DAQP-LA — Isolated current module

- *Input ranges:* *DAQP-LA-B: 0.1 A, 0.3 A, 1 A, 3 A, 10 A peak, 30 A peak, DAQP-LA-B-S1: 2 mA, 6 mA, 20 mA, 60 mA, 200 mA, 0.6 A,*
- *Bandwidth:* *300 kHz*
- *Signal connection:* *Safety banana sockets*

Module specifications

	DAQP-LA-B	DAQP-LA-B-S1
Input resistance (Shunt)	0.1 Ohm	5 Ohm
Shunt inductance	<10 nH	<10 nH
Input ranges	0.1 A, 0.3 A, 1 A, 3 A, 10 A peak, 30 A peak	2 mA, 6 mA, 20 mA, 60 mA, 200 mA, 0.6 A
Continuous current	max. 5 A_{RMS}	max. 0.6 A
Peak current	30 A max. 10 ms; 10 A max. 100 ms	3 A max. 10 ms; 1 A max. 100 ms
DC accuracy 100 mA and 300 mA 1 A to 30 A 2 mA and 6 mA 20 mA to 600 mA	 ±0.05 % of reading ±300 µA ±0.05 % of reading ±0.05 % of range	 ±0.05 % of reading ±6 µA ±0.05 % of reading ±0.05 % of range
Offset drift 100 mA and 300 mA 1 A to 30 A 2 mA and 6 mA 20 mA to 600 mA	typ. max. 12 20 µA/°K 20 40 ppm of Range/°K	 typ. max. 0.24 0.4 µA/°K 20 40 ppm of Range/°K
Gain linearity	0.03 %	
Gain drift range	Typically 20 ppm/°K (max. 50 ppm/°K)	
Long term stability	100 ppm/sqrt (1000 hrs)	
Bandwidth (-3 dB)	300 kHz(1)	
Filter selection	Push button or software	
Filters (low pass)	10 Hz, 30 Hz, 100 Hz, 300 Hz, 1 kHz, 3 kHz, 10 kHz, 30 kHz, 100 kHz	
Filter characterisitics	10 Hz to 100 kHz: Butterworth or Bessel 40 dB/dec (2nd order; ±1.5 dB @ f0) 300 kHz: Bessel 60 dB/dec (3rd order; 0 to -3 dB @ 300kHz)	
Typical SFDR and SNR 100 mA 1 A 30 A	300 kHz 100 kHz 10 kHz SFDR SNR SFDR SNR SFDR SNR 95 dB 64 dB 95 dB 67 dB 95 dB 77 dB 102 dB 82 dB 103 dB 85 dB 113 dB 90 dB 104 dB 89 dB 103 dB 89 dB 117 dB 91 dB	
Isolation voltage	Input to Ground 1.4 kV_{RMS}	
Protection	CAT III 300 V CAT II 600 V	
Output voltage	±5 V	
Output resistance	<10 Ohm	
Output current	5 mA	
Power On default settings	Software programable	
Output protection	Short to ground for 10 sec.	
Power supply	±9 V_{DC} ± 1%	
Power consumption	0.7 W	
Interface	RS-485	
(1) 300 kHz exclusively for Bessel filter characteristic		