

## PhoenixTM High Accuracy Data Loggers for use in Food Processing and Cryogenic Applications



PhoenixTM data loggers are designed for use in industrial processes. Our data loggers supplied to the food industry are specifically designed for monitoring temperatures in the harshest cooking, frying and freezing environments. The PTM1200-NT range is also recommended for surveying cryogenic freezers in heat treatment applications. PhoenixTM Data Loggers provide these key features:

- Measurement range from -328 °F to +752 °F (Type K) ideal for food (cook/chill) and cryogenic freezing applications.
- No complex keypad programming sequences, simple to set up in the comprehensive software package supplied.
- Standard 6,10 and 20 channel versions (Type K or T) to suit varying application and measurement requirements.
- Sigma 6 channel data logger provides compact IP67 data logger option for space limited processes.
- Wide data logger operating temperature range (-40 °F to +176 °F) providing robust operation thru-process.
- Accurate measurement (±0.5 °F) with large memory allowing fast sampling for high resolution temperature profiling.
- Internal cold junction compensation with feedback error detection and noise reduction, which ensures accurate and reliable data over the operating range of the data logger.
- Bluetooth capability to allow wireless logger download and reset.
- Powered by standard user replaceable alkaline batteries (AA or AAA) with a battery life of up to 1000 hours. No waiting
  time for rechargeable batteries, that have not been fully charged, or return to service department for replacement if
  faulty.
- A tough machined aluminium case providing mechanical and IP67 waterproof protection in hostile processes.
- Optional two-way RF telemetry allowing data catch-up if the signal has been temporarily interrupted, or where the logger needs to be downloaded and reset remotely between different processes. Additionally, this allows for an analysis window to be opened mid process and for full process details to be analyzed.



## **Technical Data**

Technical details for negative temperature (NT) data loggers (Type K & T)



Data Logger	PTM1-206-S-NT (Sigma)	PTM1-206-NT	PTM1-210-NT	PTM1-220-NT	
No of channels	6	6	10	20	
Resolution			0.2 °F		
Memory total (non-volatile)	Up to 3.8 million data points (10 hours profile with 20 channels@0.2 s sample interval)				
Sample Interval	From 0.2s to 1 hour (minimum 1.0s when RF or USB telemetry used)				
Logger start by:	Date & time, temperature, start button or software				
Real time data transmission:	Via USB cable and Bluetooth as standard, via 2-way RF telemetry optional**				
Bluetooth:	V2.1 SPP Compatible with Windows PC's and Android tablets / phones. Range 33 ft.				
Physical dimensions:					
Length:	7.9 inch	7.9 inch			
Width:	2.8 inch	3.9 inch			
Height:	0.8 inch		0.8 inch		
Weight:	1.10 lb		1.54 lb		
Operating temperature:	-40 °F to +176 °F		-40 °F to +176 °F		
Battery Type:	2 x 'AAA' Alkaline Replaceable Batteries		2 x 'AA' Alkaline replaceable batteri	es	
Battery life:	Up to 500 hours*		Up to 1000 hours*		
Sealing / IP Rating	IP67		6 & 10 Channel IP67 / 20 Channel IP6	65	
Measuring range: (K or T)	Type K -328 °F to +752 °F				
	Type T −328 °F to +707 °F				
Accuracy	±0.5 °F (-40 °F to +122 °F)				
(Data logger operating temperature Range dependent)	±0.7 °F (+122 °F to +176 °F)				

<sup>\*</sup>Battery Life: Dependent on operating temperature, telemetry use & sampling interval

Note: As products are continually improved, specifications may be changed without prior notice. Ref: PhoenixTM\_Datasheet\_Food Data Logger Range\_10.2\_USA 20191004

Represented by:







<sup>\*\*</sup>RF Operation: RF only applicable to Thermal View Plus, Thermal View Survey, Thermal View Finishing and Thermal View Food Software packages