

TH800 - Description			
Passive temperature sensor measurement module with eight transient measurement input channels compatible with thermocouples or resistive temperature sensors.			
Module			
Form factor	Single-slot PIU (Plug-in Unit)		
Number of input channels	8		
Supported sensor types	Thermocouples and resistive temperature sensors		
Minimum temperature (depends on the sensor type)	-100°C		
Maximum temperature (depends on the sensor type)	+400°C		
Sampling rate	1ksample/sec		
Analogue bandwidth	750Hz		
Input differential impedance	20MΩ		
Input common mode impedance	1.25GΩ		
Galvanic isolated	Channels are isolated from the backend but not from one another		
Thermocouple measurement			
Supported sensor types	J/K/T type thermocouple		
Resolution	0.6μV (~0.016°C)		
Accuracy (default calibration coefficients)	0.012% + 30μV (±2°C)*		
*Sensor inaccuracies are not included.			
RTD measurement			
Supported sensor types	2-, 3-, and 4-wire resistive temperature sensors (RTD10, RTD20, RTD50, RTD100, RTD200, RTD500, RTD1000, RTD2000, RTD5000, RTD10000, RTD20000, RTD50000)		
Accuracy (Platinum temperature sensor, default calibration coefficients)	±1°C		
Excitation current (selected automatically)	10μA, 50μA, 100μA, 250μA, 500μA, 750μA, 1mA, 1.5mA, 2mA		
Measurement ranges	Sensor type	Resistance range [Ω]	Resolution [mΩ]
	RTD10	0 - 42	0.35
	RTD20	0 - 85	0.7
	RTD50	0 - 165	1.4
	RTD100	0 - 335	2.8
	RTD200	0 - 670	5.6
	RTD500	0 - 1335	11.2
	RTD1000	0 - 3340	28
	RTD2000	0 - 6680	56
	RTD5000	0 - 16700	140
	RTD10000	0 - 33400	280
	RTD20000	0 - 66800	560
	RTD50000	0 - 133600	1121