



# ADTECH

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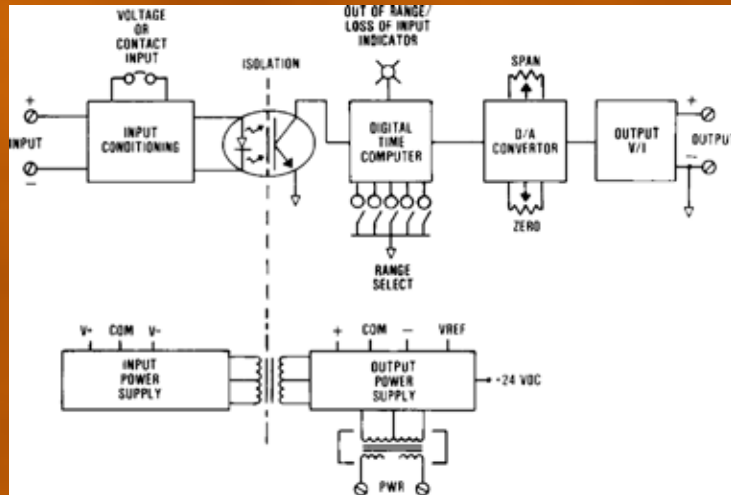
## ISOLATED PULSE DURATION RECEIVER MODEL NO. PDR 82

THE ADTECH MODEL PDR 82 ISOLATED PULSE DURATION RECEIVER ACCEPTS PULSE DURATION SIGNALS OF 0.1 TO 300 SECOND PERIODS AND PROVIDES ACCURATE CONVERSION TO STANDARD PROCESS SIGNALS SUCH AS 4-20 MA DC, 1-5 VDC, OR ZERO-BASED OUTPUTS.

AN EXCLUSIVE FEATURE OF THE PDR 82 IS A LOSS-OF-INPUT OR OUT-OF-RANGE LED INDICATOR, WHICH PROVIDES A VISUAL INDICATION.

THE PDR 82 PROVIDES STANDARD PROCESS CURRENT OR VOLTAGE SIGNALS ON THE OUTPUT WITH A MAXIMUM OF 10 mV P/P OUTPUT RIPPLE. IT OFFERS, AS STANDARD, A CONVENIENT WAY OF INTERFACING TELEMETRY/PULSE DURATION SIGNALS TO A COMPUTER SYSTEM OR OTHER PROCESS INSTRUMENTATION FOR IMPROVED RESOLUTION.

RECALIBRATION TO OTHER DESIRED RANGES IS CONVENIENT. THE USE OF TEMPERATURE-STABLE, LOW-NOISE COMPONENTS PROVIDES EXCELLENT STABILITY AND NOISE IMMUNITY.



### TYPICAL APPLICATIONS

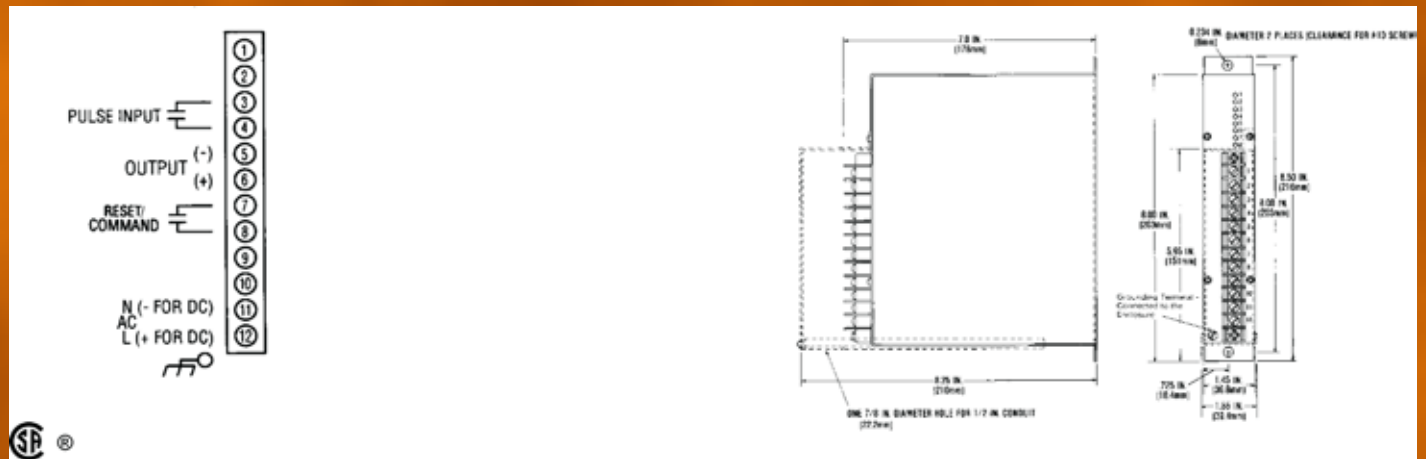
- FLOW AND LEVEL SENSOR INTERFACE
- TELEMETRY RECEIVER
- COMPUTER OUTPUT TO AN ANALOG INTERFACE

### FEATURES

- PULSE DURATION INPUTS: 0.1 TO 300 SECONDS OVERALL PERIOD
- SELECTABLE RANGES: 0 TO 2, 0 TO 13.33, 1 TO 5, AND 3-12 SECONDS ARE TYPICAL INPUT RANGES
- RESPONSE TIME: 1 PERIOD
- DIGITAL ACCURACY:  $\pm 1$  PART IN 4096
- INDICATION: FOR OUT-OF-RANGE OR LOSS-OF-INPUT
- DC PROCESS SIGNAL OUTPUTS: CURRENT AND VOLTAGE
- REPEATABILITY:  $\pm 0.02\%$  OF SPAN
- HIGH ACCURACY:  $\pm 0.1\%$  OF SPAN



# CONNECTIONS / DIMENSIONS



## INPUT/OUTPUT

INPUT SIGNALS	OUTPUT SIGNALS/OUTPUT DRIVE (RL)	
VOLTAGE: 28 VDC MAXIMUM INTO 500 OHMS MINIMUM	SIGNAL	AC POWER (RL) DC POWER(RL)
CONTACT: DRY, 10 VA @ 24 VDC RATING- SPECIFY	4-20 MA DC	0-1,000 OHMS MAX 0-900 OHMS MAX
PERIOD: 0.1 TO 300 SECONDS	10-50 MA DC	0-400 OHMS MAX 0-350 OHMS MAX
INPUT RANGES: 0 TO 2 SECONDS	0-1 MA DC	0-20,000 OHMS MAX 0-18,000 OHMS MAX
0 TO 13.33 SECONDS	1-5 VDC	100K OHMS MIN 100K OHMS MIN
1 TO 5 SECONDS	0-10 VDC	200K OHMS MIN 200K OHMS MIN
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  
 LOAD EFFECT:  $\pm 0.01\%$  ZERO TO FULL LOAD  
 OUTPUT RIPPLE: 10 mV P/P MAXIMUM  
 RESPONSE TIME: 400 MILLISECONDS; ONE CYCLE TIME  
 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  
 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)	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
O 11	BIPOLAR VOLTAGE OUTPUT TO $\pm 10$ VDC: AT 1 MA, BIPOLAR CURRENT $\pm 1$ MA
O 12	REVERSE CALIBRATION
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 period: i.e., time
- Input range
- N.O. or N.C. contact input
- 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.