



DISCONTINUED: Conc Temp Monitoring Kit

Product Images



Short Description

This page has been replaced by <https://www.tempcon.co.uk/tempcon-concrete-temperature-monitoring-kit>

Description

This concrete temperature sensors kit comprises a HOBO UX120-014M 4-Channel thermocouple data Logger, protective enclosure and 4 x Type K thermocouples (2 metres in length each). As such it is perfect for monitoring and logging the temperature of concrete at various depths and locations whilst it cures. The data logger contains onboard ambient temperature measurement in addition to the 4 thermocouple channels. The thermocouples are manufactured by Tempcon in-house and ensure a fast accurate response time.

Using HOBOWare, you can easily configure the logger alarm to trip for specific high or low concrete temperatures. Or, you can set up burst logging in which the logger records data at a different interval during certain conditions.

Key Features of the Concrete Temperature Monitoring Kit

- 4 thermocouple inputs for type J, K, T, E, R, S, B, or N thermocouple probes (we supply 4 x Type K Free of Charge!)
- Internal thermistor for ambient temperature & cold junction compensation
- 22 bit resolution
- Logger operating range: -20° to +70°C (the thermocouple probes' working range is dependent on the type and material used)
- Memory: 1.9 million measurements
- LCD refreshes every 15 seconds
- Visual high & low temperature alarm thresholds
- User upgradable firmware
- 4 X 2 metre Type K thermocouples
- Free software
- Free USB cable
- CASE-4X-2 (NEMA 4X designation, designed to offer a weather-resistant enclosure in a wet, dusty, or condensing environments for short deployments where additional protection is needed).

Additional Information

	<div>Specifications</div> <div>Thermocouple</div>																																				
	<table><tr><th>Type</th><th>Range</th><th>Accuracy</th><th>Resolution</th></tr><tr><td>J</td><td>-210° to 760°C (-346° to 1,400°F)</td><td>±0.6°C (±1.08°F) ± thermocouple probe accuracy</td><td>0.03°C (0.06°F)</td></tr><tr><td>K</td><td>-260° to 1,370°C (-436° to 2,498°F)</td><td>±0.7°C (±1.26°F) ± thermocouple probe accuracy</td><td>0.04°C (0.07°F)</td></tr><tr><td>T</td><td>-260° to 400°C (-436° to 752°F)</td><td>±0.6°C (±1.08°F) ± thermocouple probe accuracy</td><td>0.02°C (0.03°F)</td></tr><tr><td>E</td><td>-260° to 950°C (-436° to 1,742°F)</td><td>±0.6°C (±1.08°F) ± thermocouple probe accuracy</td><td>0.03°C at (0.05°F)</td></tr><tr><td>R</td><td>-50° to 1,550°C (-58° to 2,822°F)</td><td>±2.2°C (±3.96°F) ± thermocouple probe accuracy</td><td>0.08°C (0.15°F)</td></tr><tr><td>S</td><td>-50° to 1,720°C (-58° to 3,128°F)</td><td>±2.2°C (±3.96°F) ± thermocouple probe accuracy</td><td>0.08°C (0.15°F)</td></tr><tr><td>B</td><td>550° to 1,820°C (1,022° to 3,308°F)</td><td>±2.5°C (±4.5°F) ± thermocouple probe accuracy</td><td>0.1°C (0.18°F)</td></tr><tr><td>N</td><td>-260° to 1,300°C (-436° to 2,372°F)</td><td>±1.0°C (±1.8°F) ± thermocouple probe accuracy</td><td>0.06°C (0.11°F)</td></tr></table>	Type	Range	Accuracy	Resolution	J	-210° to 760°C (-346° to 1,400°F)	±0.6°C (±1.08°F) ± thermocouple probe accuracy	0.03°C (0.06°F)	K	-260° to 1,370°C (-436° to 2,498°F)	±0.7°C (±1.26°F) ± thermocouple probe accuracy	0.04°C (0.07°F)	T	-260° to 400°C (-436° to 752°F)	±0.6°C (±1.08°F) ± thermocouple probe accuracy	0.02°C (0.03°F)	E	-260° to 950°C (-436° to 1,742°F)	±0.6°C (±1.08°F) ± thermocouple probe accuracy	0.03°C at (0.05°F)	R	-50° to 1,550°C (-58° to 2,822°F)	±2.2°C (±3.96°F) ± thermocouple probe accuracy	0.08°C (0.15°F)	S	-50° to 1,720°C (-58° to 3,128°F)	±2.2°C (±3.96°F) ± thermocouple probe accuracy	0.08°C (0.15°F)	B	550° to 1,820°C (1,022° to 3,308°F)	±2.5°C (±4.5°F) ± thermocouple probe accuracy	0.1°C (0.18°F)	N	-260° to 1,300°C (-436° to 2,372°F)	±1.0°C (±1.8°F) ± thermocouple probe accuracy	0.06°C (0.11°F)
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	<div>Internal 10K Thermistor (Temperature):</div> <div><div>✖Range: Logging: -20° to 70°C (-4° to 158°F)</div><div>Accuracy: ±0.21°C from 0° to 50°C (±0.38°F from 32° to 122°F), see Plot A</div><div>Resolution: 0.024°C at 25°C (0.04°F at 77°F); see Plot A</div><div>Drift: <0.1°C (0.18°F) per year</div></div>																																				
Explanation	<div>Logger</div> <div><div>Logger Operating Range</div><div>Logging: -20° to 70°C (-4° to 158°F); 0 to 95% RH (non-condensing); logger accuracy from 0° to 50°C (32° to 122°F)</div><div>Launch/readout: 0° to 50°C (32° to 122°F) per USB specification</div><div>Logging rate: 1 second to 18 hours, 12 minutes, 15 seconds</div><div>Logging modes: Normal, Burst or Statistics</div><div>Memory modes: Wrap when Full or Stop when Full</div><div>Start modes: Immediately, Push Button, Date & Time or Next Interval</div><div>Stop modes: When Memory Full, Push Button, or Date & Time</div><div>Restart mode: Push Button</div><div>✖Time accuracy: ±1 minute per month at 25°C (77°F), see Plot B</div><div>Battery life: 1 year, typical with logging rate of 1 minute and sampling interval of 15 seconds or greater</div><div>Battery type: Two AAA 1.5V alkaline batteries, user replaceable</div><div>Memory: 4 MB (1.6 million measurements, maximum)</div><div>Download type: USB 2.0 interface</div><div>Full memory download time: Approximately 1.5 minutes</div><div>LCD: LCD is visible from: 0° to 50°C (32° to 122°F); the LCD may react slowly or go blank in temperatures outside this range</div><div>Size: 10.8 x 5.41 x 2.54 cm (4.25 x 2.13 x 1 in.)</div><div>Weight: 107.5 g (3.79 oz)</div><div>Environmental rating: IP50</div></div>																																				
Ideal For																																					
Brand	Onset HOBO																																				
Channel(s)	4																																				
Onset Product Series	UX120																																				
Typical applications	Cement Curing																																				
Measurements	Temperature																																				

Additional Options

Additional Thermocouple Temperature Probes	1.2 Metre Type K Exposed Junction
	2 Metre Type K Exposed Junction
	5 Metre Type K Exposed Junction
	6 Metre Type K Exposed Junction
	7 Metre Type K Exposed Junction
	10 Metre Type K Exposed Junction
Calibration Certificate	2 Point Temperature Calibration (0°C / 65°C)
	2 Point Temperature Calibration (please specify temperature points)