

# AC/DC CURRENT SENSOR CT6862/6863,9709

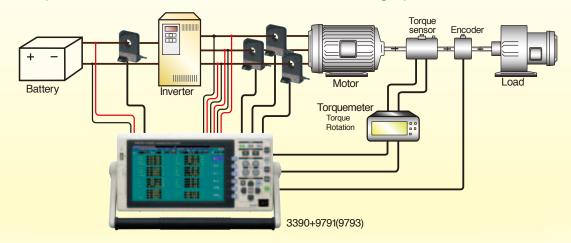
Current Sensors

# Wide-Bandwidth and High-Precision Current Measurement



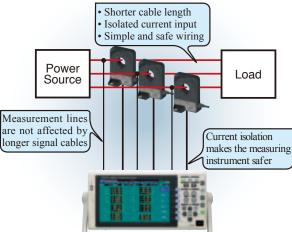
HIOKI 9709, CT6862, and CT6863 wide-bandwidth and high-precision AC/DC current sensors achieve high accuracy measurement of both small- and large-current signals. They can be used for a wide variety of applications in the fields of electric and hybrid electric vehicles, inverters and other devices, alternative energy sources such as solar power and fuel cells, as well as home electronic appliances and system equipment.

#### Ideal for comprehensive evaluation of wide-bandwidth and high-precision inverter motors



## **HIOKI's Current Sensors Support More Accurate Current and Power Measurements**

#### When a current sensor is used:

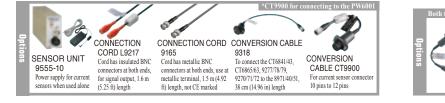


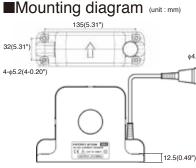
New Age for Current Measurement with High Precision, Wide Bandwidth, and Excellent Temperature Characteristics

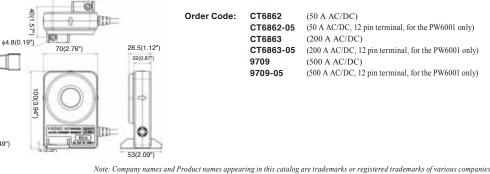
- Achieve a maximum accuracy of  $\pm 0.16\%$ , which is equivalent to power meters using a direct cable connection (when used with the POWER ANALYZER 3390).
- The cable connecting the power source and load can be made thicker and shorter to allow measurement to be performed in nearly the same cable condition as the real operation of a device under test.
- Insert loss is far smaller than with a shunt resistor so the operation of a device under test is not affected.
- A wide range of measurements are possible, including battery charge and discharge measurement and inverter secondary circuit measurement.
- A wide operating temperature range allows the sensor to be used in the same environment conditions as a device under test.
- Installing a power line is simple, secure, and safe.
- Excellent characteristics reduce the effect of the conductor position, external magnetic field, and magnetization
- CAT III 1000V Safe
- Convenient voltage output design

### Specifications

•	CT6862	CT6863	9709
Frequncy characteristics	DC to 1 MHz	DC to 500 kHz	DC to 100 kHz
Rated current	50 A AC/DC	200 A AC/DC	500 A AC/DC
Output voltage	2 V/50 A	2 V/200 A	2 V/500 A
Measurable conductor diameter	26 mm(1.02") or less		36 mm(1.42") or less
Compatible power meters	3193(with 9602), 3194 (with 9602), 3390, PW6001		
Output resistance	50 Ω		
Basic accuracy	DC, $16H z \le f \le 400 Hz$ ±0.05% rdg. ±0.01% f.s. ±0.2 deg Accuracy is given for 0°c to 40°c, 80% rh or less		DC, $45 \text{ Hz} \le f \le 66 \text{ Hz}$ ±0.05% rdg. ±0.01% f.s. ±0.2 deg Accuracy is given for 18°c to 28°c, up to 80% rh
Period of accuracy guaranteed	Accuracy guaranteed for 1 year, Post-adjustment accuracy guaranteed for 1 year		Accuracy guaranteed for 6 months, Post-adjustment accuracy guaranteed for 6 months
Max. rated voltage to earth	AC/DC 1000 V (50/60 Hz) (measurement category III)		
Cord length	3 m (9.84 ft)		
Operating temperature and humidity range	-30°c to 85°c, 80% rh or less (with no condensation)		0°c to 50°c, 80% rh or less (with no condensation)
Dimensions, Mass	70W (2.76") × 100H (3.94") × 53D (2.09") mm, 340 g (12.0 oz)		$160W (6.30") \times 112H (4.41") \times 50D (1.97") mm, 850 g(30.0 oz)$
Supplied Accessories	Instruction manual ×1, Mark bands ×6		







φ4.8(0.19")

45(1.77")

#### 9318 and 9705 are required in order to connect to the F/V Unit 8940 CONVERSION CABLE EXTENSION CARLE 9706 9705 Extension for 5 m (16.41 ft) length, connect up to 2 cables 0.2 m (0.66 ft) length, to 0.2 m (0.00 ft) rengin, to connect the CT6841/6843, CT6863/6865, 9709, 9272-10 to the F/V Unit 8940 in series. Caution! Cannot be used in com bination with the CT6862/63 or 9277 to 9279 Cannot be used in combina tion with the CT6862

### AC/DC CURRENT SENSOR

CT6862 Order Code: CT6862-05 CT6863 CT6863-05 9709 9709-05

(50 A AC/DC) (50 A AC/DC, 12 pin terminal, for the PW6001 only) (200 A AC/DC) (200 A AC/DC, 12 pin terminal, for the PW6001 only) (500 A AC/DC) (500 A AC/DC, 12 pin terminal, for the PW6001 only)

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All information correct as of June 30, 2015. All specifications are subject to change without notice

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