IPETRONIK

CANpressure

Pressure transducer with CAN output for automotive applications

- Absolute and relative pressure gauge in the range of 1 … 150 bar
- Internal temperature sensor at gauge point
- Measurement data output to CAN
- Galvanic isolation (inputs, CAN, supply, enclosure)
- Designed for engine compartment applications
- Ruggedized and compact modules for harsh environments

Channel pressure	
Pressure range	0 … 1 / 2 / 5 / 10 / 25 / 50 / 100 / 150 / bar (relative / absolute)
Accuracy at ambient temperature -40 … 125 °C	0.5 % FS (Full Scale / TEB Total Error Band)
Media temperture range (gas or liquids)	-50 … 150 °C (-40 … 302 °F)
Accuracy of temperature measurement -40 … 150 °C	±3 K
Threads for absolute pressure	M10 female: 5/ 100/ 150 bar G1/4 male: 2 / 5 / 10 bar M10 male: 2 / 5 / 10 / 25 / 50 / 100 / 150 bar 7/16UNF male: 10 / 25 / 50 bar M8 female: 1 / 2 / 5 / 10 / 25 / 50 / 100 / 150 bar G1/4 female: 2/ 5/ 10/ 25 bar 1/8"NPT female: 10/ 50 bar
Threads for relative pressure	M10 male: 1 / 2 / 5 / 10 / 25 / 50 / 100 / 150 bar G1/4 female: 1 / 2 / 5 / 10 / 50 bar M8 female: 1 / 5 / 10 / 25 bar M10 female: 1 / 2 / 10 / 100 bar G1/4 male: 1 / 2 / 5 / 10 bar M8 male: 2/ 5 bar 1/8"NPT female: 1 / 2 / 10 / 50 bar M14 male: 2 / 5 / 10 / 25 / 50 bar
General channel properties	
Special functions	Offset adjust, during measurement, multiple groups
AD converter	16 bit / SAR (successive approximation register)
Oversampling	10 kHz
Channel sampling rates	1 / 2 / 5 / 10 / 20 / 50 / 100 / 200 / 500 / 1000 / 2000 Hz
Aggregate sample rate	2 kHz
Hardware filter (switchable)	1.2 kHz, Butterworth (8-pole) Accuracy 10 %

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Software filter types	Bessel Butterworth Elliptic (8-pole)
Software filter (DSP selectable)	6 / 7.5 / 9.96 / 15 / 30 / 39.96 min 1 / 1.25 / 1.67 / 2.5 / 5.0 / 6.67 / 10 / 12.5 Hz 16.67/ 25/ 50/ 66.7/ 100/ 125/ 166.67/ 250/ 500 Hz Accuracy 0.05 %
Device	
Inputs	1
Voltage supply	6 … 36 VDC
Supply voltage thresholds	Switch-on 6 ±0.3 VDC / Switch-off 6 ±0.3 VDC
Power consumption, typical	0.7 W
Working temperature range	-40 … 125 °C (-40 … 257 °F)
Storage temperature range	-55 … 150 °C (-67 … 302 °F)
IP-Code	Relative IP 52 / absolut IP 65 (ISO 20653 - 2013)
Relative humidity	5 ... 95 %
Dimensions	L76 mm x Ø 24 mm (2.99 in x 0.94 in)
Weight	120 g (0.26 lb)
Configuration interface	CAN high speed
Data transfer rate	Software selectable up to 1 MBit/s (ISO11898-2)
Housing material	Stainless steel 4435
Wrench size	24 mm (0.94 in)
Tightening torque	17 … 23 Nm
Status LED	Yes
Interfaces	
Overload Pressure	3 x full scale / burst pressure > 200 bar
Accessories	
System cable	M-CAN-ABS 620-502 M-CAN cable SUBD/S Term. 620-560 M-CAN cable 620-561 M-PWR term cable, banana 620-567 M-CAN/PWR term cable SubD/S, banana