

APCS (Analog Process Control Services) is Australia's leading manufacturer of high quality electronics for process measurement. These highly versatile products can be custom configured for specialized applications including custom linearization, thermocouple conversion, range splitting, LVDT, vibration, pH, ramping, A/D, ΔP, and more.

Absolute Process Instruments now provides the widest range of signal conditioning products available anywhere! For product data sheets and ordering options, see www.apcs.com or call us at 800-942-0315 for a quotation.



USC 701 UNIVERSAL SIGNAL CONDITIONER

Measurement and control functions in a single instrument
User programmable for most signal conditioning applications including PID control

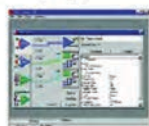
Programmable I/O

Inputs: 2 analog, 2 pulse, sensor excitation

Outputs: 1 analog or pulse, 2 relays, MODBUS

Adjustable dead band & time delays

Math, logic, custom linearization, four 101 point tables



BSC 133 BIPOLAR SIGNAL CONVERTER

Converts uni- & bipolar input signals to a bi-polar DC signal. Load independent bi-polar output.

Input: AC/DC current & volts, resistance, RTD, thermocouple, pH/ORP, frequency, pulse, LVDT and millivolts. Sensor excitation.

High power output & dither options for hydraulic applications

Adder or subtracter options

Optional output ramp, external ratio peak hold, track & hold

Front adjustments for span and zero



MPA 166 MULTIPOINT DIGITAL-ANALOG CONV.

Sums up to 16 digital inputs and converts the result to a DC signal. All inputs have an equal weighting, option for alternate input weighting.

DC input signals can be either voltage or current

Auxiliary available on input connector to drive open collector transistors or any contact type device

Options for non-standard trigger levels, hysteresis and bandwidth



SSP 235 SIGNAL SPLITTER

Produces two DC output signals from one input signal. Output signals can be different from each other and from input.

Input: 4-20 mA, mV, bipolar, thermocouple, RTD, pulse, resistance, AC current or AC voltage. Sensor excitation.

2000 Vrms isolation

Field configurable by internal links with selectable response time

Front adjustments for span and zero

Range splitting versions



APC 153 ANALOG TO PULSE CONVERTER

Converts an analog input signal to a pulse signal. Signal conversion for use with PLC & SCADA systems

Input includes AC/DC current & volts, resistance, RTD (Pt100), thermocouple, pH/ORP and pulse

Transistor (pulse) output up to 10k Hz

2000 Vrms isolation

Front adjustments for span and zero



RAF 185 RAMP FUNCTION MODULE

Convert period ramp, pulse accumulation or quadrature to DC signal. Microprocessor-based. Use for motor start-up, speed control, process signal ramping, pulse accumulation, quadrature.

Contact or external source pulse input. Sensor excitation.

Time base (period) adjustments. Master reset.

Output up to 18 VDC or 50 mADC

2000 Vrms isolation



APC 253 ANALOG TO PULSE CONVERTER

Converts an analog input signal to a pulse signal. Signal conversion for use with PLC & SCADA systems

Input include AC/DC current & volts, resistance, RTD (Pt100), thermocouple, pH/ORP and pulse

Transistor (pulse) output up to 10k Hz

2000Vrms isolation

Front adjustments for span and zero

Power supply up to 63 VDC



DI 739 ISOLATOR, DUAL CHANNEL

Two fully independent isolator channels. Factory configured input to customer requirements.

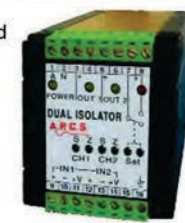
Jumper configurable outputs for common process signals

Front adjustments for span and zero for each channel

Optional alarm on channel 2

Isolation is 2 kVrms between all 6 ports

Can be configured for signal splitting or range splitting



ATP 168 ANALOG TO POTENTIOMETER CONVERTER

Convert most process signals to a potentiometer output. Replace mechanical pots used for control of existing machinery or for automatic control of gain or offset in instrumentation.

Switched resistors with 1 in 255 (8 bit) resolution

3-way isolation up to 2000 Vrms

Connect as a 3-wire pot or 2-wire variable resistor

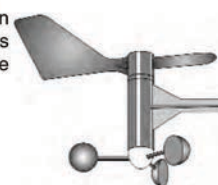


MU 7911 WIND SPEED/DIRECTION SENSOR

Measure wind speed and direction. Robust low cost design for industrial applications. Use for low cost weather stations and weather related control such as building/greenhouse blinds.

Horizontal arm with pipe mounting bracket and 12m cable

Low friction ball bearings for long life



ATR 167 ANALOG TO RESISTANCE CONVERTER

Converts process signals into a simulated resistance output. Convert a thermocouple to RTD signal to match dissimilar existing equipment. Use for automatic gain control.

True analog conversion providing extremely high resolution

Front adjustments for span and zero

3-way isolation up to 2000 Vrms between input signal, resistance output and power supply



QLPI 731 ISOLATOR, QUAD LOOP POWERED

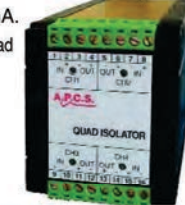
Four channel loop powered isolator. Standard output is 4-20 mA. Double surge protection to prevent failure due to DC switched inductive load spikes

Selectable process inputs, range changing via internal solder pads

Wide supply range of 7.5 to 38 VDC

Internal zero and span trim adjustments

Front mounted LEDs verify the function of each channel



HVI 237 ISOLATOR, 5 KV

Fast response high voltage signal isolator. Used for high voltage electric machinery such as trains and mining equipment.

Input: selectable mV ranges, optional ranges to 1000 VDC, DC current inputs via shunt

Optional 250 μsec response time to capture spikes and fast surges

Dual outputs





APCS Specialty Signal Conditioners

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Specialty I/O

VPR 271 VOLTAGE PRESENCE RELAY

Directly monitor 3-phase voltage up to 700 V phase to phase. Neutral must be connected for proper operation. Signal powered by incoming AC-voltage. LED indication of each phase.

- 2 relay outputs indicating loss of 3 phases loss of 1 phase
- Relay 1 energized with any phase present
- Relay 1 and 2 are energized with all three phases present
- Relay 2 de-energizes if any one of the three phases fail
- Relay 1 and 2 are de-energized if all three phases fail



HVR 272 ALARM RELAY, HIGH VOLTAGE

High voltage input alarm relay. Use for over/under voltage monitoring.

- Directly monitor voltage up to 700 V, 40 to 1000 Hz
- Powered from the incoming AC voltage
- 2.5 Kv Isolation
- Two 8A rated relay contact outputs with one trip point adjustment.



QAU 775 FOUR RELAY QUAD ALARM

Four relay output alarm with adjustable set-points. Input: AC & DC current/voltage, pulse, potentiometer, temperature, chemical sensors and strain-gauge. Sensor excitation.

- Optional min/max selector or 4-20mA adder/subtractor, retransmission
- Contacts rated at 10A/250 VAC resistive, optional TTL
- Front setpoint and deadband adjustments
- Window alarm option. Reverse action option. LED alarm indicators



TRA 173 ALARM, TRIPLE

Triple relay output alarm with adjustable set-points. Common applications include process alarms.

- Input up to 2 kVDC and 10 ADC
- Sensor excitation
- Contacts rated at 10A/250VAC
- Front setpoint adjustments
- Trip status is indicated by LED



PHT 129 PH / REDOX TRANSMITTER

Converts pH/ORP to DC signal. Wide range of pH and ORP probe input. Wastewater and water treatment monitoring, contamination detection, salinity monitoring.

- High input impedance
- Output up to 18 VDC or 50 mADC
- 2000 Vrms isolation
- Temperature compensation optional
- Front adjustments for span and zero



CDT 128 CONDUCTIVITY TRANSMITTER

Convert conductivity to a DC signal. Any type of conductivity input. Interface to conductivity cells, detect contamination, salinity monitoring.

- Sensor excitation
- Temperature compensation option
- Output up to 18 VDC or 50 mADC
- 2000Vrms isolation
- Front adjustments for span and zero



VBT144 VIBRATION TRANSMITTER

Converts vibration to a DC signal. Monitoring of vibrating feeders, protection of vibrating machinery.

- Input: field configurable for mV input for swing-coil velocity transducers, piezoelectric accelerometer or eddy current displacement probe
- Zero to peak, peak to peak or RMS average normalized
- Output up to 18Vdc or 50mAdc
- Raw sensor signal output on front BNC connection
- Front adjustments for span and zero



PLR 255, PLR 555 (IP65) PULSE REPEATER

Rescales or repeats pulse signals, optional frequency division. Pulse conditioning and stretching, pulse conversion.

- Input: external pulse or any type of speed sensor up to 10 kHz. Sensor excitation
- Voltage/PNP/NPN outputs
- 2000 Vrms isolation
- Front adjustments for pulse width and trigger level
- Powered by 8-60 VDC



PM 277 DIFFERENTIAL PRESSURE MONITOR

Converts differential air pressure to an analog output and provides a relay contact. Robust piezoresistive silicon pressure sensor for high accuracy and long life. Ventilation system monitoring, pressure monitoring & control in clean rooms, control of process air systems.

- Pressure ranges from 0.3 psi to 30 psi (2 kPa to 200 kPa)
- Optional open collector output instead of relay contact
- Low range AC or DC voltage power supplies



RTDT 225 TEMPERATURE TRANSMITTER, RTD

Converts RTD (Pt100) temperature sensors to a Linearized DC signal.

- Lead resistance compensation
- Front adjustments for span and zero
- 2000 Vrms isolation
- 2-wire or 3-wire output loop power supplies
- Options for downscale burnout, differential input, and 2 input average



TCT 226 TEMPERATURE TRANSMITTER, THERMOCOUPLE

Converts a thermocouple temperature input to a DC signal

- Input: J, K, T, E, R, S, N thermocouples
- 2-wire or 3-wire output loop power supplies
- 2000 Vrms isolation
- Cold junction compensation
- Front adjustments for span and zero
- Optional upscale or downscale burn-out



LVDT 149 LVDT TRANSMITTER

Converts LVDT output to DC a signal. Interface to LVDT (Linearly Variable Differential Transformer) for position monitoring or measuring applications.

- Any type of LVDT input
- Output up to 18 VDC or 50 mADC
- Output ramp option
- Front adjustments for span and zero



STM 156 STALL MONITOR

Frequency alarm with an adjustable trip point. Stall or under speed monitor of conveyor belt or slowly rotating shaft.

- Input: external pulse and any type of speed sensor
- Front adjustments for trip speed and start-up delay
- Relay contact output
- Under speed alarm



VBT 244 VIBRATION TRANSMITTER

Converts vibration to a DC signal. Monitoring of vibrating feeders, protection of vibrating machinery, measuring building movement.

- Input: field configurable links for mV input from swing-coil velocity transducers, quartz shear transducers or eddy current displacement probe
- Transducer excitation, 2-wire or 3-wire output loop power supplies
- Zero to peak, peak to peak or RMS average normalized
- Option for integration for velocity measurement
- Front adjustments for span and zero

