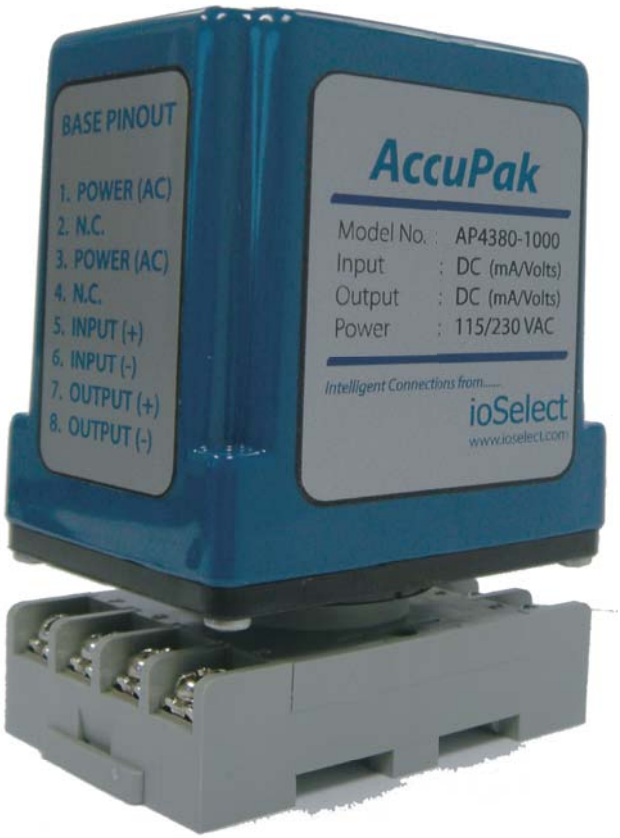
AccuPak

Plug-in Style Signal Conditioners and Alarms



- SIGNAL CONDITIONERS & ISOLATORS
- DUAL ALARM TRIP MODULES
- MATH FUNCTION MODULES
- INDUSTRY STANDARD DESIGNS
- SPECIAL RANGES AVAILABLE

PLUG-IN DESIGN
Industry Standard 8-pin and 11-pin Octal Socket mounting

100% COMPATIBILITY
Guaranteed Replacements for Action Instruments, API, Wilkerson, and others

WIDE RANGING
Field Configurable & Factory Configured Units Available

FULL ISOLATION
All Units provide greater than 1000VAC (rms) 3-way Isolation (Input/Output/Power)

HIGH ACCURACY
Overall Accuracy better than 0.1% of full scale. (Linearity ±0.05%)

HIGH OUTPUT DRIVE
All Conditioners capable of driving a minimum of 1200Ω (@ 20mA)

INDUSTRIAL SPECS
Operating Temperature Range:
-10˚C to +60˚C

LIFETIME WARRANTY
Guaranteed no charge replacement under normal use

TECHNICAL SPECIFICATIONS

AccuPak Plug-in Style Signal Conditioners and Alarm Modules

AP4380-2000 DC-to-DC Conditioner (Wide Ranging)

Input Range (full scale):	10mV to 220V, 1mA to 100mA
Output Ranges:	0-5V, 1-5V, 0-10V, 2-10V, 0-1mA, 0-20mA, and 4-20mA
Linearity:	0.05% of span, or better
Response Time:	< 100mS
Isolation (Vrms):	Power: 1,500V, I/O: 1,000V
Temperature Stability:	±0.02% of span/°C, or better

AP4300 High Accuracy DC-to-DC Conditioner

Input Range (full scale):	Voltage: ± 250V max. Current: ± 5A max.
Output Ranges:	Voltage: -10V to +15V max. Current: 0-25mA max.
Adjustability:	±15% of factory set range
Accuracy:	0.1% of span, or better
Response Time:	< 100mS
Isolation (Vrms):	Power: 1,500V, I/O: 1,000V
Temperature Stability:	±0.02% of span/°C, or better

AP7380 Frequency-to-DC Conditioner (Wide Ranging)

Input Range (full scale):	0-10Hz to 0-100,000 Hz
Input Amplitude	: 50mV to 350V peak
Output Ranges:	0-1V, ±1V, 0-2V, 0-5V, 1-5V, 0-10V, ±10V, 0-1mA, 1-5mA, 0-10mA, 0-20mA, 4-20mA
Linearity	: 0.05% of span, or better
Sensor Excitation	:18Vdc, unregulated
Isolation (Vrms)	: Power: 1,500V, I/O: 1000V
Temperature Stability:	±0.02% of span/°C, or better

AP4400 Math Function Modules

AP4400: Add/Subtract Module (specify 2 to 4 inputs)
AP4410: 2-channel DC input Multiplier (A x B)
AP4420: 2-channel DC input Divider (A / B)
AP4430: 2-channel DC input Squarer (A^2)
AP4440: DC input Square Root Extractor
Input Range (all units): ± 20V or ±100mA, max.
Output Range (all units): -10V to +15V, 0-25mA, max.
General Specifications of AP4300 apply to all modules

AP1090 DC Input Dual Limit Alarm (Wide Ranging)

Input Range (full scale):	0-5V, 0-10V, 4-20mA
Relay Output(s):	(2) SPST (5A@230VAC or 30VDC)
HI/LO/FAILSAFE:	Switch selectable
Setpoint Adjustment:	0-100%
Deadband Adjustment:	0.25% to 100%
Response Time:	< 100mS
Isolation (Vrms):	Power & Relay Contacts: 1,500V
Temperature Stability:	±0.02% of span/°C, or better

AP6010/6020 AC Voltage/Current-to-DC Conditioners

Input Range (full scale):	Voltage (6010): 50mV to 250V Current (6020): 1mA to 5A
Input Frequency:	40Hz to 1000Hz
Output Ranges:	Voltage: -10V to +15V max. Current: 0-25mA max.
Adjustability:	±15% of factory set range
Accuracy:	0.1% of span, or better
Response Time:	< 100mS
Isolation (Vrms):	Power: 1,500V, I/O: 1,000V

AP4001 RTD-to-DC Signal Conditioner

Input Range (full scale):	any RTD from 10Ω to 2000Ω (2, 3 or 4 wire configurations)
Output Ranges:	Voltage: -10V to +15V max. Current: 0-25mA max.
Adjustability:	±15% of factory set range
Accuracy:	0.1% of span, or better
Response Time:	< 100mS
Isolation (Vrms):	Power: 1,500V, I/O: 1,000V
Temperature Stability:	±0.02% of span/°C, or better

AP1020 DC Input Dual Limit Alarm

Input Range (full scale):	± 250V or ±5A, max.
Relay Output(s):	(2) SPST (5A@230VAC or 30VDC)
HI/LO/FAILSAFE:	Switch selectable
Setpoint Adjustment:	0-100%
Deadband Adjustment:	0.25% to 100%
Response Time:	< 100mS
Isolation (Vrms):	Power & Relay Contacts: 1,500V
Temperature Stability:	±0.02% of span/°C, or better

AP4003 Potentiometer-to-DC Signal Conditioner

Input Range (full scale):	any pot, 100Ω to 100KΩ
Output Ranges:	Voltage: -10V to +15V max. Current: 0-25mA max.
Adjustability:	±15% of factory set range
Accuracy:	0.1% of span, or better
Response Time:	< 100mS
Isolation (Vrms):	Power: 1,500V, I/O: 1,000V
Temperature Stability:	±0.02% of span/°C, or better

AP1220 Thermocouple Input Dual Limit Alarm

Input Range (full scale):	Any Standard TC type (consult)
Relay Output(s):	(2) SPST (5A@230VAC or 30VDC)
HI/LO/FAILSAFE:	Switch selectable
Setpoint Adjustment:	0-100%
Deadband Adjustment:	0.25% to 100%
Response Time:	< 100mS
Isolation (Vrms):	Power & Relay Contacts: 1,500V
Temperature Stability:	±0.02% of span/°C, or better

AP4051 Strain Gauge-to-DC Signal Conditioner

Input Range (full scale):	0.4mV/V to 1V/V (10V excitation)
Excitation:	4V to 12VDC, 40mA max. load
Output Ranges:	Voltage: -10V to +15V max. Current: 0-25mA max.
Adjustability:	±15% of factory set range
Accuracy:	0.1% of span, or better
Response Time:	< 100mS
Isolation (Vrms):	Power: 1,500V, I/O: 1,000V
Temperature Stability:	±0.02% of span/°C, or better

AP1420 RTD Input Dual Limit Alarm

Input Range (full scale):	Any 2,3 or 4-wire RTD (consult)
Relay Output(s):	(2) SPST (5A@230VAC or 30VDC)
HI/LO/FAILSAFE:	Switch selectable
Setpoint Adjustment:	0-100%
Deadband Adjustment:	0.25% to 100%
Response Time:	< 100mS
Isolation (Vrms):	Power & Relay Contacts: 1,500V
Temperature Stability:	±0.02% of span/°C, or better

AP4130 Thermocouple-to-DC Conditioner

Input (TC) Types:	J,K,T,E,R,S,B or N
Output Ranges:	Voltage: -10V to +15V max. Current: 0-25mA max.
Burnout Detection:	Upscale/Downscale (jumper set)
Adjustability:	±15% of factory set range
Accuracy:	0.1% of span, or better
Response Time:	< 100mS
Isolation (Vrms):	Power: 1,500V, I/O: 1,000V
Temperature Stability:	±0.02% of span/°C, or better

AP1620 AC Input Dual Limit Alarm

Input Range (full scale):	5250V or ±5A, max.
Relay Output(s):	(2) SPST (5A@230VAC or 30VDC)
HI/LO/FAILSAFE:	Switch selectable
Setpoint Adjustment:	0-100%
Deadband Adjustment:	0.25% to 100%
Response Time:	< 100mS
Isolation (Vrms):	Power & Relay Contacts: 1,500V
Temperature Stability:	±0.02% of span/°C, or better