

ACTION PAK® AP4570 MODEL



Benefits

- Digital Design Prevents Output “Droop”
- Peak Detection Applications
- Low-Cost “Sample & Hold” Applications
- AC Line Powered
- Three Year Warranty



Track-Hold/Peak-Hold Process Function

Provides Signal “Track & Hold” or “Track & Peak Hold” Capability

DESCRIPTION

The AP4570 offers two modes of operation - Track & Hold and Track & Peak-Hold. In “Track & Hold” operation the output tracks the input signal. When an external contact is closed, the input level is “saved” and its corresponding output signal is held indefinitely until the contact is opened. Releasing the hold switch (pins 8 and 11) allows the output to again follow the input. The “Track & Peak-Hold” mode is similar to “Track & Hold” operation except upon contact closure (pins 8 and 11) the highest input is “saved” and the corresponding output is held until a higher signal level occurs.

APPLICATION

Model AP4570 is useful in capturing DC-input signals to be held for further processing or signal-conditioning. Typical applications include monitoring peak electrical or energy demands, capturing process conditions such as flow rates, equipment protection and taring to factor out unwanted dead weight.

OPTIONS

CS Canadian Standards Association Certification.

U Urethane coating of internal circuitry for protection from corrosive atmospheres

CALIBRATION

Top-accessed screwdriver adjustments provide typical $\pm 10\%$ zero and span adjustability. Calibration is referred to input in that adjustments are correct for input/sensor variations. Zero is adjusted for the specified minimum output with the input at the desired minimum. Span is adjusted for the specified maximum output with the input at the desired maximum. Repeat adjustments for maximum accuracy.

PRODUCT ASSISTANCE

For additional information on calibration, operation and installation please contact our Technical Services Group. Call toll-free:

800-783-6664



*Protecting the
Integrity of
Industrial
Process Signals*



An Invensys Company

SPECIFICATIONS

Input Impedance	Voltage Input: >200K Ω Current Input: 20 Ω
Output Impedance	Voltage Output: <10 Ω Current Output: >100K Ω
Output Drive	Voltage Output: 10mA, max (1K Ω , min. @ 10V) Current Output: 15V compliance @ 20mA (750 Ω , max)
Response Time	100msec. typical
Linearity	$\pm 0.05\%$ of span, typical
Output Resolution (digital tracking)	1 part in 512
Stability (15-minute warm-up)	$\pm 0.02\%/^{\circ}\text{C}$ typical

Output Ripple	0.25% of max. span, rms or 2mV, whichever is greater
Common Mode Rejection	60 Hz: >80dB DC: >100dB
Common Mode Voltage	600V DC or peak AC max
Temperature Range	Operating: 0 to 60 $^{\circ}\text{C}$ (32 to 140 $^{\circ}\text{F}$) Storage: -20 to 85 $^{\circ}\text{C}$ (-4 to 185 $^{\circ}\text{F}$)
Power	Consumption: 3W typical, 5W max Standard: 120VAC ($\pm 10\%$, 50-400Hz) Available: 240VAC ($\pm 10\%$, 50-400Hz)
Weight	0.56lbs

Table 1: AP4570

Standard Input/Output Ranges*

0-1V	1-5V	10-50mA
0-5V	0-10V	4-20mA

Table 2: AP4570 Input Limits

Minimum Span		Maximum Input	
Voltage	Current	Voltage	Current
100mV	1mA	200V	1A

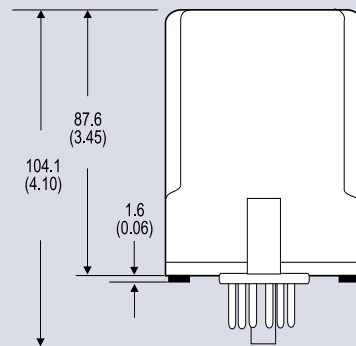
Table 3: AP4570 Output Limits

Minimum Span		Maximum Output	
Voltage	Current	Voltage	Current
100mV	1mA	10V	50mA

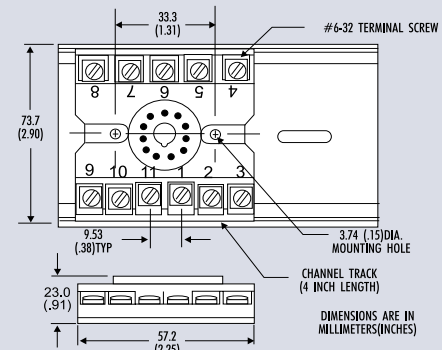
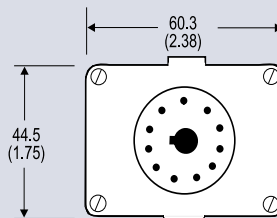
* Consult factory for non-standard I/O ranges.

DIMENSIONS

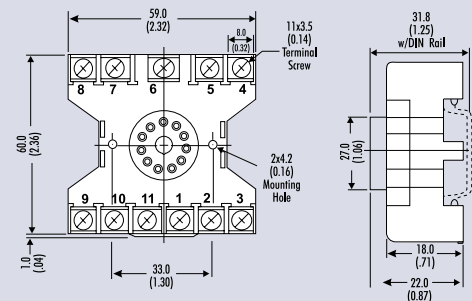
Dimensions are in mm (inches)



Retaining Spring
Available: Model M801



M011 (Track/Surface)



MD11 (DIN/Surface)

MODELS & ACCESSORIES

Mounting

AAII Action Paks feature plug-in installation. Model AP4570 uses an 11-pin base and either molded socket M011, or DIN rail MD11.

Ordering Information

Specify:

- Model: **AP4570**
- Input Range (see Tables 1, 2)
- Output Range (see Tables 1, 3)
- Options: CS, U (see text)
- Line Power (see specs.)

Pin Connections

- AC Power (Line)
- Shield (Gnd)
- AC Power (Neu)
- Input (+)
- Input (-)
- Mode Select Open: Track & Hold
- Mode Select Closed: Track & Peak/Hold
- Output (+)
- Output (-)
- Hold Select Open: Track
- Hold Select

(All power supplies are transformer-isolated from the internal circuitry.)