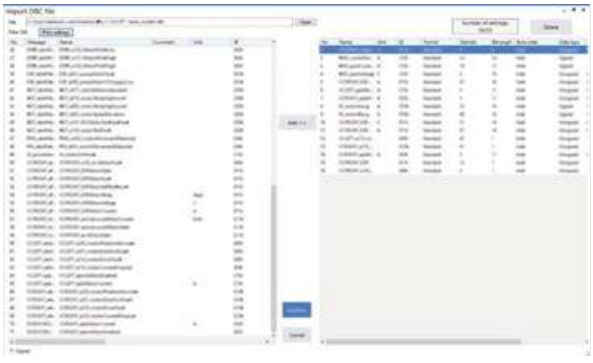
LabVIEW® , MATLAB driver

Seamless integration into automation and data analysis workflows.



CAN Editor

Load DBC files and select CAN signals easily for synchronized logging.



Specifications

Basic Specifications

Power Analyzer PW4001

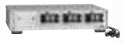
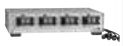
Model (order code)	Standard functions	D/A output	Motor analysis	External power source
P W4 0 01- 01	4 ch, 15 GB internal memory, CAN interface	-	-	-
PW4001-02		✓	-	-
PW4001-03		-	✓	-
PW4001-04		-	-	✓
PW4001-05		✓	✓	✓

Measurement lines	***Single-phase 2-wire, single-phase 3-wire, three-phase 3-wire, three-phase 4-wire***
Number of channels	***4 (4 voltage, 4 current, isolated between each channel)***
Measurement frequency bandwidth	***DC, 0.1 Hz to 600 kHz***
Sampling	***16 bit, 2.5 MHz***
Data update rate	***1 ms, 10 ms, 50 ms, 200 ms***
Accuracy for power	***DC, 50/60 Hz: ±0.03 % reading ± 0.01 % range 50 kHz: ±0.40 % reading ± 0.10 % range***
Voltage measurement range	***Voltage: 6 V, 15 V, 30 V, 60 V, 150 V, 300 V, 600 V, 1500 V***
Current measurement range	***Current: 40 mA to 2000 A (depends on current sensor)***
Measurement parameters	***Voltage (U), current (I), active power (P), apparent power (S), reactive power (Q), power factor (λ), phase angle (φ), voltage frequency (fU), current frequency (fI), efficiency (η), loss (Loss), voltage ripple factor (Urf), current ripple factor (Irf), current integration (Ih), power integration (WP), voltage peak (Upk), current peak (Ipk) Wideband mode: (max. analysis order of 500th)***
Harmonic measurement	***Recording capacity: up to 5 mega-words for any waveform (current, voltage, motor)***
Waveform recording	***Voltage, torque, RPM, frequency, slip, motor-power power spectrum analysis***
Motor analysis (option)	***Efficiency-loss calculations, user-defined formula, delta conversion, current sensor automatic phase shift compensation***
Calculation function	***USB flash drive, LAN, USB (function), external control, BNC sync., CAN or CAN FD***
External interface	***100 V to 240 V AC, 50/60 Hz, 230 VA 10.5 V to 28 V DC***
Power supplies	***361 (W) × 176 (H) × 135 (H) mm (14.21 (W) × 6.93 (H) × 5.31 (D) in.), 4.6 kg (162.3 oz.)***
Dimensions and weight	***Startup guide × 1, power cord × 1, USB cable × 1, D-sub connector × 1 (PW4001-02, PW4001-05), DC power supply connector (PW4001-04, PW4001-05)***
Included accessories	

Data sheet
Specifications details here

Options

Current sensor lineup

	Model	Rated current	Max. peak current	Frequency range	Amplitude accuracy 50/60 Hz	Diameter of measurable conductors	Cable length	Automatic phase correction	Operating temperature
Pass-through types									
	CT6862-05	50 A rms	±141 A peak	DC to 1 MHz	±0.05% rdg. ±0.01% f.s.	φ24 mm (0.94 in.)	3 m (9.84 ft.)	-	–30°C to 85°C –22°F to 185°F
	CT6872 CT6872-01	50 A rms	±200 A peak	DC to 10 MHz	±0.03% rdg. ±0.007% f.s.	φ24 mm (0.94 in.)	3 m (9.84 ft.) 10 m (32.81 ft.)	Yes	–40°C to 85°C –40°F to 185°F
	CT6863-05	200 A rms	±565 A peak	DC to 500 kHz	±0.05% rdg. ±0.01% f.s.	φ24 mm (0.94 in.)	3 m (9.84 ft.)	-	–30°C to 85°C –22°F to 185°F
	CT6873 CT6873-01	200 A rms	±350 A peak*1	DC to 10 MHz	±0.03% rdg. ±0.007% f.s.	φ24 mm (0.94 in.)	3 m (9.84 ft.) 10 m (32.81 ft.)	Yes	–40°C to 85°C –40°F to 185°F
	CT6875A CT6 875A -1	500 A rms	±1500 A peak*1	DC to 2 MHz DC to 1.5 MHz	0.04% rdg. ±0.008% f.s.	φ36 mm (1.42 in.)	3 m (9.84 ft.) 10 m (32.81 ft.)	Yes	–40°C to 85°C –40°F to 185°F
	CT6904A	500 A rms	±1000 A peak*1	DC to 4 MHz	±0.02% rdg. ±0.007% f.s.	φ32 mm (1.26 in.)	3 m (9.84 ft.)	Yes	–10°C to 50°C 14°F to 122°F
	CT6876A CT6 876A -1	1000 A rms	±1800 A peak*1	DC to 1.5 MHz DC to 1.2 MHz	0.04% rdg. ±0.008% f.s.	φ36 mm (1.42 in.)	3 m (9.84 ft.) 10 m (32.81 ft.)	Yes	–40°C to 85°C –40°F to 185°F
	CT6 87 7A CT6877A-1	2000 A rms	±3200 A peak*1	DC to 1 MHz	0.04% rdg. ±0.008% f.s.	φ80 mm (3.15 in.)	3 m (9.84 ft.) 10 m (32.81 ft.)	Yes	–40°C to 85°C –40°F to 185°F
Clamp types									
	CT6830	2 A rms	±4.3 A peak	DC to 100 kHz	±0.3% rdg. ±0.05% f.s.	φ5 mm (0.20 in.)	4 m, 20 cm*3 (13.12 ft., 7.87 in.)	Yes	–40°C to 85°C –40°F to 185°F
	CT6 8 31	20 A rms	±43 A peak	DC to 100 kHz	±0.3% rdg. ±0.01% f.s.	φ5 mm (0.20 in.)	4 m, 20 cm*3 (13.12 ft., 7.87 in.)	Yes	–40°C to 85°C –40°F to 185°F
	CT6833 CT6833-01	200 A rms	±600 A peak	DC to 50 kHz	±0.07% rdg. ±0.007% f.s.	φ20 mm (0.79 in.)	5 m (16.4 ft.) 10 m (32.8 ft.)	Yes	–45°C to 85°C –49°F to 185°F
	CT6834 CT6834-01	500 A rms	±800 A peak	DC to 50 kHz	±0.07% rdg. ±0.007% f.s.	φ20 mm (0.79 in.)	5 m (16.4 ft.) 10 m (32.8 ft.)	Yes	–45°C to 85°C –49°F to 185°F
	9272-05	20 A rms, 200 A rms	±71 A peak, ±430 A peak	1 Hz to 100 kHz	±0.3% rdg. ±0.01% f.s.	φ46 mm (1.81 in.)	3 m (9.84 ft.)	-	0°C to 50°C 32°F to 122°F
	CT6841A	20 A rms	±60 A peak*1	DC to 2 MHz	±0.2% rdg. ±0.01% f.s.	φ20 mm (0.79 in.)	3 m (9.84 ft.)	Yes	–40°C to 85°C –40°F to 185°F
	CT6843A	200 A rms	±600 A peak*1	DC to 700 kHz	±0.2% rdg. ±0.01% f.s.	φ20 mm (0.79 in.)	3 m (9.84 ft.)	Yes	–40°C to 85°C –40°F to 185°F
	CT6844A	500 A rms	±800 A peak*1	DC to 500 kHz	±0.2% rdg. ±0.01% f.s.	φ20 mm (0.79 in.)	3 m (9.84 ft.)	Yes	–40°C to 85°C –40°F to 185°F
	CT6845A	500 A rms	±1500 A peak*1	DC to 200 kHz	±0.2% rdg. ±0.01% f.s.	φ50 mm (1.97 in.)	3 m (9.84 ft.)	Yes	–40°C to 85°C –40°F to 185°F
	CT6846A	1000 A rms	±1900 A peak*1	DC to 100 kHz	±0.2% rdg. ±0.01% f.s.	φ50 mm (1.97 in.)	3 m (9.84 ft.)	Yes	–40°C to 85°C –40°F to 185°F
Direct-wired types									
	PW9100A-3*2	50 A rms	±200 A peak*1	DC to 3.5 MHz	±0.02% rdg. ±0.005% f.s.	M6 screw terminals	3 ch	Yes	0°C to 40°C 32°F to 104°F
	P W 910 0A - 4*2	50 A rms	±200 A peak*1	DC to 3.5 MHz	±0.02% rdg. ±0.005% f.s.	M6 screw terminals	4 ch	Yes	0°C to 40°C 32°F to 104°F

*1: Within 20 ms and 40°C (104°F) or less *2: Special specification PW9100A with a rated current of 5 A can also be ordered.
*3: Between sensor to multiplexer, between multiplexer to output connector

Voltage measurement options

Model		Product	Note
	L10 2 5	VOLTAGE CORD	1500 V DC CATII, 1000 V CATIII, rated current 1 A, banana-banana (red, black, 1 each), alligator clip, approx. 3 m (9.84 ft.) length
	L9438-50	VOLTAGE CORD	1000 V CATIII, 600 V CATIV, rated current 10 A, banana-banana (red, black, 1 each), alligator clip, spiral tube, approx. 3 m (9.84 ft.) length
	L10 0 0	VOLTAGE CORD	1000 V CATIII, 600 V CATIV, rated current 10 A, banana-banana (red, yellow, blue, gray, 1 each, black × 4), alligator clip, approx. 3 m (9.84 ft.) length
	L9257	CONNECTION CORD	1000 V CATIII, 600 V CATIV, rated current 10 A, banana-banana (red, yellow, blue, gray, 1 each, black × 4), alligator clip, approx. 3 m (9.84 ft.) length
	L1021-01	PATCH CORD	1000 V CATIII, 600 V CATIV, rated current 10 A, for branching voltage input, banana branch to banana (red × 1), 0.5 m (1.64 ft.) length
	L1021-02	PATCH CORD	1000 V CATIII, 600 V CATIV, rated current 10 A, for branching voltage input, banana branch to banana (black × 1), 0.5 m (1.64 ft.) length
	L9243	GRABBER CLIP	1000 V CATII, rated current 1 A, (red, black, 1 each)
	L4940	CONNECTION CORD	1000 V CATIII, 600 V CATIV, rated current 10 A, banana-banana (red, black, 1 each), approx. 1.5 m (4.92 ft.) length
	L4935	ALLIGATOR CLIP SET	1000 V CATIII, 600 V CATIV, rated current 10 A, (red, black, 1 each)
	VT1005	AC/DC HIGH VOLTAGE DIVIDER	Voltage divider up to 5000 V and output to a Hioki power analyzer.
	L1050-03	VOLTAGE CORD	For VT1005, 1.6 m (L1050-01), 3.0 m (L1050-03)
	L9217-01	CONNECTION CORD	For VT1005 connection, insulated BNC, 600 V CATII, 300 V CATIII, rated current 0.2 A, 3.0 m (9.84 ft.)
	L9217-02	CONNECTION CORD	For VT1005 connection, insulated BNC, 600 V CATII, 300 V CATIII, rated current 0.2 A, 10 m (32.80 ft.)

Connection options

Model		Product	Note
	L9217	CONNECTION CORD	For VT1005 connection, insulated BNC, 600 V CATII, 300 V CATIII, rated current 0.2 A, 10 m (32.80 ft.)
	9165	CONNECTION CABLE	For BNC synchronization, metal BNC to metal BNC, 1.5 m (4.92 ft.) length
	9713 - 01	CAN CABLE	One end terminating in bare wires, 2 m (6.56 ft.) length
	CT9902	EXTENSION CABLE	For extension of current sensor cable, ME15W-ME15W, 5 m (16.40 ft.) length
	CT9557	SENSOR UNIT	Adds output waveforms from up to 4 current sensors to 1 channel and outputs it to a Hioki power analyzer.
	CT9904	CONNECTION CABLE	Cable length 1m; required in order to connect the CT9557's added waveform output terminal to a Hioki power analyzer.

Others

Model		Product	Note
	SP7001-95	NON-CONTACT CAN SENSOR	Acquires CAN or CAN FD signals, simply by pinching probes over wire insulation. It connects to the CAN connector of the PW4001, supports CAN or CAN FD communication, and can be powered via a USB connector.
	L3000	D/A OUTPUT CABLE	D-sub 25-pin to BNC (male) 20-channel conversion cable
	Z5200	BNC TERMINAL BOX	D-sub 25-pin to BNC (female) 20-channel conversion box
	C4001	CARRYING CASE	Hard trunk type, with casters
	Z5302	RACKMOUNT FITTINGS	For EIA standard rack
	Z5303	RACKMOUNT FITTINGS	For JIS standard rack

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HEADQUARTERS
81 Koizumi,
Ueda, Nagano 386-1192 Japan
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PW4001E3-5XB