

DAQ Modules Specifications

Module description	Type	Speed (ch/sec)	Max volts	Max amps	Bandwidth	Thermal offset	Comments
DAQ-900 20 ch Multiplexer	2-wire solid-state (4-wire selectable)	450	120 V		10 MHz	< 4 μ V	Built-in cold junction reference
DAQ-901 20 ch Multiplexer + 2 ch current	2-wire armature (4-wire selectable)	80	300 V	1 A	10 MHz	< 4 μ V	Built-in cold junction reference 2 additional current channels (22 total)
DAQ-903 40 ch Single-Ended Mux	1-wire armature (common low)	80	300 V		10 MHz	< 1 μ V	No four-wire measurements
DAQ-904 4 x 8 Matrix	2-wire armature		300 V		10 MHz	< 1 μ V	
DAQ-907 Multifunction Module	16 bits of digital input and output		42 V				Open drain
	100 kHz totalizer input		42 V		100 kHz		Input threshold selectable
	Two 18-bit analog outputs		± 12 V	± 24 mA			Max 40 mA total output per frame
DAQ-908 20 ch Actuator/General Purpose Switch	SPDT / form C		300 V		10 MHz	< 4 μ V	
DAQ-909 8 ch HV Multiplexer + 2 ch current	2-wire armature (4-wire selectable)	60	DC 600 V AC 400 V	2 A	10 MHz	< 4 μ V	2 additional current channels (10 total)

Internal DMM measurement functions supported

	DAQ-900	DAQ-901	DAQ-903	DAQ-904	DAQ-907	DAQ-908	DAQ-909
AC/DC Voltage	\checkmark ^{2,3}	\checkmark	\checkmark				\checkmark
AC/DC Current		\checkmark					\checkmark
Frequency/Period	\checkmark	\checkmark	\checkmark				\checkmark
2Wire Resistance	\checkmark ¹	\checkmark	\checkmark				\checkmark
4Wire Resistance	\checkmark ¹	\checkmark					\checkmark
Thermocouple	\checkmark	\checkmark					\checkmark ⁴
2Wire RTD		\checkmark	\checkmark				\checkmark
4Wire RTD		\checkmark					\checkmark
Thermistor		\checkmark	\checkmark				\checkmark
Capacitance		\checkmark	\checkmark				\checkmark

1. For the measurement of 100 Ω and 1 k Ω resistance ranges, it is recommended to use 4-wire resistance. The maximum resistance range of DAQ-900 is 1 M Ω .

2. When measuring AC voltage, the input impedance will decrease with frequency. A source impedance of 5 Ω or less will maintain specification over frequency. A source impedance of 50 Ω or less will maintain specification in the 5 kHz range.

3. For DC voltage measurement, if the integration time is short and the source impedance is high, more stabilization time may be required.

4. Need to use an extension cable moving the cold junction outside the chassis and manually set the reference temperature value