ADTECH
95 Mt. Read Blvd # 149
Rochester, New York 14611 USA
Phone: 1.585.698.1845
Fax: 1.585.697.0445

www.adtech-inst.com

ISOLATED AC CURRENT /VOLTAGE TRANSMITTERS
MODEL NUMBER:
ACT 40

The Adtech Model ACT 40 AC Current or Voltage Transmitter delivers highly accurate conversion of AC signals to DC process signals, providing a utility class instrument for the industrial and process customer.

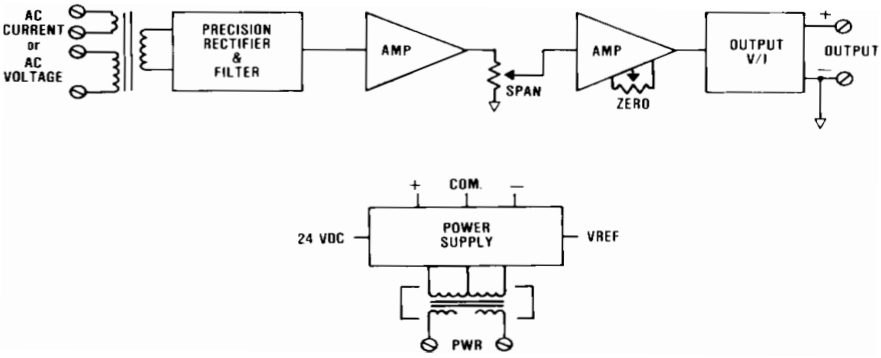
The most common AC current application is to measure the line current of induction motor as a measure of the power being delivered to the load. A frequent AC voltage application is motor speed where the tachometer output is an AC voltage proportional to speed.

This versatile instrument offers high input over range protection, high input to output isolation, and wide frequency range.

The basic input range is 0-5 amps AC or any voltage of 0-20 VAC to 0-150 VAC. It provides an isolated conversion to a standard process signal such as 4-20 mA DC, 1-5 VDC, or zero based outputs.

The ACT 40 delivers standard process current or voltage signals on the output with a maximum of 10 mV P/P output ripple. It offers a convenient means of interfacing AC signals to a computer system, PLC, distributed control system, or other process instrumentation for monitoring or control purposes.

Zero and span adjustment is provided by two infinite resolution potentiometers. Recalibration to other ranges is very convenient.



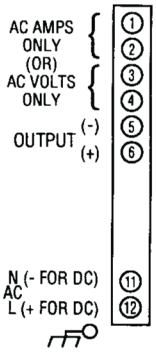
Typical Applications

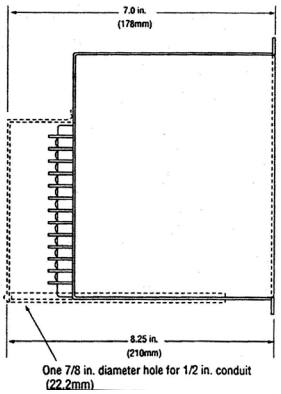
- Low-cost power measurement
- AC current/voltage signals can be interfaced to process instruments
- Output can be used for excitation control
- Motor current for torque or mass flow measurement
- Output current can be used with DC alarms for high/low voltage or current detection

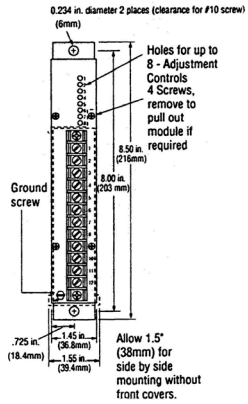
FEATURES

- **AC Current Input:** 0-5 amps: 20 amps continuous over range
- **AC Voltage Input:** 0-20 to 0-150 VAC: 200% of input over range
- **Input Frequency:** 25-400 Hz
- **High Accuracy:** ±0.25% of span
- **Very Low Input Burden**
- **DC Process Signal Outputs:** Current and voltage
- **Repeatability:** ±0.05% maximum
- **Reverse Calibration / Linear Inverter:** Optional
- **Front Removable electronics**

CONNECTIONS / DIMENSIONS







SAFETY CAUTION: If an AC Current Transmitter is in service, DO NOT open the connections to terminals 1 and 2. FIRST SHUT OFF the primary current circuit that is being monitored, then disconnect the leads from terminals 1 and 2.

INPUT/OUTPUT

Input Signals
AC Current: 0-5 amps AC, burden less than 0.5 VA
AC Voltage: any 0-20 to 0-150 VAC signal, burden less than 1.5 VA, up to 300 VAC optional
Input Frequency Range: 25-400 Hz
Input Over load Capability:
AC Current: 20 amps continuous; 250 amps for 1 second
AC Voltage: 200% of input specified

Output Signals/Output Drive (RL)

Signal	AC Power (RL)	DC Power (RL)
4-20 mA DC	0-1,000 ohms max	0-900 ohms max.
10-50 mA DC	0-400 ohms max.	0-350 ohms max.
0-1 mA DC	0-20,000 ohms max.	0-18,000 ohms max.
1-5 VDC	100K ohms min.	100K ohms min.
0-10 VDC	200K ohms min.	200K ohms min.

PERFORMANCE

Calibrated Accuracy: ±0.25%
Linearity: ±0.25% maximum, ±0.1% typical (10-100%)
Repeatability: ±0.05% maximum
Temperature Stability: ±0.01% /°F maximum, ±0.004% / °F typical
Load Effect: ±0.01% zero to full load
Output Ripple: 10 mV P/P maximum
Response Time: 400 milliseconds
Temperature Range: 0° to 140 °F (-18° to 60°C); operating -40° to 185 °F (-40° to 85 °C) storage
Power Supply Effect: ±0.05% for a ±10% power variation
Common Mode Rejection: 130 dB @ 60 Hz
Isolation: 1,500 V rms, 50-60 Hz input, output, power ground
600 V rms, 50-60 Hz, 1,000 VDC, output, power, ground
Note: All accuracies are given as a percentage of span

POWER

115 VAC: 50/60 Hz, 0.7 PF	(Standard)	48 VDC: Isolated	(Option P3)
12 VDC: Isolated	(Option P8)	125 VDC: Isolated (105-140 VDC)	(Option P4)
24 VDC: Non-Isolated	(Option P1)	230 VAC: 50/60 Hz, 0.7 PF	(Option P5)
24 VDC: Isolated	(Option P2)		

Note: All units 3 watts maximum, and ±10% power variation unless noted.

MECHANICAL

Electrical Classification: General Purpose
Connection: Barrier Terminal strip (3/8" spacing, No. 6 screws)
Controls: Multiturn zero and span controls
Mounting: Surface mounting standard. See Housings Section for options.
Weight: Net Unit: 2.6 pounds (1.18 kilograms); Shipping: 3.0 pounds (1.36 kilograms)

OPTIONS

Option Number	Description
O 12	Reverse Calibration
H 10	Thin-line conduit monitoring plate and terminal cover
H 13B, H 14B, H 15B	NEMA 4,7,& 12 enclosures
H 16	PFA 12 high-density, plug-in enclosure

Ordering Information

- Model number
- Input current or voltage signal
- Output signal
- Prime power with option no.
- Input/output options
- Housing and miscellaneous options.

Please refer to the Housing and/or Option Section for more specific and detailed information.