

PendoTECH® Temperature Sensor Benchtop Transmitter™

Background

The PendoTECH Temperature Sensor Benchtop Transmitter connects to the PendoTECH Temperature sensor and produces a 4-20 milliamp signal that is linear with temperature. It is available in 1-, 2- and 4-channel models. The transmitter has a rugged ABS plastic enclosure and an LED front panel power indicator. Electrical connections are located on the back panel. Digital technology and the narrow 4-20mA output range from 0 to 70°C ensures accurate and drift free linearization of the sensor output.





Luer Sensor



Transmitter Details

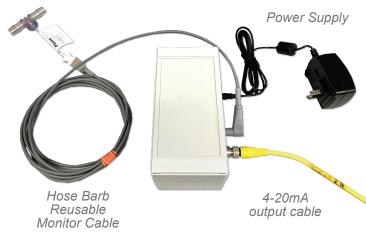
Connections to the unit are quick and convenient.

It is powered by a 24VDC wall supply that has universal voltage input (100-250VAC). The reusable temperature sensor cable plugs into the back of the unit. The 4-20mA output may be interfaced to PendoTECH products by the included interface cable. To maintain CE compliance, input wires must be less than 10ft. in length which is the maximum length of the PendoTECH reusable monitor cables. Additional wire length also adds additional resistance which can impact accuracy so extensions are not recommended.











Product Information



Specifications

Enclosure	ABS Plastic with rubber feet		
Operating Voltage	24VDC		
Response Time [^]	500mS to reach 70% of final value		
Max Loop Resistance	800ohms		
Input/Output Isolation	Not Isolated		
Warm-up Time	2 Minutes to full accuracy		
EMC	Emissions: BS EN61326; Susceptibility: BS EN61326		
Ambient Temp. Range	-20 to 80°C		
Ambient Storage	-40 to 80°C		
Ambient Humidity	0 to 95% (Non condensing)		
Dimension	6.25inch (w) x 3.125inch (h) x 3.063inch (l)		
Weight	370grams		

[^]Response time of transmitter only

Input

Range	0-70°C	
Burnout Signal	Upscale 22mA	
Sensor Lead Length	<10feet (to maintain CE)	
Sample Rate	500mS per Reading	
Accuracy	±0.14°C	
Thermal Drift	Zero ±0.01°C/°C; Span 50ppm	
Connection	1/4inch headphone receptacle	

Output

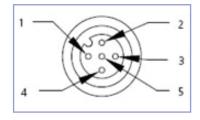
Output	4 to 20 mA, (spans to temperature range of 0-70°C)	
Maximum Output Range	3.8 to 22mA	
Accuracy*	± 5μA	
Thermal Drift	± 2μA/°C	

^{*} Total system accuracy is transmitter + sensor accuracy

Ordering Information

PDKT-TT1	PendoTECH Temperature Sensor Benchtop Transmitter with 4-20mA output in ABS plastic box with 24VDC wall supply	
PDKT-TT2	PendoTECH Temperature Sensor Benchtop Transmitter with 4-20mA output in ABS plastic box with 24VDC wall supply (for 2 sensors)	
PDKT-TT4	PendoTECH Temperature Sensor Benchtop Transmitter with 4-20mA output in ABS plastic box with 24VDC wall supply (for 4 sensors)	
PDKT-650-TEMPB	3.0m Re-usable Temperature Sensor Cable with 1/4 phone Jack for Barb Sensors	
PDKT-650-TEMPL	7ft Re-usable Temperature Sensor Cable with 1/4 phone Jack Term. for Luer Sensors	

Output Receptacle Schematic



	PDKT-TT1	PDKT-TT2	PDKT-TT4
1 (Brown)	T1mA (+)	T1mA (+)	T1mA (+)
2 (White)	GND	GND	T2mA (+)
3 (Blue)	N/A	T2mA (+)	T3mA (+)
4 (Black)	N/A	GND	T4mA (+)
5 (Gray)	N/A	N/A	GND

Unit Shown with Interface Cable to PendoTECH Control System



For warranty information see our website at http://www.pendotech.com/warranty