



Automotive
Energy & Power Analysis
Aerospace & Defense
Transportation
General Test & Measurement



Analog Isolation Amplifiers

DAQ series

DEWETRON high precision signal conditioning amplifiers are available for almost any sensor to measure

- Voltage
- Current
- Pressure
- Temperature
- Position
- Torque
- Velocity
- Acceleration
- Strain
- Force
- Distance
- RPM
- Resistance
- and more

Key Features

- Full isolation
- Single channel modularity
- High bandwidth
- High accuracy
- Integrated sensor supply
- DEWE-30 chassis for any AD card or Recorder
- Simple sensor connection

DAQP series modules are signal conditioners featuring high accuracy, programmable input ranges, signal filtering and full isolation. DAQP modules are highest quality and offer best comfort in all applications by single channel modularity and convenient sensor connection.

Due to their isolation these modules are almost indestructible and the user does not need to worry about details like common mode voltage, ground system etc – **just simply connect the signal and measure! This is saving a lot of time and money.**

Monitor e.g. temperature on a circuit breaker with cheap non-isolated thermocouples. Even current measurements using shunt resistors in the power line are no problem. There are unlimited applications where isolation is the key for success.

As a perfect supplementation to the dynamic DAQP modules DEWETRON offers quasi static PAD modules with integrated 24 bit A/D converters and typically 8 channels per module for slow signals.



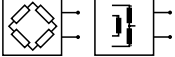
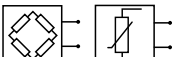
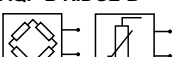
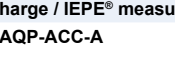




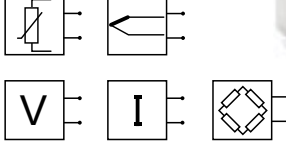


Selection Guide

DAQ Series Modules



- Single channel
- High bandwidth - for dynamic signals
- Isolation (most models)
- Analog signal output (± 5 V)
- Single channel modularity
- For DEWETRON systems with built-in DAQ rack
- Pure signal conditioning solution in conjunction with DEWE-30 series racks

Module	Input type	Ranges	TEDS	Bandwidth (BW), Filters (LP = lowpass, HP = highpass)	Isolation (ISO), Overvoltage protection (OP)
Universal measurement					
DAQP-STG 	Strain gage, bridge sensors	± 0.1 to ± 1000 mV/V (@ 5 VDC _{exc})	✓	BW: 300 kHz LP: 10 Hz to 300 kHz	ISO: 350 V _{DC} OP: ± 50 V _{DC}
	Piezoresistive bridge	± 0.5 to 10000 mV/mA (@ 1 mA _{exc})			
	Voltage	± 500 μ V to ± 10 V			
	Resistance	25 m Ω to 100 k Ω			
	Pt100, Pt200, Pt500, Pt1000, Pt2000	-200° C to 850° C			
	IEPE® via MSI-BR-ACC	± 2.5 to ± 10000 mV			
	Thermocouple via MSI-BR-TH-x	full range of TC type			
Charge via MSI-BR-CH-50	up to 50000 pC				
Voltage via MSI-BR-V-200	up to ± 200 V				
High voltage measurement					
DAQP-HV 	High voltage	± 20 to ± 1400 V	-	BW: 300 kHz LP: 10 Hz to 300 kHz	ISO: 1.8 kV _{RMS}
DAQP-HV-S3 	High voltage	± 20 to ± 1400 V	-	BW: 700 kHz LP: 10 Hz to 700 kHz	ISO: 1.8 kV _{RMS}
DAQP-DMM 	High voltage	± 10 to ± 1000 V	-	BW: 20/30 kHz LP: 10 Hz to 30 kHz	ISO: 1.5 kV _{RMS}
Voltage & current measurement					
DAQP-LV 	Voltage	± 10 mV to ± 50 V	✓	BW: 300 kHz LP: 10 Hz to 300 kHz	ISO: up to 1 kV _{RMS} OP: 350 V _{DC}
	Current with external shunt	20 mA / 5 A			
	IEPE® via MSI-V-ACC	± 10 mV to 10 V			
	Pt100, Pt200, Pt500, Pt1000, Pt2000 and resistance via MSI-V-RTD	-200° C to 1000° C and 0 to 6.5 k Ω m			
Charge via MSI-V-CH-50	up to 50000 pC				
DAQP-V 	Voltage	10 mV to 50 V	-	BW: 50 kHz LP: 10 Hz to 50 kHz	ISO: up to 1 kV _{RMS} OP: ± 500 V _{DC}
	Current with external shunt	20 mA / 5 A			
DAQN-AIN 	Voltage	± 10 V (1:1 input)	-	-	OP: $< \pm 500$ V (jumper selectable)
Current measurement					
DAQP-LA-SC 	Current <i>Note:</i> 5 A _{RMS} continuous	0.1 A to 30 A peak max. 5 A _{RMS} contin. current	-	BW: 300 kHz LP: 10 Hz to 300 kHz	ISO: 1.4 kV _{RMS}
DAQP-LA-B 	Current <i>Note:</i> typ. 20 mA application	2 mA to 600 mA	-	BW: 300 kHz LP: 10 Hz to 300 kHz	ISO: 1.4 kV _{RMS}

Module	Input type	Ranges	TEDS	Bandwidth (BW), Filters (LP = lowpass, HP = highpass)	Isolation (ISO), Overvoltage protection (OP)
Bridge / strain gage and carrier frequency amplifier					
DAQP-CFB 	AC bridge, strain gage <i>Note:</i> 5 kHz sine wave excitation	Bridge: 0.1 to 1000 mV/V Inductive sensors, LVDT Inductive: 5 to 1000 mV/V	-	BW: DC to 2.3 kHz LP: 10 Hz to 1 kHz	OP: $\pm 10 V_{DC}$
DAQP-BRIDGE-A 	Strain gage, bridge sensors	± 1 to ± 50 mV/V (@ 5 VDC)	-	BW: 20 kHz LP: 10 Hz to 20 kHz	ISO: 350 V_{DC} OP: $\pm 10 V_{DC}$
DAQP-BRIDGE-B 	Strain gage, bridge sensors	± 0.1 to ± 100 mV/V (@ 5 VDC)	✓ ¹⁾	BW: 200 kHz LP: 10 Hz to 200 kHz	OP: $\pm 10 V_{DC}$
DAQP-BRIDGE-B 	Potentiometric sensors	200 Ω to 10 k Ω			
Charge / IEPE[®] measurement					
DAQP-ACC-A 	IEPE [®] sensors	± 50 mV to ± 5 V	-	BW: 0.5 Hz to 300 kHz LP: 1 to 300 kHz HP: 0.5 Hz and 5 Hz	-
DAQP-CHARGE-A 	Charge sensors IEPE [®] sensors <i>Note:</i> selectable integration and double integration	Charge: 5 to 50000 pC IEPE [®] : ± 5 mV to 5 V	-	BW: 0.1 Hz to 50 kHz LP: 100 Hz to 50 kHz HP: 0.1 Hz to 10 Hz	-
DAQP-CHARGE-B 	Charge sensors <i>Note:</i> selectable time constant for static sensors	± 100 to $\pm 1\,000\,000$ pC	-	BW: DC to 100 kHz LP: 10 Hz to 100 kHz HP: DC, 0.001 Hz to 0.5 Hz	ISO: 350 V_{DC}
Temperature measurement					
DAQP-THERM 	Thermocouple <i>Note:</i> internal CJC and linearisation	Type K, J, T, R, S, N, E, B, L, C and U selectable free programmable range	-	BW: 3 kHz LP: 3, 10, 30, 100, 300, 1000 Hz	ISO: 1 kV _{RMS}
DAQP-MULTI 	Thermoresistors Thermocouple Resistance Piezoresistive bridge Voltage Current (with external shunt)	Pt100, Pt200, Pt500, Pt1000 and Pt2000, free programmable range Type K, J, T, R, S, N, E, B, L, C, U free programmable range 1 Ohm to 1 MOhm 13 ranges (± 0.5 to 5000 mV/mA) 10 ranges from ± 5 mV to ± 5 V depending on external shunt	✓	BW: 3 kHz LP: 3, 10, 30, 100, 300, 1000 Hz	ISO: 1 kV _{RMS}
Frequency measurement					
DAQP-FREQ-A 	Frequency	100 Hz to 200 kHz	-	BW: according to range Output response: 1.5 ms 30 ms 500 ms	ISO: 350 V_{DC}
Voltage output module					
DAQN-V-OUT 	Voltage output	1:1 output module with isolation Input voltage: ± 10 V Output voltage: ± 10 V	-	BW: 400 Hz	ISO: 240 V_{DC}

¹⁾ TEDS support for DAQP-BRIDGE-B revision 2 only



ADAP-D9M-BNCF:
DSub to BNC adapter for DAQP-V series and DAQP-FREQ modules



BNC to Microdot adapter
(included as a standard with DAQP-CHARGE-A modules)



CONN-DSUB-9:
Screw terminal adapter for all modules with 9-pin DSub connector



BNC to banana and banana to BNC adapters



Isolated high-voltage amplifier: DAQP-HV

Standard Models

Instruments

For Your Computer

Signal Conditioning

Components