



ADTECH

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ECONOMY 3-WAY DUAL CHANNEL ISOLATED SIGNAL CONVERTER MODEL NO. ECT 604

THE ADTECH MODEL ECT 604 DC POWERED 3 WAY ISOLATED DUAL OUTPUT SIGNAL CONVERTER PROVIDES A USER CONFIGURABLE SOLUTION FOR GROUND LOOPS AND PROBLEMS ENCOUNTERED IN CONNECTING TOGETHER RECORDERS, PROCESS CONTROL SYSTEMS, MOTOR CONTROL SYSTEMS, COMPUTERS, DCS AND PLC SYSTEMS.

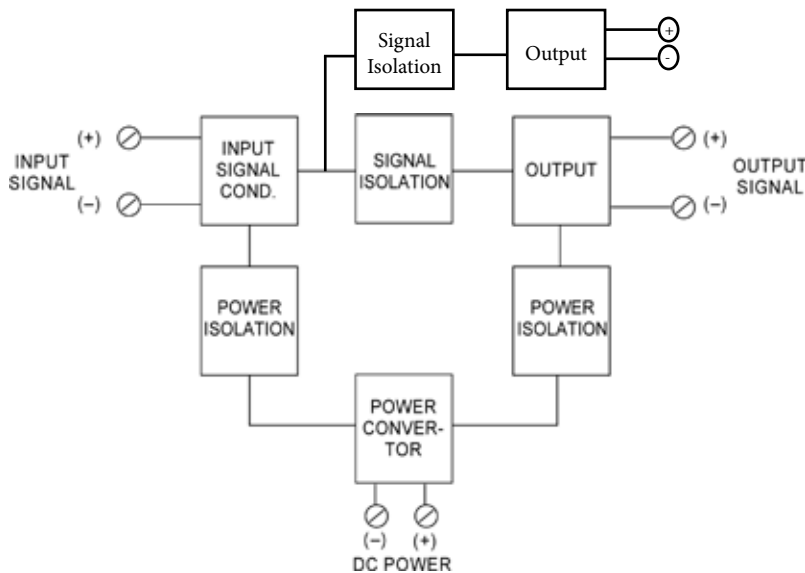
IT IS HIGHLY USEFUL FOR APPLICATIONS THAT REQUIRE SIGNAL ISOLATION ONE SIGNAL TO TWO OUTPUTS AND TO ELIMINATE GROUND LOOPS, INSTRUMENTATION LEVEL SHIFTS, OR THE CONDITIONING OF A PROCESS SIGNAL RIDING OVER HIGH COMMON MODE AC OR DC VOLTAGES. ANOTHER COMMON APPLICATION IS TO PROVIDE ADDITIONAL AMPLIFICATION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

THE INPUT, OUTPUTS AND POWER SUPPLY ARE MUTUALLY ISOLATED TO 600 VAC OR 1,000 VDC PEAK MINIMUM. THE OUTPUT IS A TRUE CURRENT SOURCE AND PROVIDES A PROCESS SIGNAL OF 4-20 MA DC. THE STANDARD RESPONSE TIME IS 150 MILLISECONDS.

IT DELIVERS TWO STANDARD PROCESSES 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 OR OTHER PROCESS INSTRUMENTATION FOR IMPROVED RESOLUTION.

ZERO AND SPAN CONTROLS ARE PROVIDED BY TWO SEPARATE INFINITE RESOLUTION POTENTIOMETERS. RECALIBRATION TO OTHER RANGES IN THE FIELD IS EASY AND CONVENIENT.

DIN MOUNTING IS SUPPLIED AS STANDARD. SURFACE MOUNT (OPTION H 26) AND SNAP TRACK (OPTION H 25) ARE AVAILABLE AT NO EXTRA COST. SPECIFY.



FEATURES

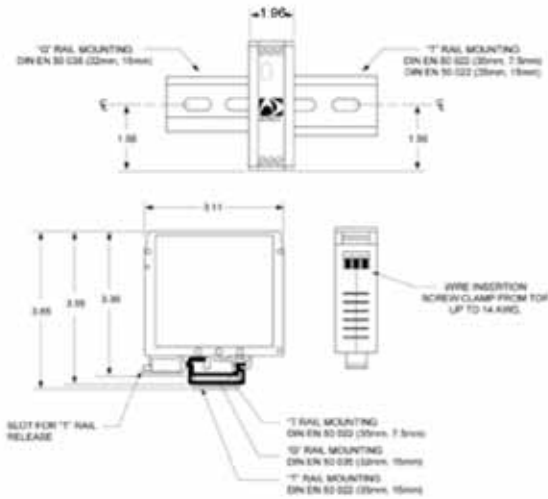
- DC CURRENT INPUTS: 4-20 OR 0-20 MA DC
- DC VOLTAGE INPUTS: 1-5 OR 0-5 VDC
- UNIPOLAR INPUTS: CURRENT OR VOLTAGE
- UNIPOLAR DC PROCESS SIGNAL OUTPUTS: TWO CURRENT OR VOLTAGE SIGNALS
- REPEATABILITY: +0.02% OF SPAN TYPICAL
- HIGH ACCURACY: +0.1% OF SPAN
- POWER: 24 VDC

TYPICAL APPLICATIONS

- FAST RESPONSE ISOLATION
- INTERFACE UNEQUAL OR NON-COMPATIBLE PLANT GROUND SYSTEMS
- INTERFACE NON-COMPATIBLE INSTRUMENTS
- DCS-PLC-PC-MC INTERFACE
- ISOLATE COMMON MODE INTERFERENCE ON SIGNAL LINES
- IMPEDANCE CONVERSION



CONNECTIONS / DIMENSIONS



INPUT/OUTPUT	<p>INPUT SIGNALS: JUMPER CONFIGURABLE 4-20 mA DC (Z IN 50 OHMS) 0-20 mA (Z IN 50 OHMS) 1-5 VDC (Z IN 1 MEGOHM) 0-5 VDC (Z IN 1 MEGOHM) VOLTAGE INPUTS TO 200 VDC, 1 MEGOHM MIN. IMPEDANCE CURRENT INPUTS OF 100 mA MAX. (OPTION I 14)</p>	<p>TWO OUTPUT SIGNALS: JUMPER CONFIGURABLE 4-20 mA DC 0-900 OHMS MAX 1-5 VDC 250K OHMS MIN.</p>
PERFORMANCE	<p>CALIBRATED ACCURACY: $\pm 0.1\%$ LINEARITY: $\pm 0.1\%$ MAX., $\pm 0.04\%$ TYPICAL REPEATABILITY: $\pm 0.05\%$ MAXIMUM TEMPERATURE STABILITY: $\pm 0.01\%$ / °F, $\pm 0.004\%$ / °F TYPICAL LOAD EFFECT: $\pm 0.01\%$ ZERO TO FULL LOAD OUTPUT RIPPLE: 10 mV P/P MAXIMUM *RESPONSE TIME: 150 MILLISECONDS BANDWIDTH: (-3DB) 2.3 HZ</p>	<p>TEMPERATURE RANGE: -25° TO 185 °F (-31 °C TO 85 °C) OPERATING; -40 ° TO 200 °F (-40 °C TO 93 °C) STORAGE POWER SUPPLY EFFECT: $\pm 0.05\%$ FOR $\pm 10\%$ POWER VARIATION COMMON MODE REJECTION: 100 DB @ 60 HZ ISOLATION: INPUT/OUTPUT/POWER 600 VAC, 50/60 HZ, 1,000 VDC</p>
POWER	<p>NOTE: ALL ACCURACIES ARE GIVEN AS A PERCENTAGE OF SPAN.</p>	
MECHANICAL	<p>24 VDC, $\pm 10\%$, 1 WATT MAXIMUM</p>	
OPTIONS	<p>ELECTRICAL CLASSIFICATION: GENERAL PURPOSE CONNECTION: SCREW COMPRESSION TYPE ACCEPTS UP TO 14 AWG CONTROLS: MULTITURN ZERO AND SPAN CONTROLS AND JUMPERS FOR RANGES MOUNTING: DIN; OPTIONAL SURFACE, SNAP TRACK OR NEMA 4 & 7 WEIGHT: NET UNIT: 4.0 OZ. (115 GRAMS) SHIPPING: 7.0 OZ. (200 GRAMS)</p>	
	<p>OPTION NUMBER I 14 H 15D H 23 H 25 H 26 H 27 H 29 H 30</p>	<p>DESCRIPTION VOLTAGE INPUTS TO 200 VDC, 1 MEGOHM MIN. IMPEDANCE; CURRENT INPUTS OF 100 mA MAX. EXPLOSION PROOF: CLASS 1, GROUP B,C AND D TWO (2) INCH PIPE MOUNTING PLATE & CLAMPS SNAP-TRACK MOUNT (SPECIFY) SURFACE MOUNTING (SPECIFY) NEMA 4 ENCLOSURE T 35 DIN "T" RAIL TWO FEET LONG T 32 DIN "G" RAIL TWO FEET LONG</p>

Ordering Information

- Model number
- Input signal
- Output signal
- Housing and miscellaneous options

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