

TH800 - Description				
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	