

DAQP-ACC-A

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

IEPE® module

- $\pm 5\text{ V}$, $\pm 1.66\text{ V}$, $\pm 500\text{ mV}$, $\pm 166\text{ mV}$, $\pm 50\text{ mV}$
- 4 mA or 8 mA
- 300 kHz
- none
- BNC socket

**Module specifications**

DAQP-ACC-A	
Ranges	$\pm 5\text{ V}$, $\pm 1.66\text{ V}$, $\pm 500\text{ mV}$, $\pm 166\text{ mV}$, $\pm 50\text{ mV}$
Gain	1, 3, 10, 30, 100
Range / gain selection	Push button or software
Gain error	0.5 %
Sensor types	IEPE® sensors only
Sensor excitation	4 or 8 mA (software selection), 10 %, up to 28 V_{DC}
Input impedance	5 or 7 MOhm (depending on time constant), in parallel with 1.2 nF
Input voltage range	4 to 19 V
Voltage < 4 V	„Shortcut“ detection
Voltage > 19 V	„No sensor“ detection
Input protection	
IN+	max. -10 to 28 V
IN- (shield)	max. 20 mA
Bandwidth (-3 dB)	From selected highpass filter to 300 kHz (+2 to -5 dB @ fg)
Filters (highpass)	0.5 Hz and 5 Hz (software selection)
0.5 Hz filter	0.32 s time constant
5 Hz filter	0.032 s time constant
Filters (lowpass)	1 kHz, 10 kHz, 100 kHz, 300 kHz other filter steps available as an option on request
Filter selection	Push button or software
Filter characteristics	Butterworth
up to 100 kHz	100 dB / decade (30 dB / octave)
300 kHz	80 dB / decade (24 dB / octave)
Typical SFDR and SNR	
	300 kHz bandwidth 100 kHz bandwidth 10 kHz bandwidth
	SFDR SNR SFDR SNR SFDR SNR
5000 mV	92 dB 90 dB 100 dB 91 dB 103 dB 93 dB
500 mV	88 dB 85 dB 100 dB 89 dB 100 dB 92 dB
50 mV	71 dB 68 dB 90 dB 73 dB 82 dB 80 dB
Output voltage	$\pm 5\text{ V}$
Output resistance	< 10 Ohm
Output current	Max. 5 mA
Output protection	Continuous short to ground
RS-485 interface	Yes
Power supply voltage	$\pm 9\text{ V}_{\text{DC}}$ ($\pm 10\%$)
Power consumption	Typical 0.8 to 1.0 W (depending on sensor)