



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.

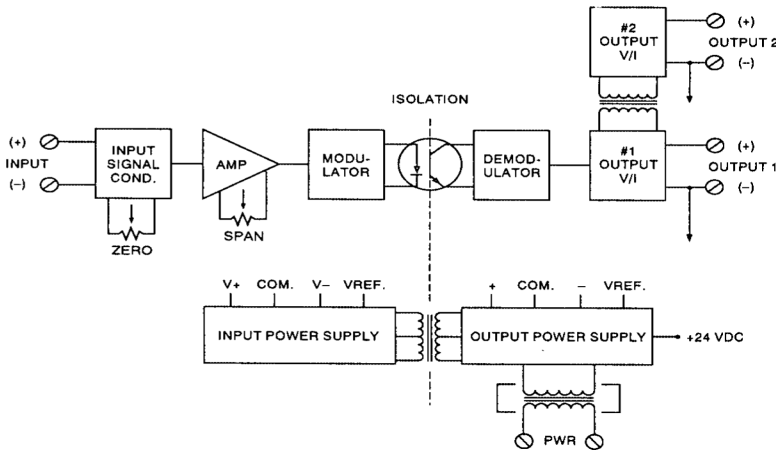
IT IS HIGHLY USEFUL FOR APPLICATIONS THAT REQUIRE SIGNAL ISOLATION TO ELIMINATE GROUND LOOPS, INSTRUMENTATION LEVEL SHIFTS, OR THE CONDITIONING OF A PROCESS SIGNAL RIDING OVER HIGH COMMON MODE AC OR DC VOLTAGES. ANOTHER COMMON APPLICATION IS TO PROVIDE ADDITIONAL AMPLIFICATION OR DRIVE TO A PROCESS SIGNAL 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.

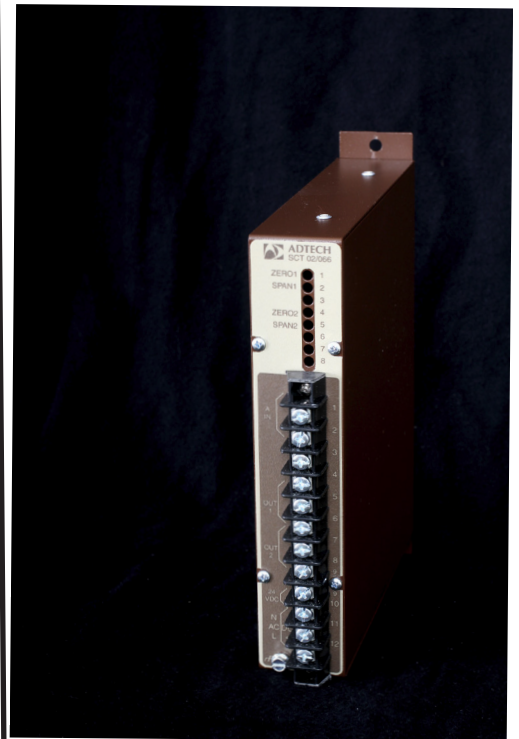
TYPICAL APPLICATIONS

- INTERFACE UNEQUAL OR NON-COMPATIBLE PLANT GROUND SYSTEMS
- INTERFACE NON-COMPATIBLE INSTRUMENTS
- DCS-PLC PC INTERFACE
- ISOLATE INTERFERENCE ON SIGNAL LINES
- IMPEDANCE CONVERSION

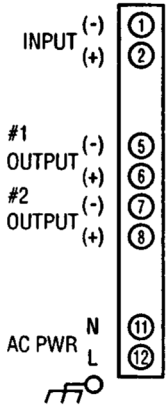


FEATURES

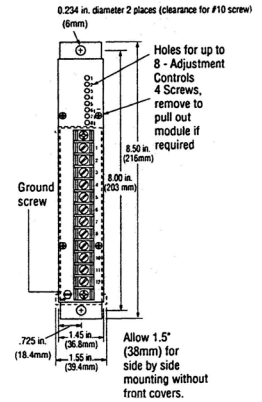
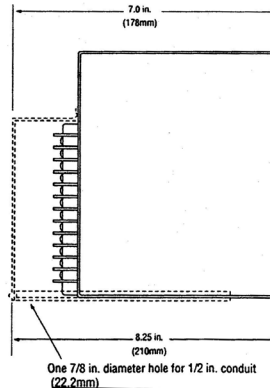
- DC CURRENT INPUTS: 4-20 MA, ETC.
- HIGH INPUT IMPEDANCE: 10 MEGOHMS MINIMUM
- ZERO-BASED INPUTS: CURRENT AND VOLTAGE
- LOW IMPEDANCE CURRENT INPUTS: 1/10-OPTIONAL
- DUAL DC PROCESS SIGNAL OUTPUTS: CURRENT OR VOLTAGE
- REPEATABILITY: $\pm 0.02\%$ OF SPAN -TYPICAL
- HIGH ACCURACY: $\pm 0.1\%$ OF SPAN



CONNECTIONS / DIMENSIONS



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



INPUT/OUTPUT

INPUT SIGNALS
 4-20 mA DC (Z IN 250 OHMS)
 10-50 mA DC (Z IN 100 OHMS)
 0-1 mA DC (Z IN 5K OHMS)
 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.

OUTPUT SIGNALS/ OUTPUT DRIVE (RL)
 OUTPUT 1 OUTPUT 2
 4-20 mA DC: 0-700 OHMS MAX 0-700 OHMS MAX.
 1-5 VDC: 500K OHMS MIN. 500K OHMS MIN.

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

PERFORMANCE

CALIBRATED ACCURACY: $\pm 0.1\%$
 LINEARITY: $\pm 0.1\%$ MAXIMUM, $\pm 0.04\%$ TYPICAL
 REPEATABILITY: $\pm 0.05\%$ MAXIMUM
 TEMPERATURE STABILITY: $\pm 0.01\%$ / °F MAXIMUM, $\pm 0.004\%$ / °F TYPICAL
 LOAD EFFECT: $\pm 0.01\%$ 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: $\pm 0.05\%$ FOR A $\pm 10\%$ 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 $\pm 10\%$ POWER VARIATION UNLESS NOTED.

MECHANICAL

ELECTRICAL CLASSIFICATION: GENERAL PURPOSE MOUNTING: SURFACE MOUNTING STANDARD. SEE HOUSINGS SECTION FOR OPTIONS.
 CONNECTION: BARRIER TERMINAL STRIP (3/8" SPACING, NO. 6 SCREWS)
 CONTROLS: MULTITURN ZERO AND SPAN CONTROLS 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.