

AC/DC CURRENT SENSOR CT6865

Current Sensors 

Measure Heavy Currents in Mega Solar Facilities, EV/HEVs, and more

AC **1000 Arms**
DC \pm **1000 A**



■ CT6865: rating 1000 A rms, DC to 20 kHz frequency band

The AC/DC CURRENT SENSOR CT6865 is the latest addition to Hioki's advanced lineup of high-precision broadband current sensors.

Energy-saving and environmentally friendly technologies are spreading fast. Large-scale solar power plants, electric vehicles, hybrid electric vehicles, and other energy-saving electricity-using technologies are increasingly common. The CT6865 has a broadband capacity of DC to 20 kHz and can be used for a wide range of measurements, from testing the DC side of solar power plants to the secondary side of inverters, handling heavy currents with the same level of precision as a direct-coupled ammeter.

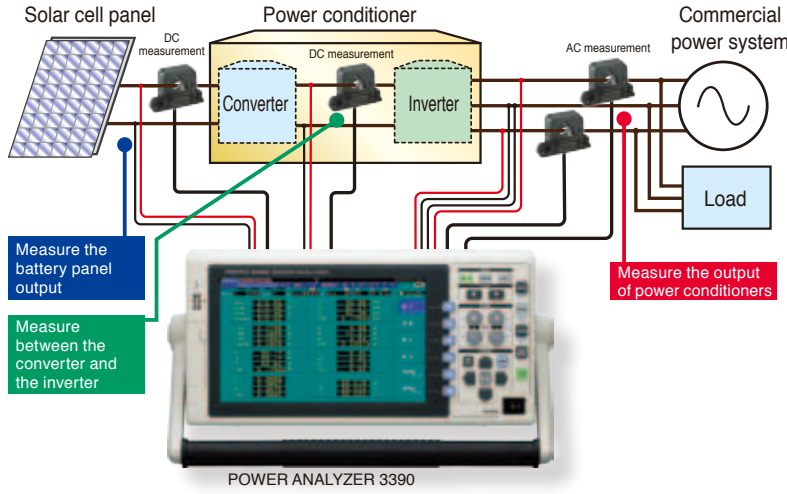
Measure the current at high-capacity mega solar facilities



Works at temperatures from -30°C (-22°F) to 85°C (185°F)



Measure the power output of power conditioners for interconnected systems

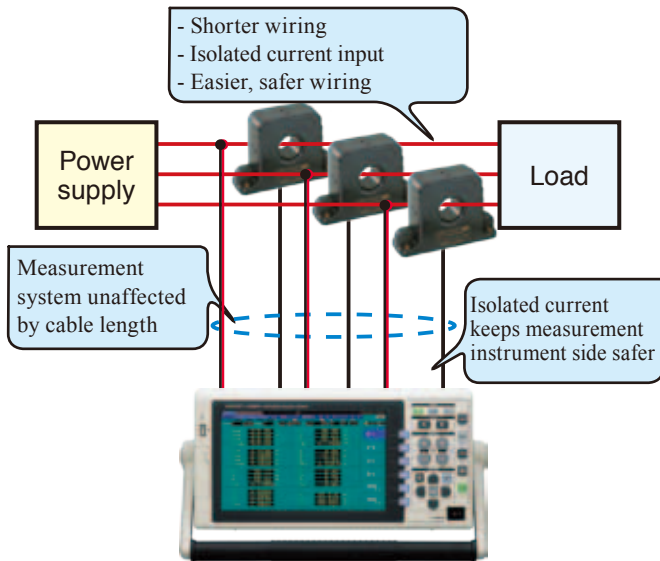


POWER ANALYZER 3390

Basic sensor accuracy of $\pm 0.05\%$ rdg. $\pm 0.01\%$ f.s.

Measure current and power output more accurately with the HIOKI CT6865 CURRENT SENSOR!

■ Only possible with a high current sensor



■ CT6865 specifications

(Accuracy guaranteed for 1 year, Post-adjustment accuracy guaranteed for 1 year)

Rated primary current	1000 A AC/DC
Output voltage	2 V/1000 A
Maximum allowable input	±1200 A DC, 1200 A AC rms (crest value: 1800 A peak)
Basic accuracy DC, 45 to 66 Hz	Amplitude accuracy: ±0.05% rdg, ±0.01% f.s. Phase accuracy: ±0.2 deg (No specified phase accuracy for DC)
Frequency characteristics	DC to 20 kHz
Maximum voltage to ground	CAT III 1000 V AC/DC
Operating temperature and humidity range	-30°C (-22°F) to 85°C (185°F), 80% rh or less (no condensation)
Diameter of measurable conductors	φ34 mm (1.34 in) or less (CV 600 V single core) 325 mm ² (0.50 in ²) or less
Dimensions	Approx. 160 mm (6.30 in) W x 112 mm (4.41 in) H x 50 mm (1.97 in) D

(Note) There are current limits due to derating

■ High-precision current sensor series



■ CT6862
Rating 50 A rms,
φ24 mm (0.94 in)
Band frequency DC
to 1 MHz

■ CT6863
Rating 200 A rms,
φ24 mm (0.94 in)
Band frequency DC
to 500 kHz

■ 9709
Rating 500 A rms,
φ34 mm (1.34 in)
Band frequency DC
to 100 kHz

■ Options

SENSOR UNIT 9555-10

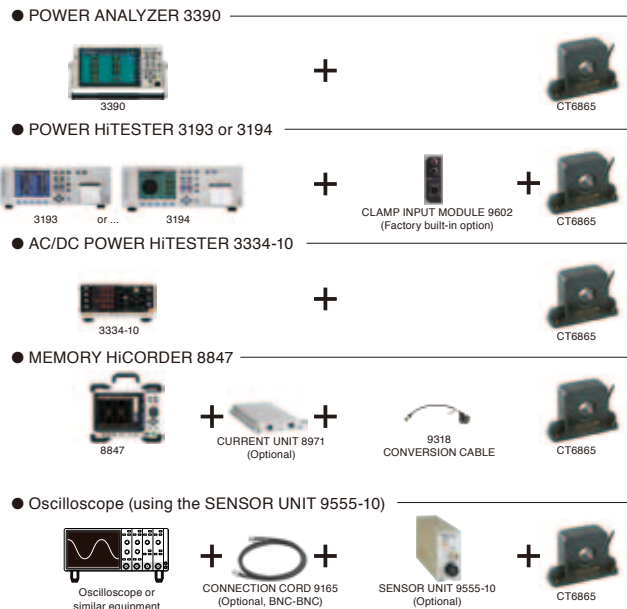
* For power supply when the AC/DC CURRENT SENSOR is used alone.



■ Pioneering a new era of power testing of large currents that delivers high precision, wide bandwidth, and a broad temperature range

- **Maximum accuracy of ±0.16%** - the same as power analyzers using the direct wire connection method (when combined with the POWER ANALYZER 3390)
- **Thicker, shorter wiring** between the power supply and the load, so you can carry out the measurement in a wiring configuration close to the actual operating environment of the device to be measured.
- **Very little insertion loss** compared to shunt resistance, with no influence on the operation of the device to be measured.
- Carry out any measurement from **battery charge and discharge testing to the secondary side of inverters.**
- **Wide temperature range** lets you use the sensor under the same environmental conditions as the device to be measured.
- **Easy, stable, and safe** power line routing.
- Other favorable characteristics include reduced effects from conductor position, external magnetic fields and magnetism
- CAT III 1000 V specifications with an emphasis on safety
- Easy-to-handle voltage output circuitry

■ Connecting with compatible measuring instruments



HIOKI

HIOKI E. E. CORPORATION

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.co.jp

HIOKI USA CORPORATION

TEL +1-609-409-9109 FAX +1-609-409-9108
http://www.hioki.com / E-mail: hioki@hioki.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
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 +82-2-2183-8847 FAX +82-2-2183-3360
E-mail: info-kr@hioki.co.jp