



# ATP

## Analog Current/Voltage to PWM Output

The **ATP-R** converts an analog signal into a digital pulse output signal. The user can select eight standard analog input ranges to the ATP by changing jumper shunt positions. To select the output pulse range, the ATP has an eight position DIP switch. The output pulse is continuous with a one second off time between pulses. The **ATP-R Version 2** operates the same except no pulse output occurs when the analog input falls to, or below, 10% of the input signal range. This allows for a true "OFF" setting for solid state relays controlling electric heat. The **ATP-T** is a Triac Output (24 VAC only). Both the **ATP-R** and **ATP-T** versions have two timing ranges, standard

and custom selectable. The standard mode allows four different timing ranges set by the DIP switch. The Custom Mode allows for 128 pulse timing ranges. The **ATP-Y** is also a Form C Relay Output (24 VAC or VDC) with an option of two pulse output ranges designed to communicate with York™ Chiller Control Packages. Some chiller control panels required a 1-11 or 0-21 second pulse to remotely reset chilled water temperatures. Specify one of two pulse ranges when ordering.

**Applications:** Analog Interface to some York™ Chiller Control Packages that require 1-11 second or 0-21 second pulse signal to reset the chilled water temperature, Analog Control of Solid State Relays for Electric Heat (no pulse output below 10% signal input span), Analog to pulse width output, Analog to (AC) triac output

**The ATP is covered by ACI's Two (2) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website.**

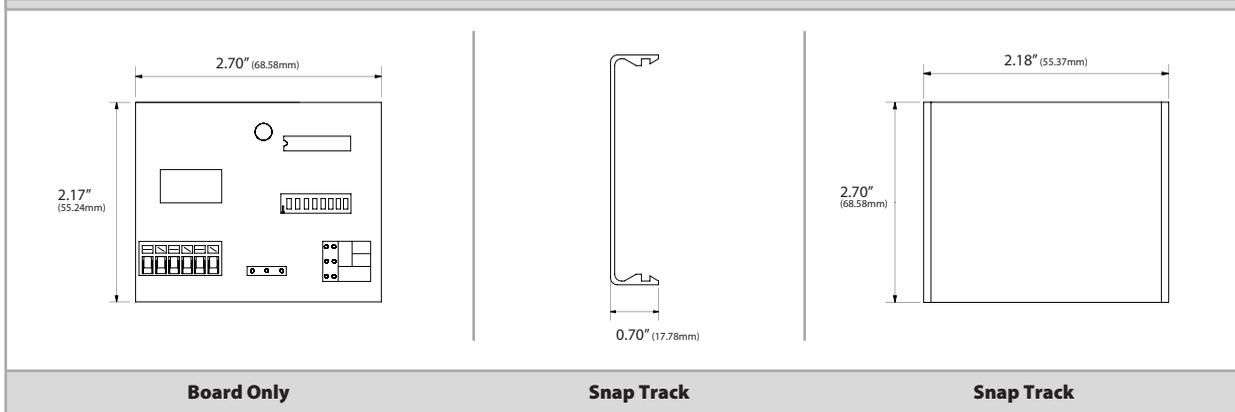
### PRODUCT SPECIFICATIONS

|   |  |
|---|--|
| <b>Supply Voltage:</b>                                    | 24 VAC or 24VDC, (+/- 10%), 50/60 Hz   |
| <b>Supply Current:</b>                                    | 50 mA maximum  |
| <b>Input Voltage Signal Range (@ Impedance):</b>          | 0-5 VDC, 0-10 VDC, 0-15 VDC, 1-5 VDC, 2-10 VDC, 3-15 VDC @ 1,000,000Ω  |
| <b>Input Current Signal Range (@ Impedance):</b>          | 0-20 mA, 4-20 mA @ 250Ω  |
| <b>Output Pulse Timing Ranges (Standard Mode):</b>        | <b>Solidyne™</b> (0.023-6s)   <b>Andover™</b> (0.1-25.5s)   <b>Johnson™</b> (0.02-5s)   <b>Novar™</b> (0.59-2.93s) |
| <b>Output Pulse Timing Ranges (Custom Mode):</b>          | Allows for 128 pulse timing ranges   |
| <b>Output Digital Type, Relay Version (ATP-R, ATP-Y):</b> | Form "C" Relay   |
| <b>Relay Contact Rating:</b>                              | 2A @ 24 VAC or 24 VDC  |
| <b>Relay Electrical Life:</b>                             | 100,000 operations @ 1A, 24 VDC  |
| <b>Relay Mechanical Life:</b>                             | 10,000,000 operations  |
| <b>Output Digital Type, Triac Version (ATP-Y):</b>        | 3A @ 24 VAC only (22-28V)  |
| <b>Connections:</b>                                       | 90° Pluggable Screw Terminal Blocks  |
| <b>Wire Size:</b>   | 16 (1.31 mm <sup>2</sup> ) to 26 AWG (0.129 mm <sup>2</sup> )  |
| <b>Terminal Block Torque Rating:</b>                      | 0.5 Nm (Minimum); 0.6 Nm (Maximum)   |
| <b>Operating Temperature Range:</b>                       | 35 to 120°F (1.7 to 48.9°C)  |
| <b>Operating Humidity Range:</b>                          | 10 to 95% non-condensing   |
| <b>Storage Temperature:</b>                               | -20 to 150°F (-28.9 to 65.5°C)   |
| <b>Snaptrack Material:</b>                                | Polyvinyl Chloride (PVC)   |
| <b>Snaptrack Flammability Rating:</b>                     | UL94 V-0   |
| <b>Product Dimensions:</b>                                | (L) 2.70" (W) 2.18" (H) 1.00" (68.58 x 55.24 x 25.4 mm)  |
| <b>Product Weight:</b>                                    | 0.18 lbs. (0.082 Kg)   |
| <b>Agency Approvals:</b>                                  | RoHS2, WEEE  |





**DIMENSIONAL DRAWING**



**STANDARD ORDERING**

Model # Example: AFP -OR- 106317

| Model #                 | Item # | Firmware Version # | Type of Output | Additional Information  |
|-------------------------|--------|--------------------|----------------|---|
| <b>ATP-R</b>            | 128306 | 0010y0A.HEX        | Relay          | ---   |
| <b>ATP-R VERSION #2</b> | 129727 | 0438Y0A.HEX        | Relay          | No Pulse Output (When Analog Input falls ≤ 10% of the input signal range) |
| <b>ATP-T</b>            | 141033 | 0010y0A.HEX        | Triac          | ---   |
| <b>ATP-T VERSION #2</b> | 130111 | 0438Y0A.HEX        | Triac          | No Pulse Output (When Analog Input falls ≤ 10% of the input signal range) |
| <b>ATP-Y (1-11)</b>     | 110588 | 01000300.OBJ       | Relay          | 1-11 Seconds Pulse for York Chiller Packages                              |
| <b>ATP-Y (0-21)</b>     | 128424 | 0208Y0A.OBJ        | Relay          | 0-21 Seconds Pulse for York Chiller Packages                              |

**ACCESSORIES**

Model # Example: A/DO008 -OR- 142583

| Model #                 | Item # | Description   |
|-------------------------|--------|---|
| <b>A/DO008</b>          | 142583 | Transient Voltage Suppressor, Bi-directional, 56 tVAC/DC, 1500W |
| <b>A/DRC 2.7 X 2.18</b> | 142626 | DIN Rail Adapter Kit  |
| <b>ENC1</b>             | 102472 | 20 Gauge Metal Enclosure, Designed to Hold Interfaces Products  |

