IPETRONIK

M-RTD2

4 PT100 measurement inputs

- Measurement data output to CAN
- Galvanic isolation (inputs, CAN, supply, enclosure)
- Designed for engine compartment applications
- Toolless module to module connection
- Ruggedized and compact modules for harsh environments

Device	
Maximum input protection voltage (channel)	±100 V (indefinitely), ±200 V (short-time, t < 2 ms)
Channel sampling rates	1/ 2/ 5/ 10/ min – 1/ 2/ 5/ 10/ 20/ 50/ 100 Hz
Aggregate sample rate	400 Hz
Voltage supply	9 ... 36 VDC
Supply voltage thresholds	Switch-on 9 ±0.3 VDC / Switch-off 6 ±0.3 VDC
Power consumption, typical	2.5 W
Working temperature range	-40 ... 125 °C (-40 ... 257 °F)
Storage temperature range	-55 ... 150 °C (-67 ... 302 °F)
IP-Code	IP 67 (ISO 20653 - 2013)
Relative humidity	5 ... 95 %
Abmessungen	W106 mm x H43 mm x D57 mm (4.17 in x 1.69 in x 2.26 in)
Weight	410 g (0.90 lb)
Configuration interface	CAN high speed
Data transfer rate	Software selectable up to 1 MBit/s (ISO11898-2)
Input sockets	Lemo ERA OS 304
Galvanic isolation	
Input module power supply	±100 V (indefinitely), ±500 V (pulse voltage)
Input CAN	±100 V (indefinitely), ±500 V (pulse voltage)
Input enclosure	±100 V (indefinitely), ±500 V (pulse voltage)
Input input	±100 V (indefinitely), ±500 V (pulse voltage)
General channel properties	
A/D converter	16 bit / SAR (successive approximation register)
Hardware filter (fixed)	150 Hz, Butterworth (8-pole)
Software filter types	Butterworth, Bessel, Elliptic (8-pole)
Software filter (DSP selectable)	6/ 7.5/ 9.96/ 15/ 30/ 39.96/ min
Software filter (DSP selectable)	1/ 1.25/ 1.67/ 2.5/ 5.0/ 6.67/ 10/ 12.5 Hz

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Channel temperature	
Measurement range temperature	RTD 100 / PT100 -50 ... 450°C (-58 ... 842 °F)
Accuracy at ambient temperature 25 °C	±0.020 % for full measurement range
Accuracy in the range -40 ... 85 °C	±0.12 % for full measurement range
Accuracy in the range -40 ... 125 °C	±1.25 % for full measurement range
Invers voltage (I_OUT+ I_OUT-)	±20 V
Sensor excitation current	1 mA, short-circuit proof (software contolled)
Accessories	
System cable	620-561.pdf
System cable	620-502.pdf
System cable	620-560.pdf
System cable	620-567.pdf
System cable	620-509.pdf
System cable	M-CAN-ABS.pdf
System cable	M-DEF-200.pdf
Input cable	600-937.pdf

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