AUTOMATIONDIRECT.com

Current and Voltage Sensors

ACUAMP®

Order Online at AutomationDirect.com
BUY ONLINE
Available in the U.S. and Canada only

Fast Shipping of In-stock Products

30-day Money-Back Guarantee
30 day

FREE Technical Support
Located in USA

Up-to-date price list:
www.automationdirect.com/pricelist

FREE Technical Support:
www.automationdirect.com/support

FREE Videos:
www.automationdirect.com/videos

FREE Documentation:
www.automationdirect.com/documentation

FREE CAD drawings:
www.automationdirect.com/cad

For the latest prices, please check AutomationDirect.com.

Current and Voltage Sensors at Great Prices

What are current and voltage sensors?

Current transducers combine a current transformer with a signal conditioner into a single package for current monitoring or logging applications, providing analog output signals compatible with most PLCs, data loggers, and SCADA systems. Current switches offer adjustable setpoints and jumper selectable sensing ranges to provide discrete outputs based on the input current level. Voltage transducers monitor or log voltage levels in AC and DC systems and provide an isolated 4-20 mA output proportional to the detected voltage. Ground fault sensors help protect people, products, and processes from damage caused by ground fault conditions.

AutomationDirect offers a wide variety of high-performance current sensors, current switches, and voltage transducers that provide outstanding features, flexibility, and durability at an incredible price.

- AC current transducers with input ranges from 2 to 2000 A
- DC current transducers with input ranges from 0 to 750 A
- AC current transformers with primary current ranges from 50 to 1000 A
- Single range AC current switches and indicator with input ranges from 0 to 400 A
- Multi-range AC and DC current switches with input ranges from 1 to 200 A
- Voltage transducers (AC and DC) with input ranges from 0 to 500 VAC, 0 to 50 VDC
- Ground fault sensors monitor all current carrying conductors in grounded single- and three-phase delta or wye systems

Advantages

Current and voltage sensors provide a simple, cost-effective method to monitor system performance, predict component failure, and identify fault conditions. Real-time current and voltage sensing make it possible to predict catastrophic events, schedule preventative maintenance and minimize downtime.

Why buy current and voltage sensors from us?

There are several advantages to purchasing current and voltages sensors from AutomationDirect:

Price

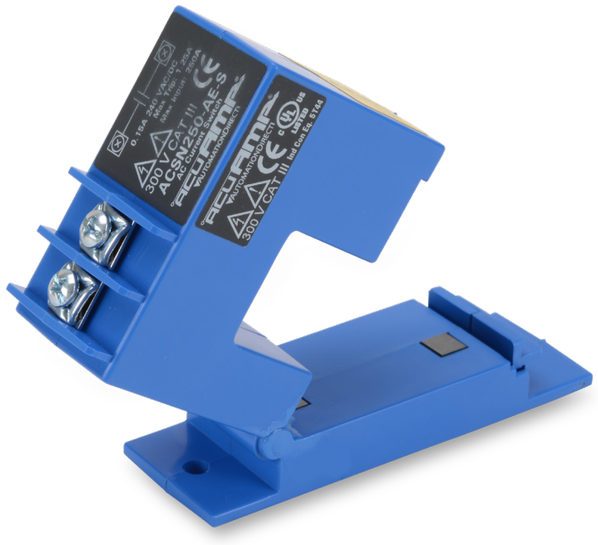
Our prices are often well below the list prices of traditional automation suppliers. Our direct business model allows us to operate more efficiently than other suppliers and pass the savings on to you.

Quality

Our current and voltage sensors carry a 5-year warranty and a 30-day moneyback guarantee. If for any reason you are not satisfied with your purchase, send it back, and we will refund your money.

Service

We give you options for self-service but, are there when you need us. You can place your order online or call our customer service. Have a technical question about one of our products or need help creating a bill of materials for one of your projects? You can call our Free Technical Support.

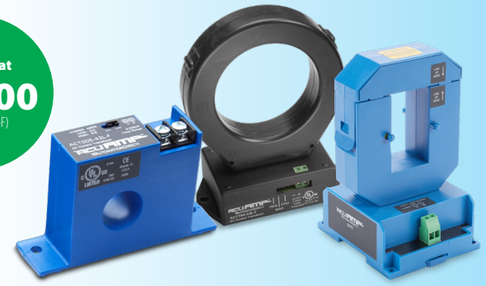


Current Transducers

AC current transducers provide valuable data for processes ranging from monitoring loads to preventive maintenance and are an excellent fit for many applications, including material handling, fan and pump applications, and heating systems. True RMS models read non-sinusoidal waveforms and are ideal for applications using variable frequency drives. These transducers are made in the USA and carry a 5-year warranty.

AC Current Transducers ACT Series

Starting at **$90.00** (ACT005-42L-F)

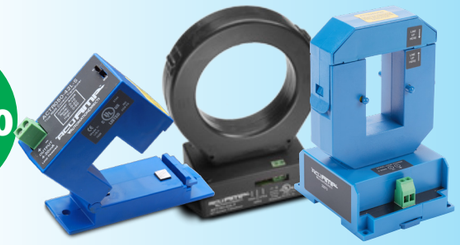


ACT series current transducers are designed for application on "linear" or sinusoidal AC loads and are compatible with most PLCs, data loggers and SCADA systems. An average responding algorithm gives an RMS output on pure sine waves, perfect for constant speed or ON/OFF loads.

- Input ranges from 2A to 2000A
- Self-powered models with 0-10 VDC outputs
- Models with 4-20mA loop powered outputs
- Models available in fixed or split core
- Selectable sensing ranges on some models
- Output is magnetically isolated from the input for safety and eliminates voltage drop
- Built-in mounting feet with optional DRA-2B 35mm DIN rail adapter available

AC Current Transducers (True RMS) ACTR Series

Starting at **$153.00** (ACTR050-42L-F)



ACTR series current transducers provide True RMS output on distorted waveforms found on variable frequency drive or SCR outputs and linear loads in "noisy" power environments.

- Input ranges from 2A to 2000A
- 4-20mA loop powered analog output
- Available in fixed or split core models
- Models with selectable sensing ranges
- Output is magnetically isolated from the input for safety and eliminates voltage drop
- Built-in mounting feet with optional or integral 35mm DIN rail adapter, depending on part number

For the latest prices, please check AutomationDirect.com.

Current Transducers

AC Transducers (Adaptive True RMS) ACTH Series

Starting at **$195.00** (ACTH005-42-24-S)

The ACTH series uses an innovative time integration adaptive True RMS measurement, ideal for monitoring pulsed waveforms such as zero-crossing burst-fired SCRs, even when the controller provides power in one cycle increments.

- Selectable input ranges to 50A
- 4–20mA analog output
- Split core models powered with 24 VAC/VDC
- Accurate measurement of sinusoidal or pulsed current wave shapes
- Zero-crossing burst fired SCR controllers
- Simplest method to monitor pulsed waveforms
- Factory calibrated, no need for zero and span adjustment potentiometers
- Built-in mounting feet with optional DRA2B 35mm DIN rail adapter available

3-Phase AC Current Transducers 3ACT/3ACTR Series

Starting at **$340.00** (3ACT030-42-24-F)

The 3ACT/3ACTR series AC 3-phase current transducers are designed for monitoring three-phase loads, motors, machines or buildings. Three separate outputs represent the current in each phase; a fourth output produces a signal proportional to the average of the current in all three phases.

- Current sensing ranges up to 200A
- Average responding and True RMS models with 4-20mA analog outputs
- 24 VAC/VDC +/-10% input power
- Large triple-aperture fixed core design allows for a quick and easy installation
- Snap onto DIN rail using integral mounting clips or attach with screws to a panel for secure mounting

DC Current Transducers DCT Series

Starting at **$142.00** (DCT100-42-24-F)

AcuAMP DCT series current transducers combine a Hall effect sensor and a signal conditioner into a single package for use in DC current applications up to 750A.

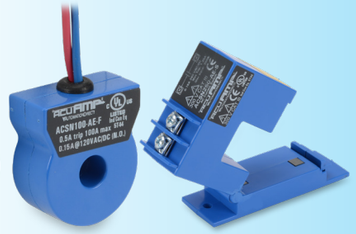
- Selectable input ranges on some models
- 4-20 mA or +/-10 VDC outputs
- Fixed core and split core models
- Large diameter aperture accommodates larger conductors
- 24 VAC/VDC powered for 4-20mA output models
- 20 to 45 VDC power for +/-10 VDC output models
- Output is magnetically isolated from the input for safety and to eliminate voltage drop
- Built-in mounting feet with optional 35mm DIN rail adapter available

Current Switches

Current switches combine a current transformer, signal conditioner, and limit alarm into a single package for monitoring applications. With adjustable setpoints and jumper selectable sensing ranges, these current switches provide discrete outputs based on the input current level. These current switches are made in the USA and carry a 5-year warranty.

Fixed Range AC Current Switches ACSN Series

Starting at **$34.00** (ACSN100-AE-F)



ACSN series fixed range current switches provide simple current flow status indication with no setup required.

- 0-100A or 0-250A input sensing ranges
- N.O. solid-state switch for control circuits up to 240 VAC/VDC
- Self-powered operation saves installation time and operating costs
- Fixed-core or split-core model types
- Built-in mounting feet with optional DRA2B 35mm DIN rail adapter available

Single Range AC Current Switches ACS150 Series

Starting at **$77.00** (ACS150-AE-F)

ACS150 series AC current switches offer an adjustable setpoint range of 1 to 150 amps, universal solid state outputs, and accurate indication of overcurrent conditions across a broad range of applications.

- Field-adjustable setpoints with 4- or 15-turn potentiometer, depending on model
- N.O. or N.C. solid state output
- Self-powered operation cuts installation time and operating costs
- Status LED provides visual indication of setpoint trip and contact action.
- Fixed-core or split-core model types

Multi-Range AC Current Switches ACS200 Series

Starting at **$83.00** (ACS200-AA-F)

ACS200 series solid-state current switches operate when the current level through the sensing aperture exceeds the adjustable setpoint. Internal circuits are totally powered by induction from the line being monitored.

- Three jumper-selectable input ranges up to 250A
- N.O. or N.C. Universal Outputs: 1A @ 240 VAC or 0.15A @ 30 VDC
- Field-adjustable setpoints with 4- or 15-turn potentiometer, depending on model
- Fixed-core or split-core model types
- Self-powered operation cuts installation time and operating costs
- Status LED provides visual indication of set-point trip and contact action
- Integral mounting feet offer secure mounting method
- UL, cUL, CE approvals

For the latest prices, please check AutomationDirect.com.

Current Switches

AC Current Switches with Two Trip Points ACS035/ACS400 Series

Starting at **$211.00** (ACS035-2C-24-F)

ACS035/ACS400 series current switches feature two separate, field-adjustable setpoints for overcurrent and undercurrent monitoring in a single device. With SPDT relay outputs, the sensors provide a control output and also a status output for remote monitoring systems.

- Up to 400A input measuring range
- Two independent SPDT replay outputs
- Two 3/4-turn potentiometers for independent setpoint adjustments
- Simple potentiometer adjustment: point the arrow at the current value
- 24 VAC/VDC operating voltage
- Fixed core case
- Sensing window provides ample space for bus bar, single or multiple conductors
- Snap onto DIN rail using integral mounting clips or attach with screws to a panel for secure mounting

AC Current Switches with LED Display ACS050/ACS200 Series

Starting at **$109.00** (ACS050-AA-24-FD)

ACS050/ACS200 series current switches feature easy and precise setpoint adjustment via a single-turn potentiometer and a digital three-digit LED display.

- Up to 200A input measuring range
- Solid-state switch output, normally open, 1A @ 240 VAC maximum
- Single-turn potentiometer adjustment with setpoint displayed on sensor
- 24 VAC/VDC operating voltage
- Fixed core case

AC Current Switches with Single-Turn Potentiometer ACSL Series

Starting at **$84.00** (ACSL010-AE-FF)

ACSL series self-powered, single-range current operated switches feature easy setpoint adjustment via a 3/4-turn potentiometer with arrow indication for the selected value.

- 0-150A input measuring range
- Two-second delay allows the output to ignore motor inrush current
- Status LED provides visual indication of setpoint trip and contact action
- Output is magnetically isolated from the input for safety
- Fixed-core or split-core model types
- Built-in feet with optional 35mm DIN rail adapter available

Current Switches

Multi-Range AC Current Switches with Time Delay ACSX Series

Starting at **$97.00** (ACSX200-AE-F)

ACSX series high-performance current switches include an adjustable 0-15 second start-up delay timer to eliminate nuisance alarms due to inrush or temporary over-current conditions.

- Three jumper-selectable input ranges up to 200A
- N.O. or N.C. AC/DC outputs with contact ratings up to 1.0A @ 240 VAC on select models
- Time delay feature eliminates need for a time delay relay
- 15-turn potentiometer setpoint adjustment on fixed-core models
- 4-turn potentiometer setpoint adjustment on split-core models
- Self-powered operation cuts installation time and operating costs
- Fixed-core or split-core model types
- Status LED provides visual indication of setpoint trip and contact action
- UL, cUL, CE approvals

DC Current Switches DCS Series

Starting at **$109.00** (DCS100-AE-24-F)

DCS100 series DC current switches combine a Hall effect sensor, signal conditioner and limit alarm into a single package for use in DC current applications up to 100A.

- Three jumper-selectable input ranges up to 100A
- Measures positive or negative current
- Adaptive hysteresis is 5% of setpoint, allowing closer control
- Normally open solid-state or SPDT relay outputs
- Output is magnetically isolated from the input for safety and to eliminate voltage drop
- Removable terminal blocks accept up to 12 AWG solid or stranded wire
- Built-in mounting feet with optional 35 mm DIN rail adapter

Current Indicator

Current Indicator

Starting at **$15.00** (ACL1)

The AcuAMP™ ACL1 current indicator is a small, inexpensive, simple LED ring which slides over a conductor to give a flashing indication of current flow. It is ideal for detecting current flow to fans, heaters, pumps, lighting or other powered devices.

- Detect currents as low as 0.5A with a single conductor pass
- Flashing LEDs are easily visible from multiple angles, even in daylight conditions
- Made in the USA
- 5-year warranty

For the latest prices, please check AutomationDirect.com.

Transducer/Switch Combo

Current transducer/switch units combine a current transformer and signal conditioner in one unit, with both an analog output for monitoring and a solid-state output for a limit alarm. These units come with adjustable trip points up to 200A and include an LED setpoint display. These transducers/switch combo are made in the USA and carry a 5-year warranty.

Current Transducer & Switch Combination ACTS Series

Starting at **$144.00** (ACTS050-42AA-24-FD)

The ACTS series AC current sensors combine a current operated switch and transducer into a single package.

- 4-20mA analog output
- N.O. solid-state output for control circuits up to 240 VAC
- 24 VAC/VDC input power
- Easily adjustable and precise setpoint using digital display
- Display flashes on and off when current has exceeded the setpoint
- Built-in mounting feet with optional DRA-2B 35mm DIN rail adapter available

Current Transformers

Current transformers offer a compact, cost-effective means of measuring primary current, producing an output proportional to the current flowing through the sensing window. They are ideal for connecting to panel meter displays, data loggers, or chart recorders. These current transducers are made in the USA and carry a 5-year warranty.

Solid Core Current Transformers CTF Series

Starting at **$25.00** (CTF-5RL-0050)

AcuAMP solid core, instrumentation grade (commercial class) current transformers offer two different window opening and mounting options, along with numerous secondary ratios.

- Panel mount versions available
- 1.56" and 2.50" diameter apertures
- Primary current ratings from 50A to 1000A
- Secondary current: 5A
- Solid-core case for convenient installation over large wires or busbars

Split Core Current Transformers CTF Series

Starting at **$81.00** (CTF-0150-5-SA)

AcuAMP CTF split core series current transformers offer a convenient, compact, and reliable means of measuring AC current.

- Large sensing apertures up to 3.49" X 2.36"
- Primary current ratings from 150A to 1000A
- Secondary current: 5A
- Compatible with standard power monitors, data loggers, & panel meters
- Non-revenue metering accuracy of 1%
- Split core design for easy installatio on cables or busbars

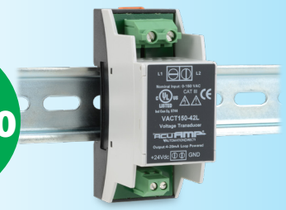
Voltage Transducers

Voltage transducers are used for monitoring or logging voltage levels in both AC and DC systems. These transducers provide a fully isolated, 4-20 mA output proportional to the detected voltage. These voltage transducers are made in the USA, UL/cUL, CE and carry a 5-year warranty.

AC Voltage Transducers
VACT Series

VACT series high-performance AC voltage transducers measure voltage in single-phase installations and provide True RMS output, even on non-sinusoidal waveforms from variable frequency drives and linear loads in "noisy" power environments.

Starting at **$163.00** (VACT150-42L)



- Models available to sense circuits of 120V, 208V, 240V, 277V, and 480 VAC
- Fully isolated, 4-20mA output
- Housed in a slim, compact, easy-to-install DIN rail mounted enclosure
- 4-wire terminal block connections

DC Voltage Transducers
VDCT Series

VDCT series DC voltage transducers are high-performance transducers for sensing voltage in DC powered installations.

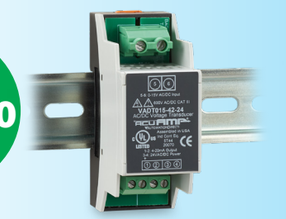
Starting at **$163.00** (VDCT015-42-24)

- Applicable on circuits up to 50 VDC
- Fully isolated 4-20mA output
- Housed in a slim, compact, easy-to-install DIN rail mounted enclosure
- Two nominal voltage ranges available: 0-15 or 0-50 VDC

AC/DC Voltage Transducers
VADT Series

VADT series high-performance AC/DC voltage transducers measure AC voltage in single-phase or 3-phase installations and DC voltage in DC powered installations. They provide True RMS output, even for non-sinusoidal waveforms.

Starting at **$163.00** (VADT015-42-24)



- Available in a variety of voltage ranges
- Zero to 5 KHz measurement
- 4-20mA output
- Compact DIN rail mount case
- Terminal block connections

For the latest prices, please check AutomationDirect.com.

AC Ground Fault Sensors

Ground fault sensors protect people, products, machines, and processes from damage caused by ground fault conditions. Higher setpoint capability helps eliminate nuisance tripping while providing adequate ground fault detection to protect machine electronics. Units can function as sensor and alarm trigger when part of an overall ground fault protection system. These AC Ground Fault Sensors are made in the USA, UL 1053 recognized, CE and carry a 5-year warranty.

Ground Fault Sensors
GFS/GFSL Series

AcuAMP® GFS series ground fault sensors monitor all current carrying conductors in grounded single- and three-phase delta or wye systems to provide protection from damage caused by ground fault conditions.

Starting at **$165.00** (GFS30-D1C-24-F)

- Jumper-selectable setpoints of 5, 10 or 30 mA
- Mechanical relay outputs with automatic or manual reset
- Outputs are magnetically isolated from monitored circuit and control power
- 24 VAC/VDC or 120 VAC operating voltage
- Ideal for use with shunt trip breakers
- Available in fixed-core models only
- Available with 0.75" or 1.87" sensing aperture
- Built-in mounting feet with optional 35mm DIN rail adapter available
- Large aperture version has integral 35mm DIN rail mounting