ADTECH

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DUAL OUTPUT ISOLATED SIGNAL CONVERTER MODEL NO. SCT 02/0 66

The Adtech Model SCT 02/0 66 AC Powered Isolated Signal Converter provides a user configurable solution for ground loops and problems encountered in connecting together recorders, process control systems, computers, DCS and PLC systems.

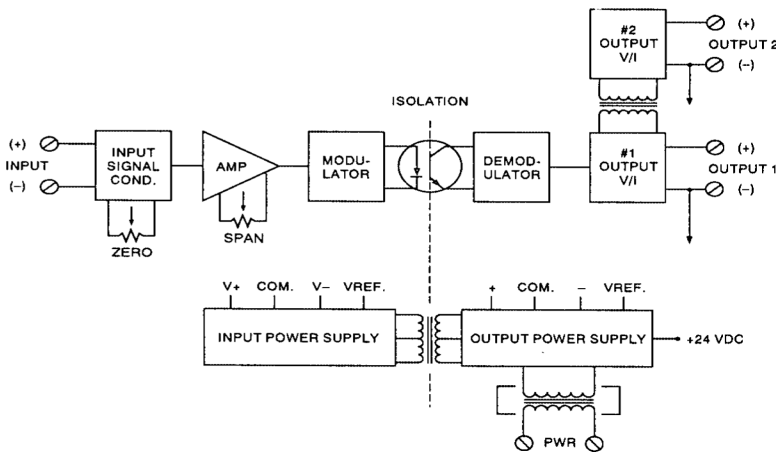It provides (2) two isolated 4-20 mA DC or 1-5 VDC outputs, or (1) one of each.

It is highly useful for applications that require signal isolation to eliminate ground loops, instrumentation level shifts, or the conditioning of a process signal riding over high common mode AC or DC voltages. Another common application is to provide additional amplification or drive to a process signal loop.

The SCT 02/0 66 offers 600 VAC/1,000 VDC ISOLATION WITH A COMMON MODE REJECTION OF 140 DB AT 60 Hz. It delivers standard process current or voltage signals on the output with a maximum of 10 mV P/P output ripple. This provides convenient interfacing of process signals to a computer system and/or other process instrumentation for improved resolution.

Zero and span controls are provided by two separate infinite resolution potentiometers.

TYPICAL APPLICATIONS

- Interface unequal or non-compatible plant ground systems
- Interface Non-compatible instruments
- DCS-PLC PC Interface
- Isolate interference on signal Lines
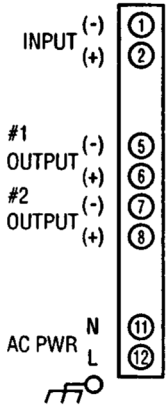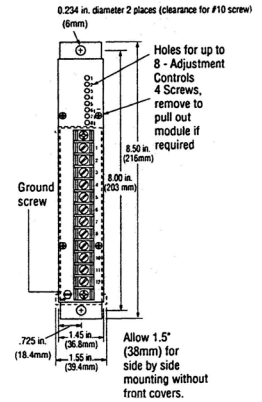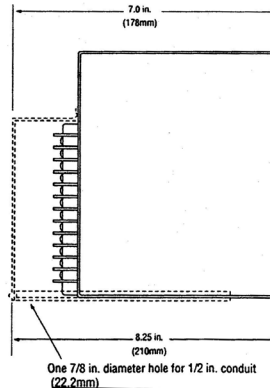- Impedance conversion

FEATURES

- DC Current Inputs: 4-20 mA, etc.
- High Input Impedance: 10 megohms minimum
- Zero-Based Inputs: Current and Voltage
- Low Impedance Current Inputs: 1/10-optional
- Dual DC Process Signal Outputs: Current or Voltage
- Repeatability: ±0.02% of span -typical
- High Accuracy: ±0.1% of span

CONNECTIONS / DIMENSIONS

INPUT (-) ① (+) ②

#1 OUTPUT (-) ⑤ (+) ⑥
#2 OUTPUT (-) ⑦ (+) ⑧

Note: With 4-20 mA DC outputs, both loads (RL) must be connected or the unused output must be shorted.

AC PWR N ⑪ L ⑫

7.0 in. (178mm)

8.25 in. (210mm)

One 7/8 in. diameter hole for 1/2 in. conduit (22.2mm)

0.234 in. diameter 2 places (clearance for #10 screw) (6mm)

Holes for up to 8 - Adjustment Controls 4 Screws, remove to pull out module if required

8.50 in. (216mm)
8.00 in. (203 mm)

Ground screw

.725 in. (18.4mm)   1.45 in. (36.8mm)
1.55 in. (39.4mm)

Allow 1.5" (38mm) for side by side mounting without front covers.

INPUT/OUTPUT

INPUT SIGNALS	OUTPUT SIGNALS/ OUTPUT DRIVE (RL)	
	OUTPUT 1	OUTPUT 2
4-20 MA DC (Z IN 250 OHMS)		
10-50 MA DC (Z IN 100 OHMS)	4-20 MA DC: 0-700 OHMS MAX	0-700 OHMS MAX.
0-1 MA DC (Z IN 5K OHMS)	1-5 VDC: 500K OHMS MIN.	500K OHMS MIN.
0-10 MA DC (Z IN 500 OHMS)		

1-5 VDC (Z IN 10 MEGOHMS)
0-5 VDC (Z IN 10 MEGOHMS)
0-10 VDC (V IN 1 MEGOHM)
OTHER ZERO-BASED CURRENTS AND VOLTAGES AVAILABLE.

NOTE: THE OUTPUT(S) CAN BE CURRENT, VOLTAGE OR ONE OF EACH

PERFORMANCE

CALIBRATED ACCURACY: ±0.1%
LINEARITY: ±0.1% MAXIMUM, ±0.04% TYPICAL
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: 150 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: 140 DB @ 60 HZ
ISOLATION: INPUT/ OUTPUT/ POWER 600 VAC, 50/60 HZ, 1,000 VDC FOR AC, ISOLATED DC POWERED UNITS

NOTE: ALL ACCURACIES ARE GIVEN AS A PERCENTAGE OF SPAN

POWER

115 VAC: 50/60 HZ, 0.7 PF   (STANDARD)   230 VAC: 50/60 HZ, 0.7 PF (OPTION P5)

NOTE: ALL UNITS 3 WATTS MAXIMUM, AND A ±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
I 14	VOLTAGE INPUTS TO 200 VDC, 1 MEGOHM MIN. IMPEDANCE; CURRENT INPUTS OF 100 MA MAX.
I 18	LOW IMPEDANCE DC CURRENT INPUTS [1/10 OF STANDARD (Z)]
O 12	REVERSE CALIBRATION (BOTH CHANNELS)
H 10	THIN-LINE CONDUIT MOUNTING PLATE AND TERMINAL COVER
H 13B, H 14B, H 15B	NEMA 4,7, AND 12 ENCLOSURES
H 16	PFA 12 HIGH-DENSITY, PLUG-IN ENCLOSURES

Ordering Information
- Model number
- Input 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.