# DAQ Modules Specifications

| Module description | Type | Speed (ch/sec) | Max volts | Max amps | Bandwidth | Thermal offset | Comments |
|---|---|---|---|---|---|---|---|
| **DAQ-900**<br>20 ch Multiplexer | 2-wire solid-state (4-wire selectable) | 450 | 120 V | | 10 MHz | < 4 µV | Built-in cold junction reference |
| **DAQ-901**<br>20 ch Multiplexer + 2 ch current | 2-wire armature (4-wire selectable) | 80 | 300 V | 1 A | 10 MHz | < 4 µV | Built-in cold junction reference<br>2 additional current channels (22 total) |
| **DAQ-903**<br>40 ch Single-Ended Mux | 1-wire armature (common low) | 80 | 300 V | | 10 MHz | < 1 µV | No four-wire measurements |
| **DAQ-904**<br>4 x 8 Matirx | 2-wire armature | | 300 V | | 10 MHz | < 1 µV | |
| **DAQ-907**<br>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**<br>20 ch Actuator/General Purpose Switch | SPDT / form C | | 300 V | | 10 MHz | < 4 µV | |
| **DAQ-909**<br>8 ch HV Multiplexer + 2 ch current | 2-wire armature (4-wire selectable) | 60 | DC 600 V<br>AC 400 V | 2 A | 10 MHz | < 4 µV | High voltage / high current channels |
| **DAQ-919**<br>8 ch HV Multiplexer | 2-wire armature | 60 | DC 1000 V | | 10 MHz | < 4 µV | Attenuates to 10 V max. |
| **DAQ-1000**<br>30 ch Multiplexer | 2-wire solid-state (4-wire selectable) | 450 | 120 V | | 10 MHz | < 4 µV | Built-in cold junction reference (DAQ-1000T) |
| **DAQ-1001**<br>30 ch Multiplexer | 2-wire armature (4-wire selectable) | 80 | 300 V | | 10 MHz | < 4 µV | Built-in cold junction reference (DAQ-1001T) |



## Internal DMM measurement functions supported [6]

| | DAQ-900 | DAQ-901 | DAQ-903 | DAQ-904 | DAQ-907 | DAQ-908 | DAQ-909 | DAQ-919 [5] | DAQ-1000 | DAQ-1001 |
|---|---|---|---|---|---|---|---|---|---|---|
| AC/DC Voltage | √ [2,3] | √ | √ | | | | √ | DC only | √ [2,3] | √ |
| AC/DC Current | | √ | | | | | √ | | | √ |
| Freq./Period | √ | √ | √ | | | | √ | | √ | √ |
| 2Wire Resistance | √ [1] | √ | √ | | | | √ | | √ [1] | √ |
| 4Wire Resistance | √ [1] | √ | | | | | √ | | √ [1] | √ |
| Thermocouple | √ | √ | | | | | √ [4] | | √ | √ |
| 2Wire RTD | | √ | √ | | | | √ | | | √ |
| 4Wire RTD | | √ | | | | | √ | | | √ |
| Thermistor | | √ | √ | | | | √ | | | √ |
| Capacitance | | √ | √ | | | | √ | | | √ |

1. For the measurement of 100 Ω and 1 kΩ resistance ranges, it is recommended to use 4-wire resistance. The maximum resistance range of DAQ-900 is 1 MΩ.
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.
5. The DAQ-919 implements a resistance-based attenuation method to support a maximum range of 10 V DC.
6. DAQ-9XX modules are suitable for DAQ-10600 and DAQ-9600, but DAQ-1000 and DAQ-1001 are only suitable for DAQ-10600