

ADTECH

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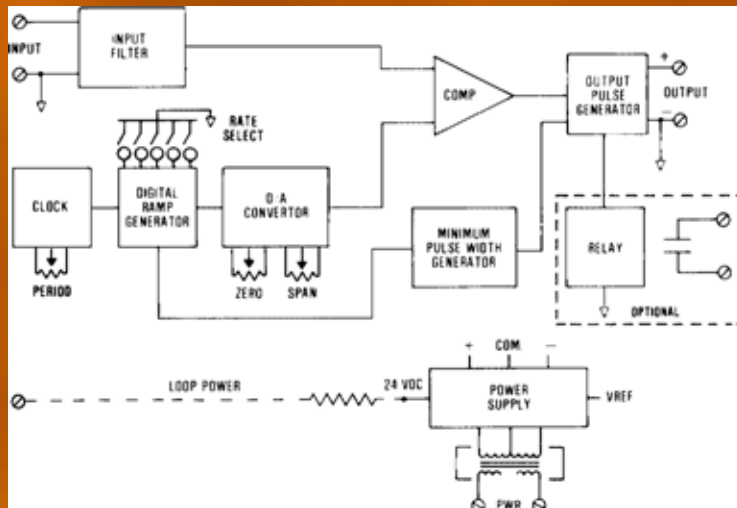
PULSE DURATION TRANSMITTER MODEL NO. PDT 80

THE ADTECH MODEL PDT 80 PULSE DURATION TRANSMITTER CONVERTS A STANDARD ANALOG PROCESS SIGNAL INPUT TO AN OUTPUT PULSE. THE PULSE DURATION ON TIME, IS LINEARLY PROPORTIONAL TO THE ANALOG INPUT SIGNAL AMPLITUDE WITH THE REPETITION TIME ADJUSTABLE OVER A 1:1 TO 1,000:1 PRE-SELECTED RANGE.

THE PDT 80 PROVIDES 24 VDC PULSE SIGNALS ON THE OUTPUT. THE OUTPUT STAGE IS SURGE PROTECTED AND CAN BE DIRECTLY CONNECTED TO TELEPHONE LINES FOR DATA TRANSMISSION. OPTION O 17 PROVIDES MERCURY-WETTED CONTACT CLOSURE OUTPUT.

RECALIBRATION TO OTHER DESIRED RANGES IS CONVENIENT. THE PDT 80 HAS A HIGH ADJUSTABILITY RANGE. THE USE OF TEMPERATURE-STABLE, LOW-NOISE COMPONENTS PROVIDES EXCELLENT STABILITY AND NOISE IMMUNITY.

THE PDT 80 INCORPORATES THE LATEST DIGITAL AND ANALOG DESIGN AND COMPONENTS, UTILIZING TIME-PROVEN TECHNIQUES FOR RELIABILITY, ACCURACY, AND SERVICEABILITY.



TYPICAL APPLICATIONS

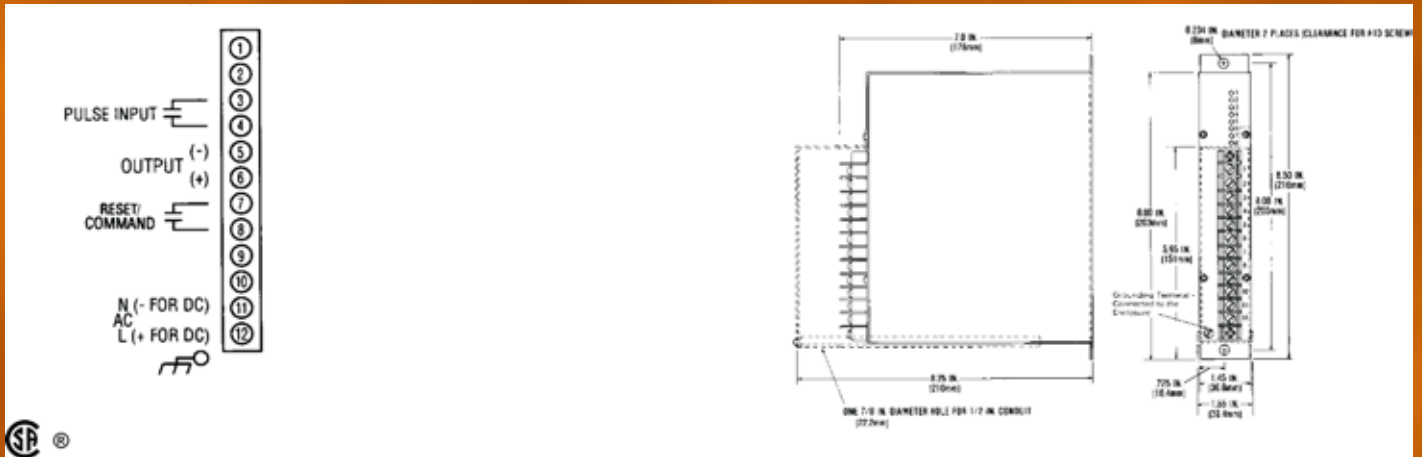
- DATA TRANSMISSION/TELEMETRY WILL METSMETER-TELETAX-DURAPULSE
- TIME-PROPORTIONING TEMPERATURE CONTROL
- PROPORTIONAL FLOW CONTROL INCREASING OR DECREASING WITH SOLENOID VALVES
- INDUSTRY APPLICATIONS:
 - SUGAR REFINING
 - PULP AND PAPER
 - FOOD PROCESSING
 - METALS AND MINING
 - WATER TREATMENT
 - LIMING PROCESS
 - BLEACHING
 - CREAM AND BUTTER PROCESSING
 - ORE FLOTATION PROCESS

FEATURES

- DC CURRENT INPUT: 4-20 MA, ETC.
- DC VOLTAGE INPUTS: 1-5 VDC, ETC.
- HIGH INPUT IMPEDANCE: 10 MEGOHMS MINIMUM
- ZERO-BASED INPUTS: CURRENT AND VOLTAGE
- LOW IMPEDANCE CURRENT INPUTS: 1/10 STANDARD-OPTIONAL
- PULSE DURATION OUTPUTS: 0.1 TO 300 SECONDS OVERALL PERIOD
- SELECTABLE RANGES: 0 TO 2, 0 TO 13.33, 1 TO 5 AND 3 TO 12 SECONDS ARE TYPICAL OUTPUT RANGES
- OUTPUT RESPONSE: ONE PERIOD
- DIGITAL ACCURACY: 1 PART IN 40%



CONNECTIONS / DIMENSIONS



INPUT/OUTPUT

INPUT SIGNALS
 4-20 mA DC (Z IN 250 OHMS)
 10 TO 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 1 MEGOHM)
 0-10 VDC (Z IN 1 MEGOHM)
 OTHER ZERO BASED CURRENT/VOLTAGES AVAILABLE

OUTPUT SIGNALS
 VOLTAGE: 24 VDC PULSES INTO 500 OHMS MIN.
 CONTACT: DRY, 10 VA @ 24 VDC RATING-OPTIONAL
 PERIOD: 0.1 TO 300 SECONDS
OUTPUT RANGES:
 0 TO 2 SECONDS
 0 TO 13.33 SECONDS
 1 TO 5 SECONDS
 3 TO 12 SECONDS
 5 TO 25 SECONDS
 OTHER PERIODS/RANGES ARE OPTIONAL

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, 0.004% / °F TYPICAL
 RESPONSE TIME: 150 MILLISECONDS; ONE CYCLE PERIOD
 TEMPERATURE RANGE: 0° TO 140 °F (-18° TO 60°C) OPERATING; -40° TO 85 °C) STORAGE
 POWER SUPPLY EFFECT: $\pm 0.05\%$ FOR A $\pm 10\%$ POWER VARIATION
 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 $\pm 10\%$ POWER VARIATION UNLESS NOTED

MECHANICAL

ELECTRICAL CLASSIFICATION: GENERAL PURPOSE
 CONNECTION: BARRIER TERMINAL STRIP (3/8 " SPACING, NO. 6 SCREWS)
 CONTROLS: MULTITURN ZERO, SPAN, AND PERIOD 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 STANDARD (Z))
O 12	REVERSE CALIBRATION
O 15	TWO-WIRE TRANSMITTER EXCITATION
O 17	INTERNAL MERCURY-WETTED RELAY
H 10	THIN-LINE CONDUIT MOUNTING 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 signal
- Output period: (i.e. time)
- Output range, voltage, or contact out
- 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.