



Test&Measurement

CTS series

AC/DC Split core current sensor



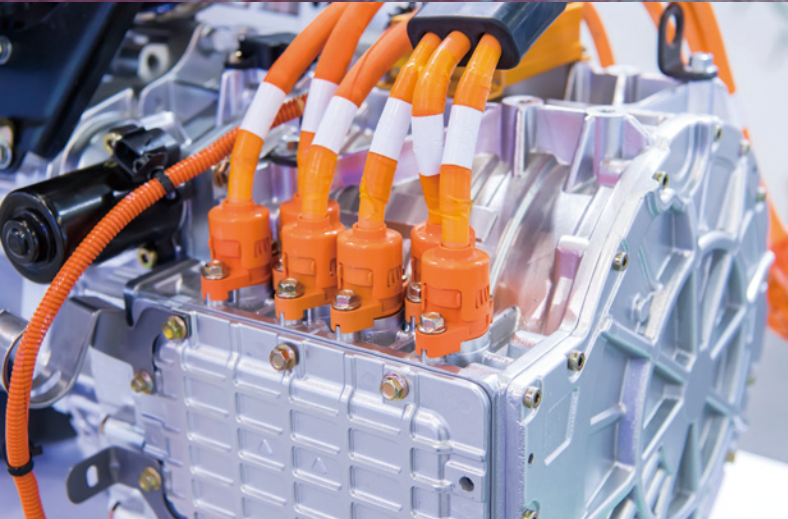
Bulletin CTS-01EN

As energy-efficient technologies become more widely adopted in industries such as power generation, transportation, home appliances, and industrial equipment, the demand for high-precision measurements continues to grow. In addition to the need for low-uncertainty measurement setups in laboratory environments, demand for field measurements and testing is also increasing. This requires sensors to deliver high performance in a more demanding environment and wider temperature operating range. Especially in the field of EVs and renewable energy, the need for highly accurate current sensors is critical due to the large currents involved.

The split core current sensor provides reliable power and efficiency measurements together with ease of use, helping engineers make the most of their valuable time.

Reproducibility – Inheriting the conventional through hole type CT shape, the CT1000S improves measurement reproducibility in limited environments by fixing and locking the axis position of the main unit and measurement cable.

Noise immunity – Performance shielding technology used in through hole type CT is employed to improve noise immunity. High-precision measurement is realized even in measurement environments with noisy inverters, motors, etc.

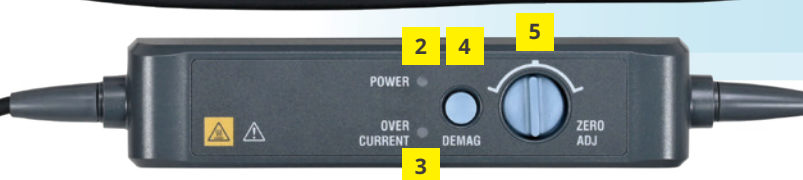




Precision power analyzer WT5000



Scopecorder DL950



**Play an
and wa**
Large Current

Main unit

- 1** Lock lever

Sub unit

- 2** Power LED
- 3** Overcurrent LED
- 4** Demag button
- 5** Offset adjust knob

IV unit

- 6** Output connector

Power supply

- 7** Power connector

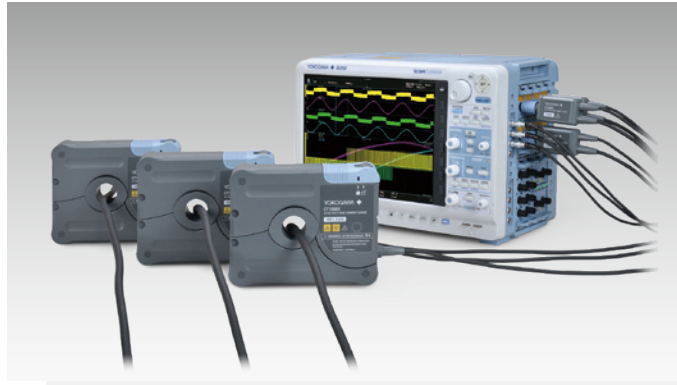
CT1000S

AC/DC Split Core Current Sensor

Power measurement



Waveform measurement

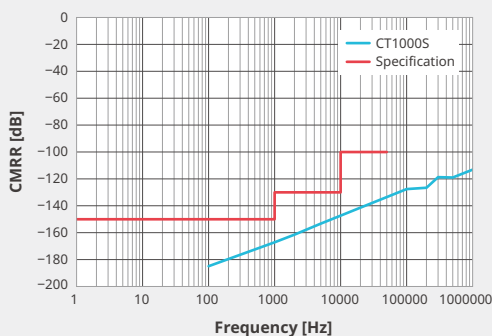


important role in both power veform measurement

1000 A Wide Bandwidth 300 kHz

Stable measurement at high bandwidth

As the power factor decreases in high-frequency measurements, the effect of phase error on power values increases. Accurate and stable measurement of devices such as inverters that use high-frequency switching to control their operation requires current sensors capable of measuring up to high bandwidths.



Excellent noise immunity enables high-precision measurement even in severe noise environments.



The axis position fixing jig suppresses the shaking of the measurement line and reduces the influence on measured values.



The main unit can be fixed with screws. Stable measurement improves reproducibility.

Easy-to-Handle Compact Des Measurements in Tight Spac

The compact body fits comfortably in one hand, making it ideal for measurements in tight spaces.



*The main units of the CT200SA and CT500SA have the same design

*The sub-unit, IV unit, and power connector have the same design as the CT1000S

High Accuracy and Wideband Performance Carried Forward

500 A, 200 A Small-type Split Core Current Sensor

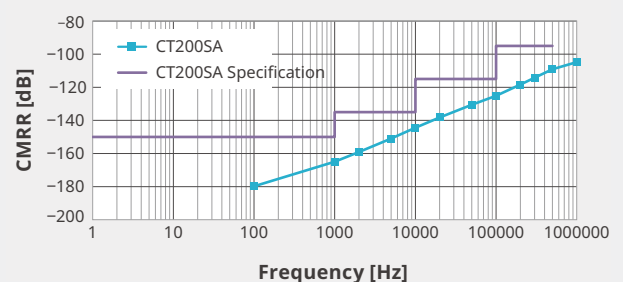
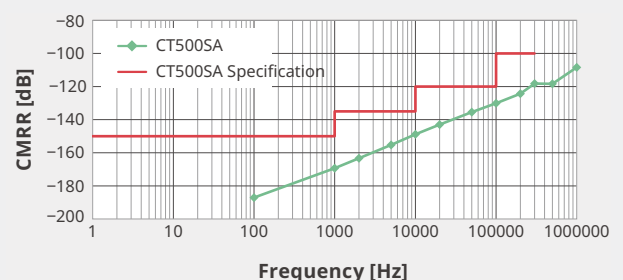
Compact size, stable wideband performance High accuracy even in harsh environments

Despite its compact size, the sensor delivers excellent noise immunity. It also retains the wide bandwidth and high CMRR needed for waveform measurement. This enables highly accurate measurement even in severe noise environments.

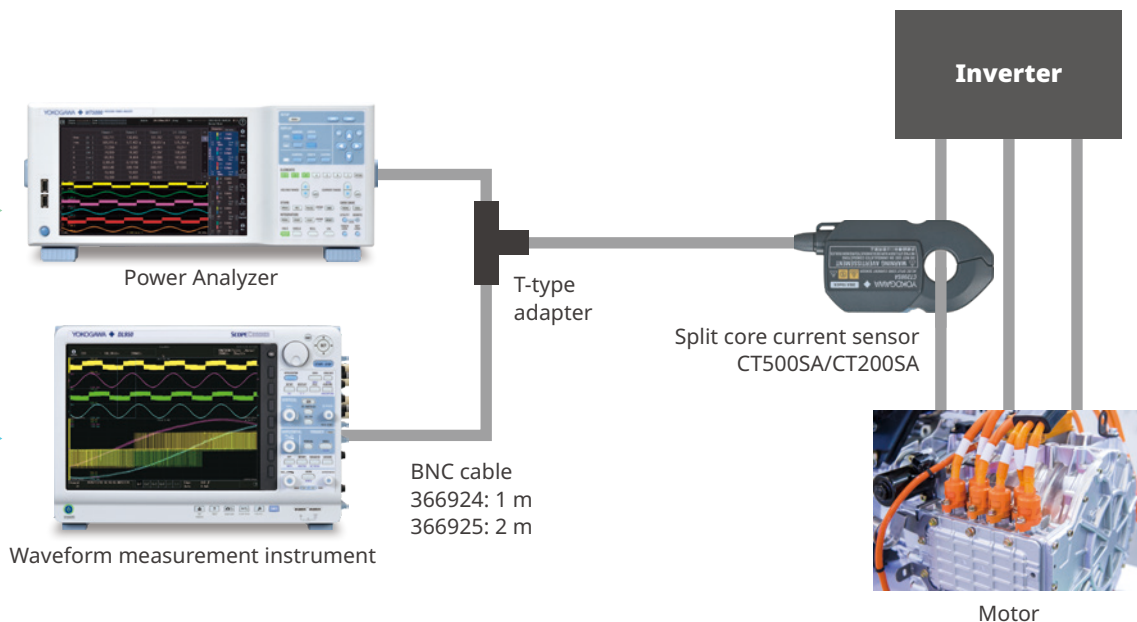
Rated Current	CT500SA: 500 A, CT200SA: 200 A
Frequency Bandwidth	CT500SA: DC to 500 kHz CT200SA: DC to 1 MHz
Basic Accuracy	$\pm(0.09\% \text{ of reading} + 0.01\% \text{ of full scale})^*$ $\pm(0.1\% \text{ of reading} + 0.01\% \text{ of full scale})$
Operating Temperature	-40°C to 85°C

*If the following temperature conditions

Main unit: 23°C $\pm$ 5°C, Sub unit: 23°C $\pm$ 5°C, IV unit: 23°C $\pm$ 5°C



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Simultaneous Input from a Single Current Sensor to a Power Analyzer and a Waveform Measurement Instrument

The sensor output can be split and fed to different measuring instruments, allowing power values and waveform data to be acquired simultaneously in a single measurement. This reduces the time and effort required to replace current sensors and edit data. It also eliminates the need to install multiple current sensors, simplifying power and waveform measurement.

*Note: Additional measurement uncertainty is introduced when using split outputs.

Easy to Install in Tight Spaces



One-Touch Opening and Closing with a Single Finger



Use the mounting hole to secure the sensor to nearby cables and other objects.

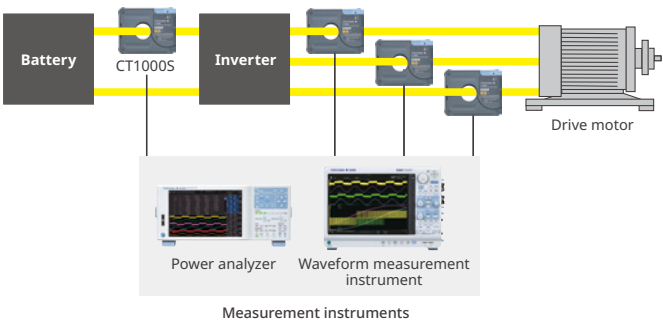
This suppresses sensor movement and improves measurement accuracy and reproducibility.



CT500SA/CT200SA

AC/DC Split Core Current Sensor

Application

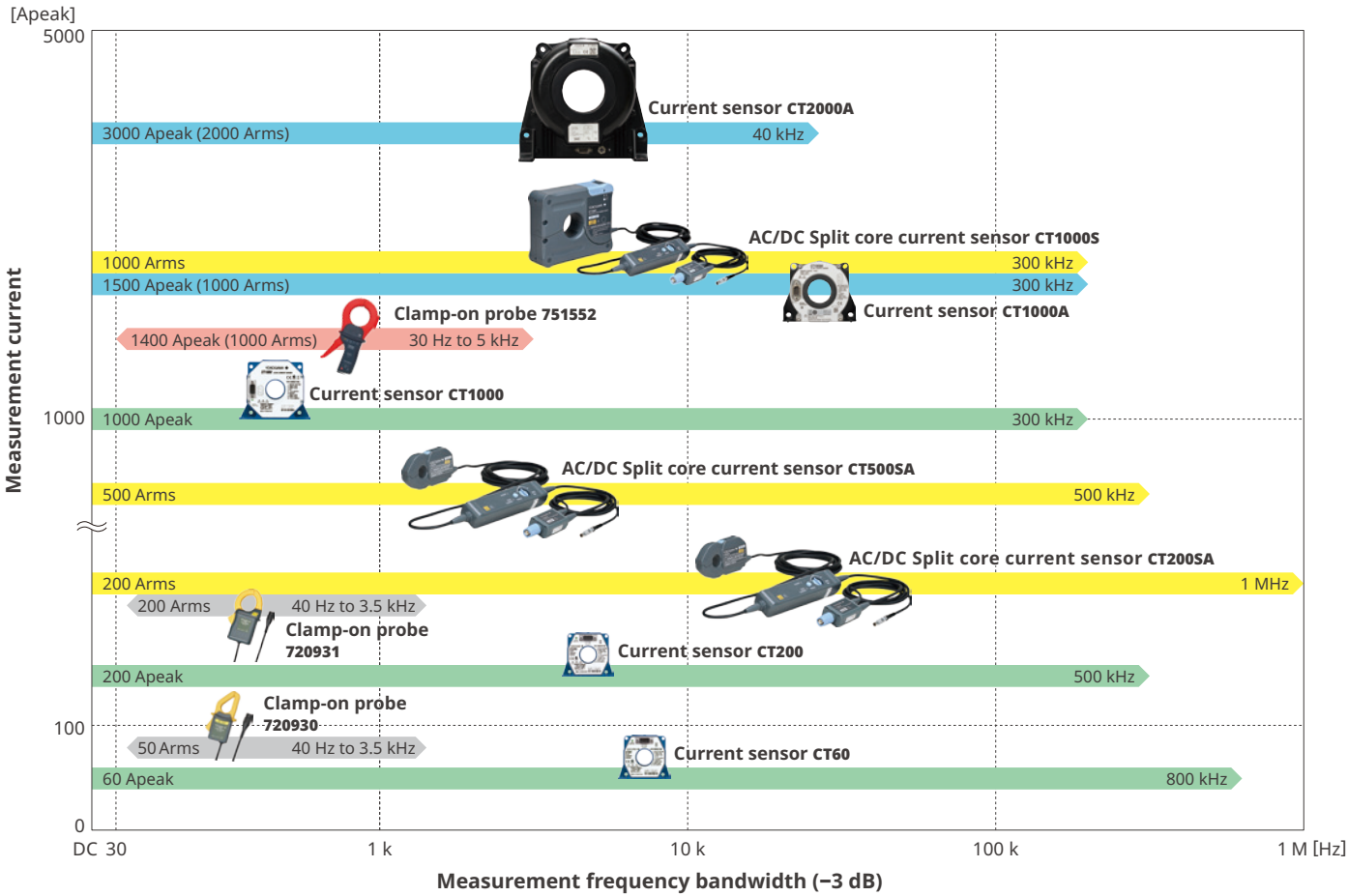


Large current and wide bandwidth measurement

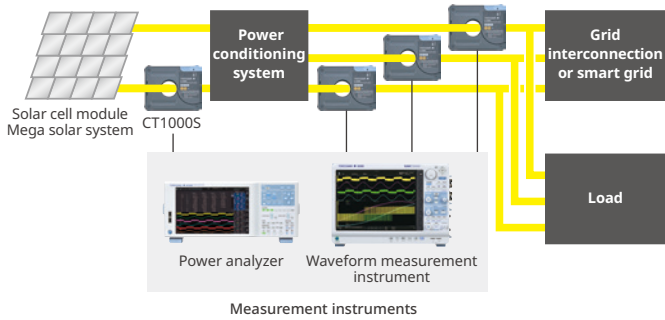
Mechanisms that convert the output of a DC power source to AC using an inverter are utilized in a variety of industrial fields, including EVs. As decarbonization is now being promoted, increasing the efficiency of inverters is an important target. Inverter output with PWM control contains harmonic components and requires a current sensor capable of measuring a wide bandwidth.

Current Sensor

For power measurement



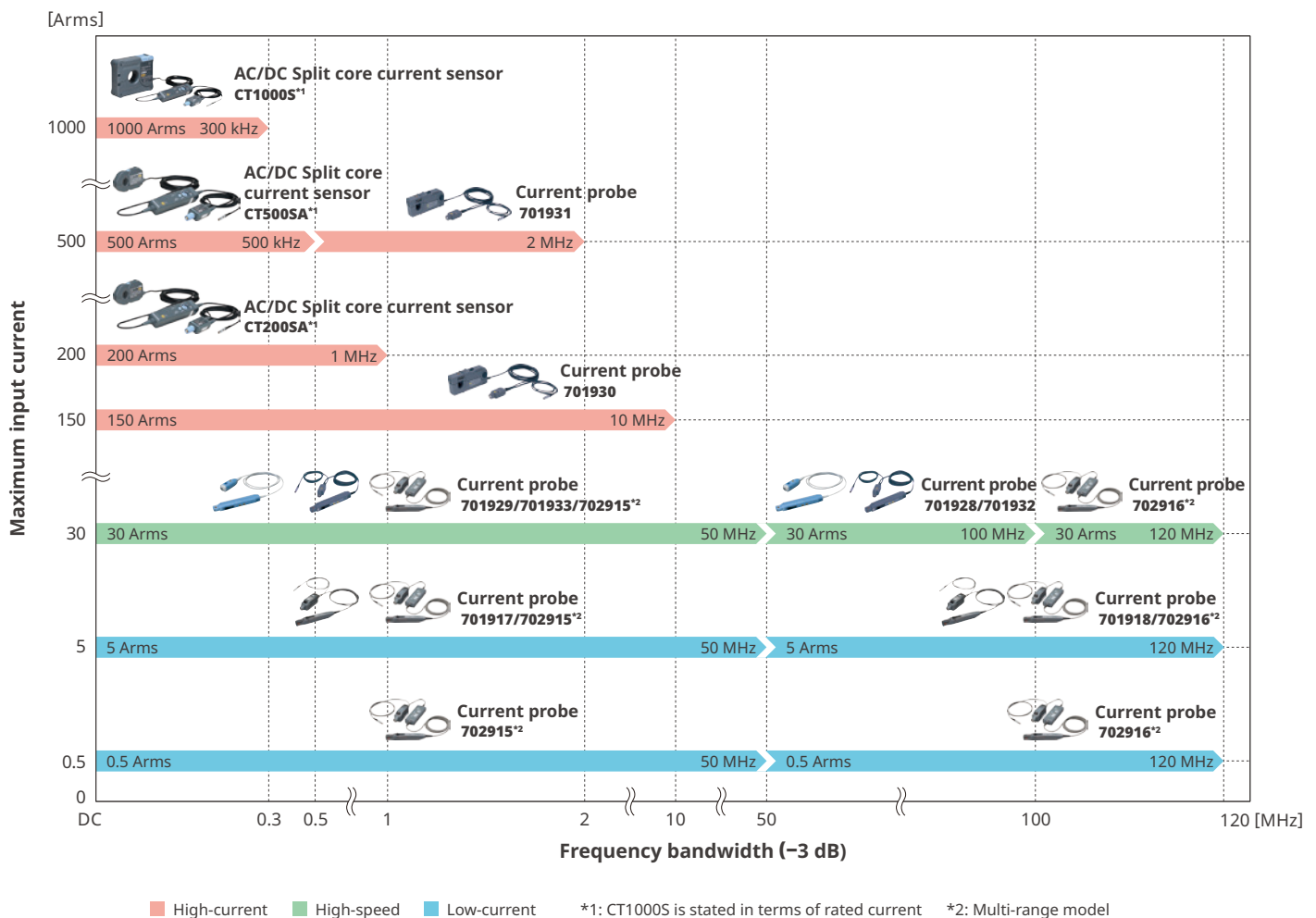
- AC/DC Split core current sensor: Power supply (± 12 V) required to drive sensor
- AC/DC current sensor: external power supply for sensor driven is necessary.
- Clamp-on probe for AC current measurement
- Probe for AC current measurement (voltage output type). Please refer to bulletins of CW500 and DL350 for details.



Large current measurement without cutting the measuring cable

Energy generated by photovoltaic modules is converted from DC to AC by a power conditioning system. Minimizing losses during this conversion process improves overall system efficiency. Achieving even a 0.1% improvement in conversion efficiency requires highly accurate measurement instruments and current sensors. The AC/DC split core current sensor enables large current measurement without cutting the target cable and reduces the workload.

For waveform measurement



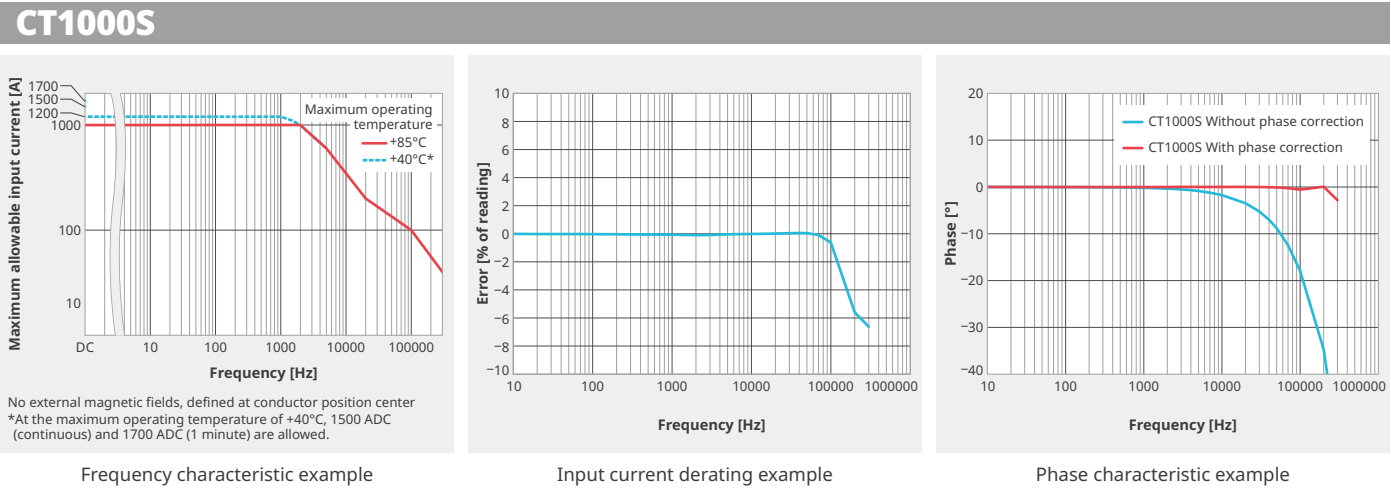
Current sensor list



Model	CT1000S	CT500SA	CT200SA	CT1000A
Rated Current	1000 Arms	500 Arms	200 Arms	1000 Arms
Accuracy (50/60 Hz)	±(0.2% of reading + 0.01% of f.s.)	±(0.09% of reading + 0.01% of full scale)*1 ±(0.1% of reading + 0.01% of full scale)		±(0.04% of reading + 30 μA)
Bandwidth (–3 dB)	DC to 300 kHz	DC to 500 kHz	DC to 1 MHz	DC to 300 kHz
Operating temperature range	Main unit: –40°C to 85°C Sub unit: 5°C to 40°C IV unit: 5°C to 40°C			–40°C to 85°C
Operating humidity range	20% to 80% RH (no condensation)			
Dimensions (W × H × D) mm	Main unit: 190 × 153 × 52 Sub unit: 177.5 × 33 × 41 IV unit: 60 × 24 × 40	Main unit: 110 × 62 × 25 Sub unit: 177.5 × 33 × 41 IV unit: 60 × 24 × 40		128 × 106 × 54
Primary current hole diameter	52 mm diameter	20 mm diameter		38.2 mm diameter
Supply voltage	±12 V			±15 V
Supply current	±0.8 A (Maximum)		±0.7 A (Maximum)	Approx. (120 mA + output current)
Output	2 mV/A	4 mV/A	10 mV/A	Primary rated current at 1000 A is 666.6 mA
Connector type	BNC			D-sub 9 pin

*1: Under the following temperature conditions Main unit: 23°C ±5°C, sub-unit: 23°C ±5°C, IV unit: 23°C ±5°C

Characteristic example

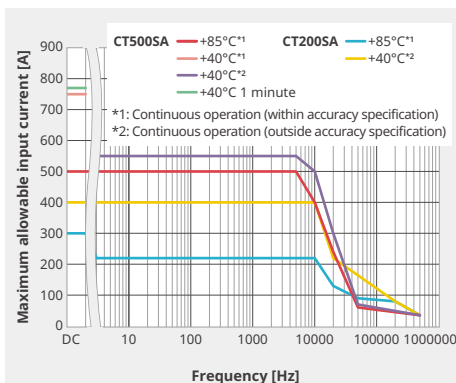




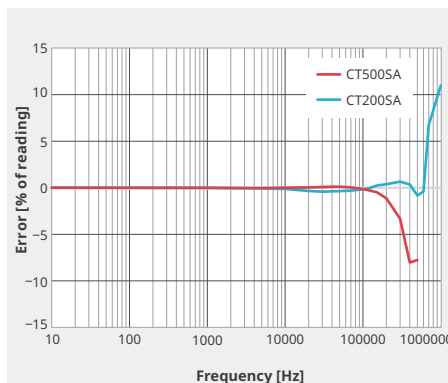
Model	CT1000	CT200	701931 ^{*2}	701930 ^{*2}
Rated Current	1000 Apeak	200 Apeak	500 Arms	150 Arms
Accuracy (50/60 Hz)	$\pm(0.05\% \text{ of reading} + 30 \mu\text{A})$		To 500 A: $\pm 1\%$ of reading $\pm 5 \text{ mV}$ 500 A to 700 Apeak: $\pm 2\%$ of reading (Amplitude accuracy)	To 200 A: $\pm 1\%$
Bandwidth (–3 dB)	DC to 300 kHz	DC to 500 kHz	DC to 2 MHz	DC to 10 MHz
Operating temperature range	10°C to 50°C	–40°C to 85°C	0°C to 40°C	
Operating humidity range	20 to 80% RH (no condensation)		80% RH (no condensation)	
Dimensions (W × H × D) mm	128 × 106 × 60	93 × 77 × 38	Sensor: 176 × 69 × 27 Terminator: 27 × 55 × 18	
Primary current hole diameter	30 mm diameter	26 mm diameter	20 mm diameter	
Supply voltage	$\pm 15 \text{ V}$		$\pm 12 \text{ V}$	
Supply current	Approx. (150 mA + output current)	Approx. (80 mA + output current)	580 mA (Maximum)	600 mA (Maximum)
Output	Primary rated current at 1000 A is 666.6 mA	Primary rated current at 200 A is 200.0 mA	0.01 V/A	
Connector type	D-sub 9 pin		BNC	

*2: For waveform measurement

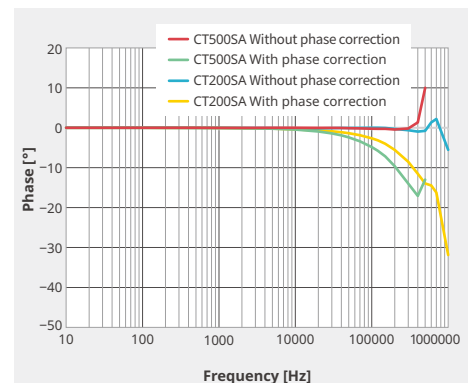
CT500SA/CT200SA



Frequency characteristic example



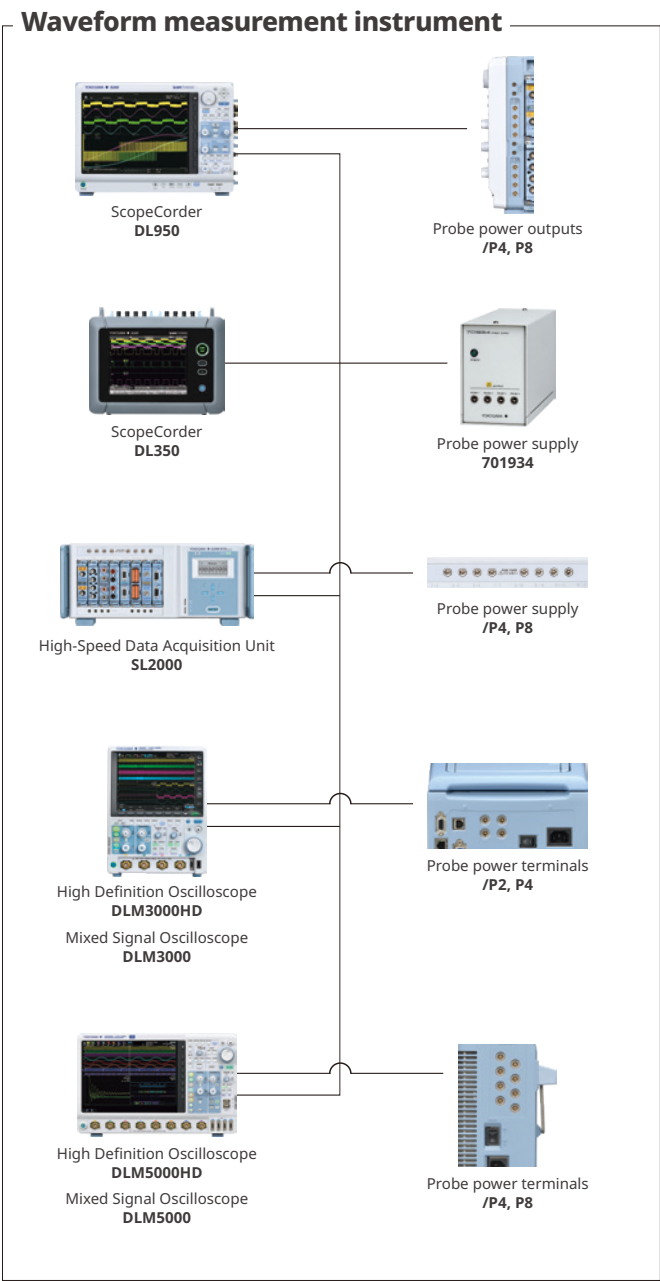
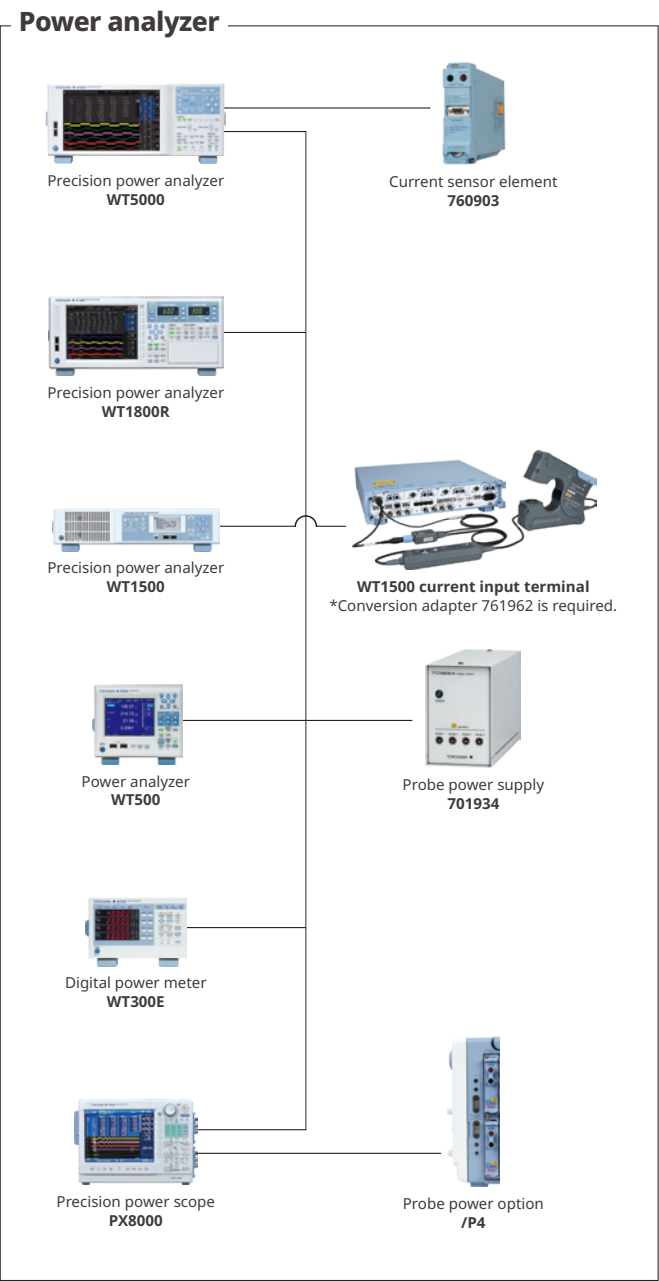
Input current derating example



Phase characteristic example

Combination with measurement instrument

Examples of a combination of a measurement instrument and a power supply when using the AC/DC split current sensor



Power supply and number of available sensors



Model	760903	PX8000 (/P4)	WT1500
Rated current	$\pm 12\text{ V}, \pm 0.8\text{ A}$	$\pm 12\text{ V}, \pm 1\text{ A}, 4\text{ ch total}$	$\pm 12\text{ V}, \pm 0.8\text{ A} (1\text{ ch})$
Number of CT1000S available * $\pm 0.8\text{ A}$ (Maximum supply)	$\times 1$	$\times 1$	$\times 4$
Number of CT500SA available * $\pm 0.8\text{ A}$ (Maximum supply)			
Number of CT200SA available * $\pm 0.7\text{ A}$ (Maximum supply)			



Model	DL950 (/P4)	DL950 (/P8)	SL2000 (/P4, /P8)
Rated current	$\pm 12\text{ V}, \pm 2.4\text{ A}, 4\text{ ch total}$	$\pm 12\text{ V}, \pm 2.4\text{ A} \times 2, 4\text{ ch total} \times 2$	$\pm 12\text{ V}, \pm 2.4\text{ A} \times 2, 4\text{ ch total} \times 2$
Number of CT1000S available * $\pm 0.8\text{ A}$ (Maximum supply)	$\times 3$	$\times 3$ $\times 3$	$\times 3$ $\times 3$
Number of CT500SA available * $\pm 0.8\text{ A}$ (Maximum supply)			
Number of CT200SA available * $\pm 0.7\text{ A}$ (Maximum supply)			



Model	DLM3000 (/P2, /P4)	DLM5000HD/DLM5000 (/P4, /P8)	701934
Rated current	$\pm 12\text{ V}, \pm 1.2\text{ A}, 4\text{ ch total}$	$\pm 12\text{ V}, \pm 2.0\text{ A}, 8\text{ ch total}$	$\pm 12\text{ V}, \pm 2.5\text{ A}, 4\text{ ch total}$
Number of CT1000S available * $\pm 0.8\text{ A}$ (Maximum supply)	$\times 1$	$\times 2$	$\times 3$
Number of CT500SA available * $\pm 0.8\text{ A}$ (Maximum supply)			
Number of CT200SA available * $\pm 0.7\text{ A}$ (Maximum supply)			

Specifications

Error indication			
% of full scale: Full scale is the rated current of this instrument.			
% of reading: Reading is the reading on the measuring instrument that this instrument is connected to.			
% of range: Range is the measurement range of the measuring instrument that this instrument is connected to.			
General Specifications			
Warm-up time	Approx. 30 minutes		
Operating environment	Temperature	Main unit	−40°C to 85°C
		Sub unit	5°C to 40°C
		IV unit	5°C to 40°C
	Humidity	20 to 80% RH (no condensation)	
	Operating altitude	2000 m or less	
	Installation location	Indoor use	
Storage environment	Temperature	−40°C to 85°C	
	Humidity	20 to 80% RH (no condensation)	
Supply voltage	Supply voltage: ±12 V ±0.5 V		
Supply current	CT1000S/CT500SA	Maximum supply current: ±0.8 A	
	CT200SA	Maximum supply current: ±0.7 A	
Maximum rated power	CT1000S	7.5 VA (1000 A, 60 Hz measurement using ±12 V power supply)	
	CT500SA	7.5 VA (500 A, 60 Hz measurement using ±12 V power supply)	
	CT200SA	5 VA (200 A, 60 Hz measurement using ±12 V power supply)	
Dimensions (excluding cables and protrusions)			
	Main unit	CT1000S 153 (H) × 190 (W) × 52 (D) mm	
		CT500SA/CT200SA 62 (H) × 110 (W) × 25 (D) mm	
	Sub unit	33 (H) × 177.5 (W) × 41 (D) mm	
	IV unit	24 (H) × 60 (W) × 40 (D) mm	
Measurable conductors	CT1000S	50 mm diameter or less	
	CT500SA/CT200SA	20 mm diameter or less	
Cable length	Main unit to sub unit	-L03	Approx. 3 m
		-L05	Approx. 5 m
		-L10	Approx. 10 m
	Sub unit to IV unit		Approx. 1 m
	IV unit to power connector		Approx. 1 m
Weight	-L03	CT1000S	Approx. 2.0 kg
		CT500SA/CT200SA	Approx. 0.7 kg
	-L05	CT1000S	Approx. 2.1 kg
		CT500SA/CT200SA	Approx. 0.8 kg
	-L10	CT1000S	Approx. 2.3 kg
	CT500SA/CT200SA		Approx. 1.0 kg
Mounting screw holes	CT1000S	6 locations (M4 screws)	
	CT500SA/CT200SA	1 location (M4 screw)	
Connector type	Output	BNC connector	
	Power supply	Probe power supply connector	
Safety standards	Compliant standards: EN 61010-1, EN IEC 61010-2-032 Type D*1 Measurement category O*2, pollution degree 2*3		
EMC standards*3	Emissions	Compliant standards: EN 61326-1 ClassA*5 Group1*6	
	Immunity	Compliant standards: EN61326-1 Table 2 (for use in industrial locations)	
		Influence in the immunity environment: ≤ ±5% of full scale*7	
Environmental standards			
	EU RoHS Directive compliant*8		
Withstand voltage	4300 VAC, 50 Hz between measurement feed-through hole and output terminal. Conducted as factory withstanding voltage test		

Device to be connected YOKOGAWA measuring instrument, accessories, or equivalent

If you obtained this manual separately from the product, the specifications in this manual may differ from those of the product.

*1: This current sensor is designed to be mounted around or removed from insulated conductors or energy-limited circuit conductors.

*2: This instrument is a measurement category O product. Do not use this instrument to make measurements in Measurement Categories II, III, and IV.
Measurement category O applies to measurement of other types of circuits that are not directly connected to a main power source.
Measurement Category II applies to electrical equipment that is powered through a fixed installation, such as a wall outlet wired to a distribution board, and to measurement performed on such wiring.
Measurement category III applies to measurement of facility circuits, such as distribution boards and circuit breakers.
Measurement category IV applies to measurement of power source circuits, such as entrance cables to buildings and cable systems, for low-voltage installations.

*3: Pollution Degree applies to the degree of adhesion of a solid, liquid, or gas that deteriorates withstand voltage or surface resistivity. Pollution Degree 2 applies to normal indoor atmospheres (with only non-conductive pollution).

*4: Ensure that the cabling of the conductor under test and this instrument, including its cables, do not interfere with each other. Otherwise, the output value of this instrument may be affected. There is also a possibility of electromagnetic interference to other equipment via the cables of this instrument.

*5: This product is classified as Class A (for use in industrial environments). Operation of this product in a residential area may cause radio interference, in which case the user will be required to correct the interference.

*6: Group 1:
Equipment that does not intentionally generate or use radio frequency (RF) energy

*7: Accurate measurement may not be possible in locations where there are very strong magnetic or electric fields in addition to the magnetic field generated by the current to be measured.

*8: For conformity to environmental regulations and/or standards other than EU, contact your nearest YOKOGAWA office (PIM 113-01Z2).

Electrical Specifications			
	CT1000S	CT500SA	CT200SA
Rated current	AC/DC 1000 A	AC/DC 500 A	AC/DC 200 A
Frequency bandwidth	300 kHz −3 dB Typical	500 kHz −3 dB Typical	1 MHz −3 dB Typical
Delay	485 ns Typical	170 ns Typical	78 ns Typical
Output voltage	2 mV/A	4 mV/A	10 mV/A
Output resistance	50 Ω ±10 Ω		
Non-linearity error	±20 ppm Typical*1,*2		
Output noise	1 mVpp typical (1 MHz or less)		
Temperature coefficient	Main unit: Add the following to the ranges outside the 0 to 40°C accuracy guaranteed temperature range (−40 to 0°C, 40 to 85°C)		
		CT1000S	CT500SA/CT200SA
	Amplitude accuracy	±0.005% of reading/°C	±3ppm of reading/°C
	Offset voltage	±0.005% of full scale/°C	±5 ppm of full scale/°C
Influence of the conductor location	≤ ±0.2% of reading (1000 A input, 50 Hz/60 Hz, using wire with 30 mm outer diameter) If conductor position adjuster (for 30 mm outer diameter) is used: ≤ ±0.1% of reading	≤ ±0.1% of reading (100 A input, 50 Hz/60 Hz, using a wire material with an outside diameter of 10 mm or more)	
Influence of the external magnetic field	≤150 mA (input conversion value, in a magnetic field of 400 A/m, DC, or 60 Hz)	≤50 mA (input conversion value, in a magnetic field of 400 A/m, DC, or 60 Hz)	
Influence of magnetization	≤150 mA (input conversion value, after 1000 ADC input)	≤30 mA (input conversion value, after rated current input)	
Influence of common mode voltage	DC to 1 kHz: ≥150 dB (0.0016% of full scale or less)	DC to 1 kHz: 150 dB or more	DC to 1 kHz: 150 dB or more
	1 kHz to 10 kHz: ≥130 dB (0.016% of full scale or less)	1 kHz to 10 kHz: 135 dB or more	1 kHz to 10 kHz: 135 dB or more
	10 kHz to 50 kHz: ≥100 dB (0.5% of full scale or less)	10 kHz to 100 kHz: 100 dB or more	10 kHz to 100 kHz: 115 dB or more
		300 kHz: 100 dB or more	500 kHz: 95 dB or more
Guaranteed accuracy period	12 months		

	CT1000S	CT500SA	CT200SA
Number of clamping operations	≤10000 operations		
Demagnetization function	Available		
Offset adjustment	Approx. ±2 mV		
Overcurrent indicator	Overcurrent LED (red) lit		
Power-on indicator	Power LED (green) lit		

*1: For CT1000S, measure input current (DC) at 200 A intervals for +1000 A → 0 A → -1000 A → 0 A → +1000 A. Defined as the difference between the regression line calculated from the measurement results and the point of measurement.
 For CT500SA, measure input current (DC) at 100 A intervals for +500 A → 0 A → -500 A → 0 A → +500 A. For CT200SA, measure input current (DC) at 40 A intervals for +200 A → 0 A → -200 A → 0 A → +200 A. Defined as the difference between the regression line calculated from the measurement results and the point of measurement.

*2: ppm defined at rated current.

Accuracy specifications

Conditions

Temperature:

Main unit: 0 to 40°C, sub unit: 5 to 40°C, IV unit: 5 to 40°C

Humidity: 20 to 80% RH

Warm-up time: At least 30 minutes

Input waveform: Sine wave or DC

Voltage to ground: 0 V

External magnetic fields: None

Conductor position: Center

Input resistance: Measuring instrument with 1 MΩ ±10% or more

Demagnetization: After execution

Offset voltage: After adjusting within ±0.2 mV

Number of clamping operations ≤10000 operations

Power supply:

Probe power supply from the measuring instrument that this instrument is connected to or the 701934 probe power supply
 Absolute accuracy, phase accuracy:

≤150% input of DC rating ≤110% input of AC rating and within the derating range (except values for 0.1 Hz ≤ f ≤ 10 Hz are references)

Amplitude (1-year accuracy)

	CT1000S	CT500SA	CT200SA
DC	±(0.2% of reading + 0.02% of full scale)	±(0.09% of reading + 0.02% of full scale)*1 ±(0.1% of reading + 0.02% of full scale)	
0.1 Hz ≤ f ≤ 100 Hz	±(0.2% of reading + 0.01% of full scale)	±(0.09% of reading + 0.01% of full scale)*1 ±(0.1% of reading + 0.01% of full scale)	
100 Hz < f ≤ 500 Hz	±(0.5% of reading + 0.02% of full scale)	±(0.2% of reading + 0.02% of full scale)	
500 Hz < f ≤ 1 kHz	±(1.0% of reading + 0.02% of full scale)	±(0.5% of reading + 0.02% of full scale)	
1 kHz < f ≤ 10 kHz	±(2.0% of reading + 0.02% of full scale)	±(1.0% of reading + 0.02% of full scale)	
10 kHz < f ≤ 50 kHz	±(3.0% of reading + 0.02% of full scale)	±(2.0% of reading + 0.02% of full scale)	±(1.5% of reading + 0.02% of full scale)
50 kHz < f ≤ 100 kHz	±(5.0% of reading + 0.02% of full scale)	±(3.0% of reading + 0.02% of full scale)	±(2.0% of reading + 0.02% of full scale)
100 kHz < f ≤ 200 kHz	—	±(5.0% of reading + 0.02% of full scale)	±(3.0% of reading + 0.02% of full scale)
200 kHz < f ≤ 500 kHz	—	—	±(5.0% of reading + 0.02% of full scale)

Phase (1-year accuracy)

	Without phase correction			With phase correction*2		
	CT1000S	CT500SA	CT200SA	CT1000S	CT500SA	CT200SA
0.1 Hz ≤ f ≤ 100 Hz	±0.1°			±0.1°		
100 Hz < f ≤ 500 Hz	±0.2°	±0.1°		±0.1°		
500 Hz < f ≤ 1 kHz	±0.4°	±0.1°		±0.1°		
1 kHz < f ≤ 5 kHz	±2.0°	±0.4°		±0.1°	±0.15°	
5 kHz < f ≤ 10 kHz	±4.0°	±1.0°		±0.1°	±0.2°	
10 kHz < f ≤ 20 kHz	±8.0°	±1.7°		±0.5°	±0.3°	
20 kHz < f ≤ 50 kHz	±20°	±4.3°		±1.0°	±0.5°	±0.4°
50 kHz < f ≤ 70 kHz	±28°	±6.0°		±2.0°	±1.0°	±0.5°
70 kHz < f ≤ 100 kHz	±40°	±9.0°		±5.0°	±2.0°	±1.0°
100 kHz < f ≤ 200 kHz	—	±18.0°		—	±5.0°	±2.0°
200 kHz < f ≤ 500 kHz	—	—	±45.0°	—	—	±5.0°

*1: Under the following temperature conditions
 Main unit: 23°C ±5°C, sub-unit: 23°C ±5°C, IV unit: 23°C ±5°C

*2: When the phase error value at 10 kHz for CT1000S or CT500SA or 100 kHz for CT200SA shown in the test certificate of this instrument is set using the "sensor correction setting" feature of the WT series

Add the following to the amplitude accuracy and phase accuracy for 10 m cable.

Amplitude accuracy ±(0.1 + 0.005 × f kHz)% of reading
 Phase accuracy Without sensor correction: ±(0.035 × f kHz)°
 With sensor correction: ±(0.01 × f kHz)°

Except, 1 kHz < f, where the unit of f in the above equations is kHz.

Add the following to the absolute accuracy when the input current (Ip) is with the following range.

CT1000S	DC 1000 A < Ip ≤ 1100 A: ±0.02% of reading DC 1100 A < Ip ≤ 1500 A: ±0.05% of reading AC 1000 A < Ip ≤ 1100 A: ±0.03% of reading
CT500SA	DC 500 A < Ip ≤ 550 A: ±0.02% of reading DC 550 A < Ip ≤ 750 A: ±0.05% of reading
CT200SA	DC 200 A < Ip ≤ 220 A: ±0.02% of reading DC 220 A < Ip ≤ 300 A: ±0.05% of reading AC 200 A < Ip ≤ 220 A: ±0.03% of reading

Accuracy in combination with the measuring instrument

WT5000 (760901,760902,760903)

Accuracy of the measuring instrument + accuracy of this instrument
 Add the following when the measuring instrument's external current sensor input is in use.

50 mV range	±0.8% of range
100 mV range	±0.4% of range
200 mV range	±0.1% of range

WT1800 series

Accuracy of the measuring instrument + accuracy of this instrument
 Add the following when the measuring instrument's external current sensor inputs /EX1 to /EX6 are in use.

50 mV range	±0.8% of range
100 mV range	±0.4% of range
200 mV range	±0.1% of range

WT500

Accuracy of the measuring instrument + accuracy of this instrument
 Add the following when the measuring instrument's external current sensor inputs /EX1, /EX2, and /EX3 are in use.

50 mV range	±(0.1% of reading + 0.8% of range)
100 mV range	±(0.1% of reading + 0.4% of range)
200 mV range	±(0.1% of reading + 0.1% of range)
Other ranges	±0.1% of reading

WT300E

Accuracy of the measuring instrument + accuracy of this instrument
 Add the following when the measuring instrument's external current sensor input /EX1 is in use.

2.5 V, 5 V, 10 V ranges	±0.1% of reading
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Add the following when the measuring instrument's external current sensor input /EX2 is in use.

50 mV range	±(0.5% of reading + 0.8% of range)
100 mV range	±(0.5% of reading + 0.4% of range)
200 mV range	±(0.5% of reading + 0.1% of range)
Other ranges	±0.5% of reading

PX8000

Accuracy of the measuring instrument + accuracy of this instrument
 Add the following when the 760812 current module's external current sensor input is in use.

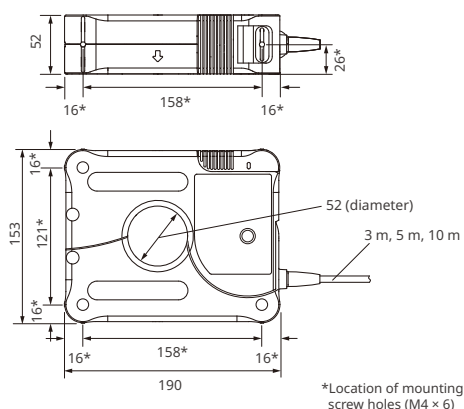
50 mV range	±0.8% of range
100 mV range	±0.4% of range
200 mV range	±0.1% of range

External dimensions

Unit: mm

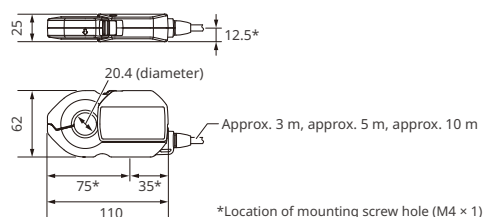
Main Unit

CT1000S



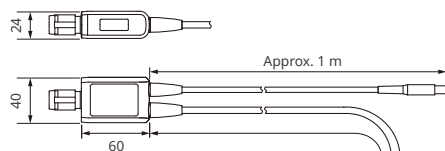
*Location of mounting screw holes (M4 × 6)

CT500SA/CT200SA

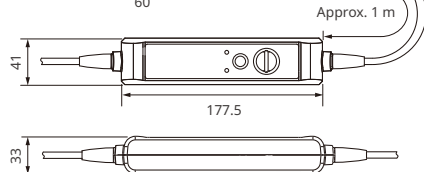


*Location of mounting screw hole (M4 × 1)

IV unit



Sub unit



*The IV unit and Sub unit for the CT1000S, CT500SA, and CT200SA are same design.

Models and suffix codes

Model	Suffix Code	Description
CT1000S		AC/DC Split core current sensor
	-L03	BNC Connector 3 m Cable
	-L05	BNC Connector 5 m Cable
	-L10	BNC Connector 10 m Cable
CT500SA		AC/DC Split core current sensor
	-L03	BNC Connector 3 m Cable
	-L05	BNC Connector 5 m Cable
	-L10	BNC Connector 10 m Cable
CT200SA		AC/DC Split core current sensor
	-L03	BNC Connector 3 m Cable
	-L05	BNC Connector 5 m Cable
	-L10	BNC Connector 10 m Cable

AC/DC Current Sensors and Clamp-on Probe

Model	Product Name	Specifications
CT2000A	AC/DC Current sensor	Measurement range: DC to 40 kHz, basic accuracy: $\pm(0.05\%$ of reading + 30 μ A), 2000 Arms (3000 Apeak)
CT1000A	AC/DC Current sensor	Measurement range: DC to 300 kHz, basic accuracy: $\pm(0.04\%$ of reading + 30 μ A), 1000 Arms (1500 Apeak)
CT1000	AC/DC Current sensor	Measurement range: DC to 300 kHz, basic accuracy: $\pm(0.05\%$ of reading + 30 μ A), 1000 Apeak
CT200	AC/DC Current sensor	Measurement range: DC to 500 kHz, basic accuracy: $\pm(0.05\%$ of reading + 30 μ A), 200 Apeak
CT60	AC/DC Current sensor	Measurement range: DC to 800 kHz, basic accuracy: $\pm(0.05\%$ of reading + 30 μ A), 60 Apeak
751552	Clamp-on probe	Measurement range: 30 Hz to 5 kHz, basic accuracy: $\pm 0.3\%$ of reading, 1000 Arms

Current probe

Model	Product	Description
701917	Current probe	DC to 50 MHz, 5 Arms, high-sensitivity
701918	Current probe	DC to 120 MHz, 5 Arms, high-sensitivity
701928	Current probe	DC to 100 MHz, 30 Arms, probe I/F
701929	Current probe	DC to 50 MHz, 30 Arms, probe I/F
701930	Current probe	DC to 10 MHz, 150 Arms
701931	Current probe	DC to 2 MHz, 500 Arms
701932	Current probe	DC to 100 MHz, 30 Arms
701933	Current probe	DC to 50 MHz, 30 Arms
701934	Power supply	Number of connectors: 4
701936	Deskew correction signal source	For voltage to current skew adjustment
702915	Current probe	DC to 50 MHz, 30 Arms, 3 input ranges
702916	Current probe	DC to 120 MHz, 30 Arms, 3 input ranges

Cables

Model	Product	Description
366924	BNC Cable	Total length: 1 m
366925	BNC Cable	Total length: 2 m

NOTICE

- Before operating the product, read the user's manual thoroughly for proper and safe operation.

- Any company's names and product names mentioned in this document are trade names, trademarks or registered trademarks of their respective companies.

Yokogawa's approach to preserving the global environment

- Yokogawa's electrical products are developed and produced in facilities that have received ISO14001 approval.
- In order to protect the global environment, Yokogawa's electrical products are designed in accordance with Yokogawa's Environmentally Friendly Product Design Guidelines and Product Design Assessment Criteria.

This is a Class A instrument based on Emission standards EN61326-1 and EN55011, and is designed for an industrial environment. Operation of this equipment in a residential area may cause radio interference, in which case users will be responsible for any interference which they cause.

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