

**DAQP-HV**

- **Input ranges:**
- **Bandwidth:**
- **Isolation:**
- **Signal connection:**

**Isolated high voltage module**

- 7 ranges ( $\pm 20$  V to  $\pm 1400$  V)
- 300 kHz
- 1.8 kV<sub>RMS</sub> line to line
- 1.4 kV<sub>RMS</sub> line to ground
- Banana sockets

**Module specifications**

DAQP-HV	
Input ranges	$\pm 20$ V, $\pm 50$ V, $\pm 100$ V, $\pm 200$ V, $\pm 400$ V, $\pm 800$ V, $\pm 1400$ V
DC accuracy	$\pm 0.05$ % of reading $\pm 40$ mV
20 V and 50 V	$\pm 0.05$ % of reading $\pm 0.05$ % of range
100 V to 1400 V	
Gain linearity	0,03 %
Gain drift range	Typically 20 ppm/°K (max. 50 ppm/°K)
Offset drift	
20 V to 100 V	typical 0.5 mV/°K                      max. 4 mV/°K
200 V to 1400 V	typical 5 ppm/°K                      max. 20 ppm of Range/°K
Long term stability	100 ppm/sqrt (1000 hrs)
Input resistance	10 MOhm
-3 dB Bandwidth	300 kHz <sup>(1)</sup>
Filter selection	Push button or software
Filter (lowpass)	10 Hz, 30 Hz, 100 Hz, 300 Hz, 1 kHz, 3 kHz, 10 kHz, 30 kHz, 100 kHz
Filter characteristics	10 Hz to 100 kHz: Butterworth or Bessel 40 dB/dec (2nd order; $\pm 1.5$ dB @ f <sub>0</sub> ) 300 kHz: Bessel 60 dB/dec (3rd order; 0 to -3 dB @ 300kHz)
Typical SFDR and SNR	
	300 kHz                      100 kHz                      10 kHz
	SFDR   SNR   SFDR   SNR   SFDR   SNR
50 V	98      76      101      81 dB      108      90 dB
200 V	98      84      101      89 dB      108      91 dB
1400 V	98      86      102      91 dB      107      92 dB
Typical CMRR	>80 dB @ 50 Hz 70 dB @ 400 Hz 60 dB @ 1 kHz 48 dB @ 10 kHz
Isolation voltage	Line to Ground 1.4 kVrms Line to Line 1.8 kVrms
Protection	CAT III 600 CAT IV 300
Surge (1.2/50)	$\pm 4000$ V
Burst (5 kHz)	$\pm 4000$ V
Output voltage	$\pm 5$ V
Output resistance	<10 Ohm
Output current	5 mA
Output protection	Short to ground for 10 sec.
Power supply	$\pm 9$ V <sub>DC</sub> $\pm 1$ %
Power consumption	0.7 W
Power On default settings	Software programable
Interface	RS-485

<sup>(1)</sup> 300 kHz exclusively for Bessel filter characteristic