

HIOKI

RAAD
INGENIEROS
TRANSFORMANDO A MÉXICO CON ENERGÍA

AC/DC CURRENT PROBE CT6833, CT6834
AC/DC CURRENT PROBE CT6830, CT6831
AC/DC CURRENT SENSOR CT7812, CT7822

NEW



Unrivaled sensing technology

HIOKI's new current sensor features a small size while delivering precise and reliable performance across a wide temperature range. Perfect for automotive testing, it simplifies installation in tight spaces, enhances measurement accuracy, and improves testing efficiency. Experience innovation that saves time and increases accuracy.



CT6833

200 A(RMS) 500 A(RMS)

Measurement accuracy: $\pm 0.07\%$ of reading
Frequency range: DC to 50 kHz



CT6830

CT7812

CT6831

CT7822

2 A(RMS) 20 A(RMS)

Measurement accuracy: $\pm 0.3\%$ of reading
Frequency range: DC to 100 kHz

CE

Half the size, twice the convenience

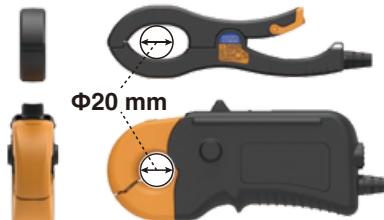
AC/DC CURRENT PROBE
CT6833, CT6834

Current probes for automotive certification testing

With its compact design, these sensors easily connect to cables in tight motor compartments, significantly reducing setup-time and enhancing overall efficiency.

- Current rating 200 A (CT6833) 500 A (CT6834)
- Frequency range: DC to 50 kHz
- Accuracy: $\pm 0.07\%$ of reading
- Operating Temperature: -40°C to +85°C

50% smaller than the previous model

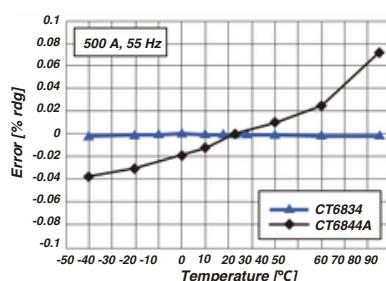


Maximum conductor diameter
Φ20 mm

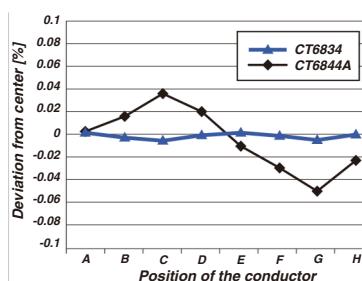
Easy lock mechanism with a single finger

Advanced fluxgate technology that redefines measurement performance

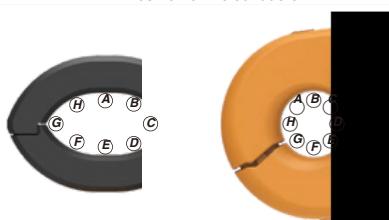
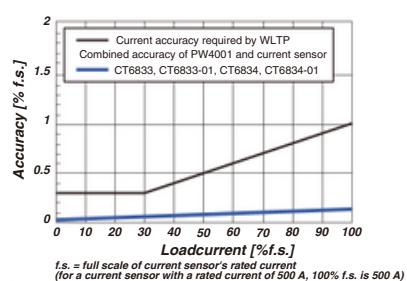
Superior temperature stability



High reproducibility regardless of conductor position



Exceptional accuracy for WLTP across all current ranges



Precision fits in your hand

AC/DC CURRENT PROBE

CT6830, CT6831

AC/DC CURRENT SENSOR

CT7812, CT7822



The future standard in a compact size.

The CT6830, CT6831, CT7812, and CT7822 were developed

with the concept of "easily clamp wires in tight spaces."

As the world's smallest zero-flux AC/DC current probes and sensors, these offer high accuracy with a lightweight design.



Maximum
conductor
diameter
Φ5 mm

- Current rating: **2 A (CT6830, CT7812), 20 A (CT6831, CT7822)**
- Frequency range: **DC to 100 kHz**
- Accuracy: **±0.3% of reading**
- Operating Temperature: **-40°C to +85°C**

For precision power analyzer

CT6830

CT6831



For multichannel data logger

CT7812

CT7822

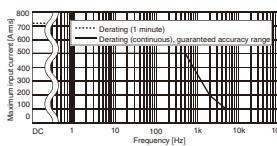
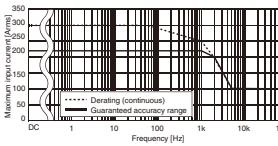
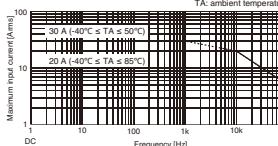
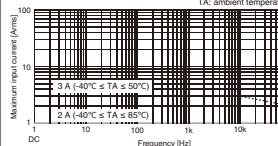


Application

Pinpoint ECU issues in completed-vehicle testing

The compact CT7812(2 A) and CT7822(20 A) sensors access intricate wiring with ease and ensure stable, high-accuracy current measurements. Combined with the LR8450 Data Logger, they record CAN signals and current data simultaneously, enabling quick issue identification.

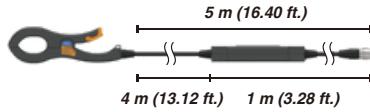
High-accuracy clamp current sensors

	CT6834, CT6834-01	CT6833, CT6833-01	CT6831, CT7822	CT6830, CT7812
Appearance				
Rated current	500 A AC/DC	200 A AC/DC	20 A AC/DC	2 A AC/DC
Frequency band	DC to 50 kHz	DC to 50 kHz	DC to 100 kHz	DC to 100 kHz
Diameter of measurable conductors	Max. Ø 20 mm (0.79 in.)	Max. Ø 20 mm (0.79 in.)	Max. Ø 5 mm (0.20 in.)	Max. Ø 5 mm (0.20 in.)
Accuracy	Sensor only (amplitude) $\pm 0.07\% \pm 0.01\%$ DC $\pm 0.15\% \pm 0.01\%$ DC < f < 16 Hz $\pm 0.07\% \pm 0.01\%$ 16 Hz < f < 66 Hz $66 \text{ Hz } 66 \text{ Hz } \pm 0.07\% \pm 0.01\%$ 100 Hz < f < 500 Hz $100 \text{ Hz } 500 \text{ Hz } \pm 0.07\% \pm 0.01\%$ 500 Hz < f < 1 kHz $500 \text{ Hz } 1 \text{ kHz } \pm 0.07\% \pm 0.01\%$ 1 kHz < f < 20 kHz $1 \text{ kHz } 20 \text{ kHz } \pm 0.1\% \pm 0.01\%$ Sensor: -40°C to 85°C (-40°F to 185°F) $-40^\circ\text{C } 85^\circ\text{C } \pm 0.05\% \pm 0.02\%$ 80% RH or less $80\% \text{ RH } \pm 0.25\% \pm 0.02\%$ 80% RH or less $80\% \text{ RH } \pm 0.25\% \pm 0.02\%$ Relay box: -25°C to 50°C (-77°F to 122°F), 80% RH or less Sensor: approx. 149W x 46H x 16.5D mm (approx. 5.87W x 1.81H x 0.65D in.)	DC $\pm 0.07\% \pm 0.01\%$ DC < f < 16 Hz $\pm 0.15\% \pm 0.01\%$ 16 Hz < f < 66 Hz $66 \text{ Hz } 66 \text{ Hz } \pm 0.07\% \pm 0.01\%$ 100 Hz < f < 500 Hz $100 \text{ Hz } 500 \text{ Hz } \pm 0.07\% \pm 0.01\%$ 500 Hz < f < 1 kHz $500 \text{ Hz } 1 \text{ kHz } \pm 0.07\% \pm 0.01\%$ 1 kHz < f < 20 kHz $1 \text{ kHz } 20 \text{ kHz } \pm 0.1\% \pm 0.01\%$ Sensor: -40°C to 85°C (-40°F to 185°F) $-40^\circ\text{C } 85^\circ\text{C } \pm 0.05\% \pm 0.02\%$ 80% RH or less $80\% \text{ RH } \pm 0.25\% \pm 0.02\%$ Relay box: -25°C to 50°C (-77°F to 122°F), 80% RH or less Sensor: approx. 149W x 46H x 16.5D mm (approx. 5.87W x 1.81H x 0.65D in.)	DC $\pm 0.3\% \pm 0.10\%$ DC < f < 66 Hz $66 \text{ Hz } 66 \text{ Hz } \pm 0.3\% \pm 0.05\%$ 1 kHz < f < 5 kHz $1 \text{ kHz } 5 \text{ kHz } \pm 0.3\% \pm 0.05\%$ 5 kHz < f < 10 kHz $5 \text{ kHz } 10 \text{ kHz } \pm 0.5\% \pm 0.05\%$ 10 kHz < f < 100 kHz $10 \text{ kHz } 100 \text{ kHz } \pm 0.00\% \pm 0.00\%$ 5 kHz < f < 10 kHz $5 \text{ kHz } 10 \text{ kHz } \pm 0.5\% \pm 0.10\%$ 10 kHz < f < 100 kHz $10 \text{ kHz } 100 \text{ kHz } \pm 30\% \pm 0.02\%$ 10 kHz < f < 100 kHz $10 \text{ kHz } 100 \text{ kHz } \pm 30\% \pm 0.02\%$ Sensor: -40°C to 85°C (-40°F to 185°F), 80% RH or less Sensor: -40°C to 85°C (-40°F to 185°F), 80% RH or less Relay box: -25°C to 50°C (-77°F to 122°F), 80% RH or less Sensor: approx. 76.5W x 23.4H x 14.2D mm (approx. 3.00W x 0.92H x 0.56D in.) Relay box: approx. 80W x 20H x 26.5D mm (approx. 3.15W x 0.79H x 1.04D in.)	
Operating temperature	Relay box: -25°C to 50°C (-77°F to 122°F), 80% RH or less Sensor: approx. 149W x 46H x 16.5D mm (approx. 5.87W x 1.81H x 0.65D in.)	Relay box: -25°C to 50°C (-77°F to 122°F), 80% RH or less Sensor: approx. 149W x 46H x 16.5D mm (approx. 5.87W x 1.81H x 0.65D in.)	Relay box: -25°C to 50°C (-77°F to 122°F), 80% RH or less Sensor: approx. 76.5W x 23.4H x 14.2D mm (approx. 3.00W x 0.92H x 0.56D in.) Relay box: approx. 80W x 20H x 26.5D mm (approx. 3.15W x 0.79H x 1.04D in.)	Relay box: -25°C to 50°C (-77°F to 122°F), 80% RH or less Sensor: approx. 76.5W x 23.4H x 14.2D mm (approx. 3.00W x 0.92H x 0.56D in.) Relay box: approx. 80W x 20H x 26.5D mm (approx. 3.15W x 0.79H x 1.04D in.)
Dimensions	mm (approx. 4.96W x 2.24H x 0.81D in.) HIOKI ME15W	mm (approx. 4.96W x 2.24H x 0.81D in.) HIOKI ME15W	mm (approx. 4.96W x 2.24H x 0.81D in.) HIOKI ME15W	mm (approx. 4.96W x 2.24H x 0.81D in.) HIOKI ME15W
Connector type	CT6834: approx. 5 m (16.40 ft.) including relay box	CT6833: approx. 5 m (16.0 ft.) including relay box	CT6831: HIOKI ME15W CT7822: HIOKI PL14	CT6833: HIOKI ME15W CT7812: HIOKI PL14
Cable length	CT6834-01: approx. 10 m (32.81 ft.) including relay box	CT6833-01: approx. 10 m (32.81 ft.) including relay box	Between sensor and relay box: approx. 4 m (13.12 ft.) Between relay box and output connector: approx. 0.2 m (0.66 ft.)	Between sensor and relay box: approx. 4 m (13.12 ft.) Between relay box and output connector: approx. 0.2 m (0.66 ft.)
Weight	CT6834: approx. 500 g (17.64 oz.)	CT6833: approx. 500 g (17.64 oz.)	CT6831: approx. 160 g (5.64 oz.) CT7822: approx. 140 g (4.94 oz.)	CT6830: approx. 160 g (5.64 oz.) CT7812: approx. 140 g (4.94 oz.)
Derating properties				

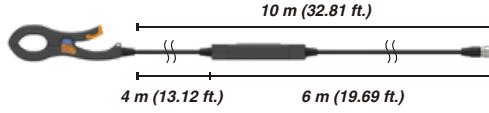
Custom cable lengths are also available. Please inquire with your Hioki distributor.

Cable lengths

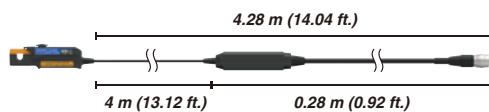
CT6833, CT6834



CT6833-01, CT6834-01



CT6830, CT6831, CT7812, CT7822



Options

CT6830, CT6831, CT6833, CT6834, CT6833-01, CT6834-01	POWER	PW800
ANALYZER		1
POWER		PW400
ANALYZER		1
POWER		PW600



External power supplies and connection cords

POWER ANALYZER	PW339				
Sensor CT9555	Unit Power supply for current sensor with waveform output	Sensor CT9557	Unit Power supply for current sensor with additive function, waveform/RMS output	Connection Cord L9217	Connection Cord 9165
Power supply for current sensor with waveform output	Power supply for current sensor with additive function, waveform/RMS output	BNC with insulation on both ends of the cord, 1.6 m (5.25 ft.)	BNC with metal on both ends of the cord, used for metallic BNC terminals, 1.5 m (4.92 ft.)	Extention cable CT9902	HIOKI ME15W (12 pin) - HIOKI ME15W (12 pin) connector, 5 m (16.40 ft.)
Sensor Unit CT9556	Power supply for current sensor with waveform/RMS output	Waveform and RMS outputs can be used simultaneously	Extention cable CT9902	Extention cable CT9902	Extention cable CT9902
Power supply for current sensor with waveform/RMS output	Power supply for current sensor with waveform/RMS output	Waveform and RMS outputs can be used simultaneously	Extention cable CT9902	Extention cable CT9902	Extention cable CT9902
RMS outputs can	CT7812, CT7822				
CURRENT MODULE	U8556				
POWER MEASUREMENT MODULE	LR8536				



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