

Split-Core Current Transformers

Features

- Split core for easy installation; ideal for retrofit
- No exposed metal parts when assembled
- 0.333 VAC output at rated current
- Safer to install and use than CTs with a current secondary
- UL and CE recognized, and RoHS compliant

Description

These split-core current transformers (CTs) from Continental Control Systems offer an easy, safe, and inexpensive method for monitoring electrical energy usage.

Ideal for retrofit applications, the split core makes it possible to attach the CT without disturbing existing wiring. Just open the CT, slip it over the wire, and snap the CT closed. Once assembled, the CTs have no exposed metal parts.

The 0.333 VAC output of these CTs is low, making them much more safe to install and use than CTs with current secondaries. These CTs are also less expensive than their current cousins.

While less accurate than CTs with a current secondary and therefore not designed for metering applications where high accuracy is necessary for billing purposes, these CTs are accurate to $\pm 1\%$ from 10% to 130% of rated current. This level of accuracy is well suited to energy monitoring applications.

Each CT has an internal precision burden resistor across the secondary and is core interleaved at joints for accuracy. Phase angle is measured at 50% of rated current. Each CT has an epoxy-encapsulated housing and includes 8 ft (2.4 m), twisted-pair, 22 AWG leads.

See specifications and dimensions on the following page.

Monitoring Energy

These split-core CTs are recommended for use with the **OptoEMU Sensor™** energy monitoring unit.

The OptoEMU Sensor is a simple appliance that monitors the electrical energy used in your facility and then uses your existing wired or wireless Ethernet network to deliver that data to online software applications. You can see real-time and historical use, eliminate guesswork, and pinpoint problem areas to reduce energy costs.



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You can also use energy data from the OptoEMU Sensor in control systems and company databases. For more information, see form 1936, the [OptoEMU Sensor Data Sheet](#).

These CTs are also recommended for use with the **SNAP-AIPM-3V** analog input module, which monitors power from a 3-phase load. The module measures voltage and current from each phase; it calculates watts and volt-amperes for each phase plus true power sums for all phases.

Part of the SNAP PAC System, the SNAP-AIPM-3V mounts on a rack with other analog, digital, and serial modules and an I/O processor. For more information, see the [Power Monitoring Modules Data Sheet](#), form 1453.

Part Numbers

Part	Description
OPTOEMU-CTS-0750-70	Current Transformer, Split Core, 70 A, 0.333 VAC, 0.75 inch (1.91 cm) Inner Diameter
OPTOEMU-CTS-0750-150	Current Transformer, Split Core, 150 A, 0.333 VAC, 0.75 inch (1.91 cm) Inner Diameter
OPTOEMU-CTS-1250-400	Current Transformer, Split Core, 400 A, 0.333 VAC, 1.25 inch (3.18 cm) Inner Diameter
OPTOEMU-CTS-2000-600	Current Transformer, Split Core, 600 A, 0.333 VAC, 2 inch (5.08 cm) Inner Diameter

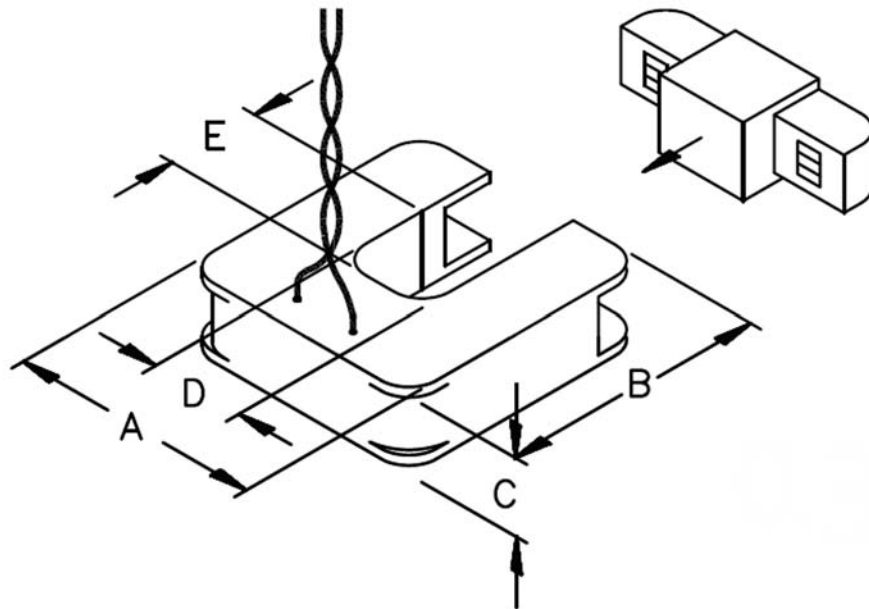
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Specifications

Refer to dimensional diagram below.

	OPTOEMU-CTS-0750-70	OPTOEMU-CTS-0750-150	OPTOEMU-CTS-1250-400	OPTOEMU-CTS-2000-600
Rated Current (primary)	70 amps	150 amps	400 amps	600 amps
Output (secondary)	0.333 VAC	0.333 VAC	0.333 VAC	0.333 VAC
Dimension A (width)	2.00 in. (5.08 cm)	2.00 in. (5.08 cm)	3.25 in. (6.45 cm)	4.75 in. (12.1 cm)
Dimension B (depth)	2.10 in. (5.33 cm)	2.10 in. (5.33 cm)	3.35 in. (8.51 cm)	5.00 in. (12.7 cm)
Dimension C (height)	0.61 in. (1.55 cm)	0.61 in. (1.55 cm)	1.00 in. (2.54 cm)	1.20 in. (3.05 cm)
Inner Diameter (D, E)	0.75 in. (1.91 cm)	0.75 in. (1.91 cm)	1.25 in. (3.18 cm)	2.00 in. (5.08 cm)
Leads	8 ft (2.4 m), 22 AWG, twisted pair	8 ft (2.4 m), 22 AWG, twisted pair	8 ft (2.4 m), 22 AWG, twisted pair	8 ft (2.4 m), 22 AWG, twisted pair
Accuracy	± 1% from 10% to 130% of rated current	± 1% from 10% to 130% of rated current	± 1% from 10% to 130% of rated current	± 1% from 10% to 130% of rated current
Agency Approvals	UL, CE, RoHS	UL, CE, RoHS	UL, CE, RoHS	UL, CE, RoHS
Warranty*	5 years*	5 years*	5 years*	5 years*

* Original manufacturer's warranty applies. See <http://www.ccontrols.com/w/Warranty>



More About Opto 22

Products

Opto 22 develops and manufactures reliable, flexible, easy-to-use hardware and software products for industrial automation, remote monitoring, and data acquisition applications.

SNAP PAC System

Designed to simplify the typically complex process of understanding, selecting, buying, and applying an automation system, the SNAP PAC System consists of four integrated components:

- SNAP PAC controllers
- PAC Project™ Software Suite
- SNAP PAC brains
- SNAP I/O™

SNAP PAC Controllers

Programmable automation controllers (PACs) are multifunctional, multidomain, modular controllers based on open standards and providing an integrated development environment.

Opto 22 has been manufacturing PACs for many years. The latest models include the standalone SNAP PAC S-series and the rack-mounted SNAP PAC R-series. Both handle a wide range of digital, analog, and serial functions and are equally suited to data collection, remote monitoring, process control, and discrete and hybrid manufacturing.

SNAP PACs are based on open Ethernet and Internet Protocol (IP) standards, so you can build or extend a system without the expense and limitations of proprietary networks and protocols.

PAC Project Software Suite

Opto 22's PAC Project Software Suite provides full-featured and cost-effective control programming, HMI (human machine interface) development and runtime, OPC server, and database connectivity software to power your SNAP PAC System.

These fully integrated software applications share a single tagname database, so the data points you configure in PAC Control™ are immediately available for use in PAC Display™, OptoOPCServer™, and OptoDataLink™. Commands are in plain English; variables and I/O point names are fully descriptive.

PAC Project Basic offers control and HMI tools and is free for download on our website, www.opto22.com. PAC Project Professional, available for separate purchase, adds OptoOPCServer, OptoDataLink, options for Ethernet link redundancy or segmented networking, and support for legacy Opto 22 serial *mistic*™ I/O units.

SNAP PAC Brains

While SNAP PAC controllers provide central control and data distribution, SNAP PAC brains provide distributed intelligence for I/O processing and communications. Brains offer analog, digital, and serial functions, including thermocouple linearization; PID loop control; and optional high-speed digital counting (up to 20 kHz), quadrature counting, TPO, and pulse generation and measurement.

SNAP I/O

I/O provides the local connection to sensors and equipment. Opto 22 SNAP I/O offers 1 to 32 points of reliable I/O per module, depending on the type of module and your needs. Analog, digital, serial, and special-purpose modules are all mixed on the same mounting rack and controlled by the same processor (SNAP PAC brain or rack-mounted controller).

Quality

Founded in 1974 and with over 85 million devices sold, Opto 22 has established a worldwide reputation for high-quality products. All are made in the U.S.A. at our manufacturing facility in Temecula, California.

Because we do no statistical testing and each part is tested twice before leaving our factory, we can guarantee most solid-state relays and optically isolated I/O modules for life.

Free Product Support

Opto 22's Product Support Group offers free, comprehensive technical support for Opto 22 products. Our staff of support engineers represents decades of training and experience. Product support is available in English and Spanish, by phone or email, Monday through Friday, 7 a.m. to 5 p.m. PST.

Free Customer Training

Hands-on training classes for the SNAP PAC System are offered at our headquarters in Temecula, California. Each student has his or her own learning station; classes are limited to nine students. Registration for the free training class is on a first-come, first-served basis. See our website, www.opto22.com, for more information or email training@opto22.com.

Purchasing Opto 22 Products

Opto 22 products are sold directly and through a worldwide network of distributors, partners, and system integrators. For more information, contact Opto 22 headquarters at 800-321-6786 or 951-695-3000, or visit our website at www.opto22.com.

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