

EnergiSensors[®]

Current Transformers (CT's).

A comprehensive range of power measurement sensors for use with Elecenergy EnergiAnalyzers[®]. Accurate Measurement and Verification of all loads from 10A to 10,000A.



EnergiSensor Current Transformers (CTs) support our full line of revenue-grade EnergiAnalyzers and help meet all measurement and verification-based requirements. Designed as part of a simple and effective process for accurately capturing power consumption, CTs are easy to specify and install non-invasively for retrofits or new construction projects.

The better the equipment, the better the measurement. EnergiSensors CT's are highly accurate and are certified to be used for revenue-grade performance and are certified to ANSI standards.

The EnergiSensor CT range comprises of 3 types of CT's that provide metering that range from small to extremely high loads. For added safety, all EnergiSensor CT's come with built-in voltage suppression devices that prevent hazardous voltages from developing on CT secondaries should they become disconnected from a meter with load current present. EnergiSensor CTs are UL listed devices. The EnergiSensor-CT range provides:

- > Solid-Core CTs (SlipOn) for use in new build projects where they can be fitted without concern for load downtime.
CT range for Solid Core is upto 400A, and delivers +/-0.3% accuracy.
- > Split-Core CTs (SnapOn) offer the greatest utility at the lowest cost where non-invasive retrofit installation is required.
CT range for Solid Core is upto 1000A, and delivers +/-0.5% accuracy.
- > Flexible / Rogowski Coil CT's (WrapOn) provide lightweight metering at very high current loads and Busbar applications.
Upto 10,000A per phase, and delivers +/-1.0% accuracy.

Elecenergy. Current Transformers (CT's) Specifications.

Electrical	Solid-Core CT	Split-Core CT	Detachable CT	Flexible CT
Nominal Rating	30, 60, 200, 400 Amps	60, 200 Amps	200, 400, 600, 1000 Amps	1000, 3000, 5000 Amps
Accuracy	±1% from 10% to 130%	±1% from 10% to 130%	0.5% ± 2.5-3.5%	±1-4%, depends on CT orientation
Phase Shift	< 2° @ Rated Current 50/60 Hz	< 2° @ Rated Current 50/60 Hz	< 2° @ Rated Current 50/60 Hz	< 1° 50/60 Hz
Frequency Range	50 Hz to 400 Hz	50 Hz to 400 Hz	50 Hz to 400 Hz	40 Hz to 5 kHz
Useful Current Range	10% to 130% of Rated Current	10% to 130% of Rated Current	10% to 130% of Rated Current	100 to 2000A AC
Working Voltage	Maximum 600 Vrms	Maximum 600 Vrms	Maximum 600 Vrms	Maximum 600 Vrms
Output Signal	333mV @ Rated Current	333mV @ Rated Current	333mV @ Rated Current	333mV @ 100A or 2000A
Mechanical				
Polarity	White lead is positive	White lead is positive	White lead is positive	White lead is positive
Output Lead	2.7m twisted pair	2.7m twisted pair	2.7m twisted pair	1.8m twisted pair
Operating Temp	-10 to 50 °C	-11 to 50 °C	-12 to 50 °C	-10 to +55 °C
Weight	30A = 65g, 60A = 130g, 300g & 400A = 350g	60A = 75g, 200A = 360g	200A = 130g, 400A = 420g, 600 & 1000A = 780g	1000A, 100cm = 500g to 3000A, 40cm = 500g to 5000A, 40cm = 600g
Safety				
Use	Indoor	Indoor	Indoor	Indoor/Outdoor
Storage Temp	-20 to +80°C	-20 to +80°C	-20 to +80°C	-20 to +70°C
Case Protection	ABS U194-V0	ABS U194-V1	ABS U194-V2	Case IP 65 (NEMA 4)
Safety Certification	IEE, ETL, CE, Compliant with CS7.13-1993	IEE, ETL, CE, Compliant with CS7.13-1994	ETL, CE, Compliant with IEEE CS7.13-1995	CE Mark, Compliant with IEC 1010-2-032
CT Dimensions				
Split/Detachable Core		Window size (cm)		H, W, D (cm)
60A Split Core CT	MCT-P60	1		3.0, 2.3, 2.6
200A Split Core CT	MCT-D200	2.4		7.4, 4.5, 3.4
200A Detachable Head CT	MCT-D200	1.9		5.3, 5.1, 1.5
400A Detachable Head CT	MCT-D400	2.5		6.9, 6.7, 2.0
600A Detachable Head CT	MCT-D600	3.2		8.5, 8.3, 2.5
1000A Detachable Head CT	MCT-D1000	5.1		12.7, 12.0, 3.0
Flexible CT Sensors		Window size (cm)		Outside & Coil diameter (cm)
1000A - 10000A Flex CT, 40 cm long	MCT-F104	13		15, 1.5
1000A - 10000A Flex CT, 60 cm long	MCT-F106	19		21, 1.5
1000A - 10000A Flex CT, 100 cm long	MCT-F110	26		29, 1.5
2000A - 30000A Flex CT, 40 cm long	MCT-F304	13		15, 1.5
5000A - 30000A Flex CT, 60 cm long	MCT-F306	19		21, 1.5
5000A - 30000A Flex CT, 100 cm long	MCT-F310	26		29, 1.5
5000A - 50000A Flex CT, 45 cm long	MCT-F504	15		18, 1.5
Solid Core CT Sensors		Window size (cm)		H, W (cm)
30A Solid Core CT	MCT-S30	0.76		4.3, 1.9
60A Solid Core CT	MCT-S60	1.3		4.8, 1.9
200A Solid Core CT	MCT-S200	2.5		6.1, 2.0
400A Solid Core CT	MCT-S400	3.2		6.9, 2