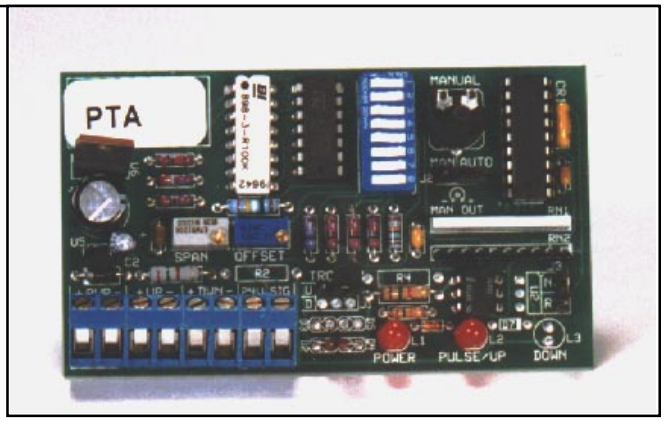
PTA

Pulse Width Modulated Input
to Analog Current or Voltage Output

FEATURES

- 7 Input Pulse Ranges (Versions 1, 2 & 3)
- 10 Field Selectable Outputs
- Current or Voltage Output
- Accepts Triac input
- Quartz Accuracy
- 255 Step Resolution
- Input to Output Signal Isolation
- LED Status Indicators
- Dial potentiometer for manual override of output
- Reverse Acting is jumper selectable
- No Wrap-Around



APPLICATIONS

- Variable Speed Pump Drives
- Pulse to Analog Transducer
- Duty Cycle to Analog Control
- Variable Frequency Fan Drive Control
- Digital to Analog Conversion
- Electric Actuator Control
- Can be used with an ATP to transduce one pulse range to another

PRODUCT DESCRIPTION

The PTA converts a single pulse-width modulated input to an analog current or voltage output. There are two LED indicators that designate power and signal . A timed contact or solid state closure from the controlling microprocessor controller is converted to a linear analog output signal with 255 steps of resolution.

The last output signal is held until the PTA receives the end of the next pulsed input signal.

The PTA's output will not wrap around if an excessively long input pulse is received. Ten preset analog output signal spans are DIP switch selectable. In addition, the span and offset potentiometer offer maximum user adjustability of the output signal.

The input signal is optically isolated and can accept either positive or negative polarity.

ORDERING INFORMATION

Specify: **PTA Version** _____ with _____ **ENC1 Enclosure?**

1, 2 or 3 (see page 2)

Custom Pulse Input Ranges also available

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SPECIFICATIONS

Electrical Requirements

Power Supply

Supply Voltage	Regulated 24 VDC minimum, 35 VDC maximum
	Regulated 22 to 28 VAC
Supply Current	45 mA maximum

Input

Trigger Level	Dry contact to common, 5-24 VDC, or 24 VAC +/- 10%
Time Between Pulses	1 millisecond minimum
Pulse Duration/Resolution	Range in seconds of dry contact, triac or solid state relay (SSR) closure, 255 steps of resolution:
Version #1	.02 to 5 seconds .1 to 10 seconds
	0.59 to 2.93 seconds .1 to 25.5 seconds
Version #2	0 to 10 seconds Duty Cycle Pulse (as sampled in a 10 second window)
	.023 to 6 seconds
Version #3	0 to 20V Staefa™ Phase Cut to Analog
SPECIAL ORDER MODELS:	1) Flowmeter Pulses Per Minute to Analog
	2) Protemp by Fluidmaster™ Pulses Per Minute to Analog
	3) HSQ PWM (15 sec.) to Analog (Fails to minimum with no pulse after 60 seconds plus three other "no pulse" ranges.

Output

Voltage Range	Pre-set Spans; Dip switch selectable:
	0 to 1 VDC 1 to 2 VDC
	0 to 4 VDC 1 to 5 VDC
	0 to 10 VDC 1 to 11 VDC
	0 to 14 VDC 1 to 16 VDC
	Adjustable Range: 0 to 16 VDC (with adjustable offset)
Current Range	0 to 16 mA 4 to 20 mA
	Adjustable Range: 0 to 20 mA (with adjustable offset)
Accuracy	+/- 2% of Span for all ranges, fixed or adjustable, +/- 5% of span for Staefa™ phase cut
Load Impedance	Current: 0 to 750 ohms maximum
	Voltage: 1000 ohms to infinity minimum

MECHANICAL REQUIREMENTS

Connections

Wire Size	Up to one 14 gauge maximum
Terminal Type	45º Captive screw, moving clamp design in nickel plated copper alloy
Dimensions	3.75" L x 2.25" W x 1.5" H
Weight	1.5 oz
Mounting	Furnished with 3.75" length of 2.25" wide snaptrack (ENC1 optional)

Environmental Requirements

Operating Temperature	32 to 120 degrees F
Storage Temperature	-20 to 150 degrees F
Operating Humidity	10% to 95% non-condensing

PTA Specifications may change without notice to improve accuracy or functionality.

Call for Other Calibration Ranges and Versions.

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