



NEW Hand-Held Instrumentation

C100 • C110 • C120



C100/C110

Portable Digital Instruments for Measuring Temperature

- Unique, Thumb-Wheel Operation to select full range of Functions
- Automatic Switch Off, Integrated Real Time Clock (Date/Time)
- Variety of Wahl RTD and Thermocouple Probes available
- Large, Illuminated Display
- °F/°C Selectable
- 1 Point Calibration
- **C100** Measure Temperature with PT100 RTD, 1 channel
- **C110** Measure Temp with PT100 RTD or Thermocouple, 2 channels
- **C120** Measure Temperature with Thermocouple, 2 channels



Specifications			
Model	C100 3120.00	C110 3120.10	C120 3120.20
Sensor Type	RTD PT100 (4 Wire)	RTD: PT100 (4 Wire) and Thermocouple	Thermocouple
Operating Temperature	32° to 122°F 0° to 50°C	32° to 122°F 0° to 50°C	32° to 122°F 0° to 50°C
Temperature Range	Sensor 1 RTD: -328° to 932°F -200° to 500°C	Sensor 1 RTD: -328° to 932°F -200° to 500°C	Sensor 1 & 2 Type K/J/N: -328° to 2192°F -200° to 1200°C Type E: -454° to 1832°F -270° to 1000°C Type R/S: -58° to 3218°F -50° to 1770°C Type T: -454° to 752°F -270° to 400°C
		Sensor 2 Type K/J/N: -328° to 2192°F -200° to 1200°C Type E: -454° to 1832°F -270° to 1000°C Type R/S: -58° to 3218°F -50° to 1770°C Type T: -454° to 752°F -270° to 400°C	
Display Sensor 1	RTD	RTD	Thermocouple
Display Sensor 2		Thermocouple	Thermocouple
RTD Accuracy	±0.1°C (-100° to 200°C) otherwise ±0.2°C	±0.1°C (-100° to 200°C) otherwise ±0.2°C	
Thermocouple Accuracy		K/J/N/E ±(0.5°C, ±0.2% reading) R/S/T ±(0.5°C, ±0.3% reading)	K/J/N/E ±(0.5°C, ±0.2% reading) R/S/T ±(0.5°C, ±0.3% reading)
RTD Resolution	±0.01°C	±0.01°C	
Thermocouple Resolution		0.1°C	0.1°C
Functions	HOLD, MAX, MIN, AVG, DATE/TIME, Auto OFF, CAL, °C and °F, Display Illumination		
Battery / Life	4 x 1.5V AA Alkaline Batteries (included) / approx. 500 hours		
Dimensions / Weight	5.78 x 3.35 x 1.46 inches (147 x 85 x 37 mm) 14 ounces (approx. 400g)		
Optional Accessories	#3120.50 Spare Screw-in 4-Pole Input Connector #3120.CAS Carrying Case for Instrument and Accessories		



Calibration Services Available

Wahl

INSTRUMENTS, INC.

Fast Response Platinum RTD Probes and Type K Thermocouple Probes for Lufft C100 Series Meters

Use the interchangeable Platinum RTD and Type K Thermocouple Probes listed below with the Lufft C100 Series Hand Held Meters. The C100 uses any of the Platinum RTD Probes, the C110 uses Platinum RTD or Type K Thermocouple Probes, the C120 uses Type K Thermocouple Probes.

112LF

Fine Tip Probe



114LF

Penetration Probe



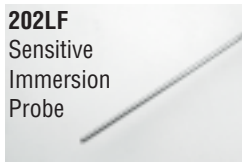
121LF

Spring Tip Surface Probe



202LF

Sensitive Immersion Probe



204CTLF

Paddle Probe



205LF

Heavy Duty Immersion Probe



302LF

Air/Gas Probe



123ULF

Right Angle Surface Probe



Platinum RTD Probes

112LF Fine Tip Penetration Probe for foods and other soft substances. 2.75" shank with 1" long tip. 450°F temperature limit with 3 second response⁽²⁾.

114LF Heavy-Duty Penetration Probe for plastic melts, rubber, asphalt, frozen foods, or other semi-solids. Adjustable penetration depth limiter. 900°F temperature limit with 3.7 second response⁽²⁾. 4-1/2" shank length is 1/8" diameter with penetration tip.

121LF Spring Articulated Straight Surface Probe for molds, dies, platens, electronics, machine housings and all other surfaces. Spring tip allows conformity and maximum contact to measured surface. 900°F temperature limit; 2-second response⁽¹⁾. 4-1/4" shank, .25" diameter, straight tip design. Also with **-12"** and **-18"**, shank lengths.

123ULF Right Angle Fast Surface Probe with low-profile rigid 90° bend. Sealed sensor design for rugged applications. 4" shank length, straight tip. 900°F temperature limit with 3 second response⁽¹⁾.

202LF Sensitive Immersion Probe with low mass .084" diameter 5" long shank. Super fast response time of 1.4 seconds⁽²⁾ for use in all liquids and semi-solids. 900°F temperature limit.

204LF 12" Long Immersion Probe with 12" shank for baths, vats, kettles and other deep vessels. 900°F limit with 2 second response⁽²⁾.

204CTLF Paddle Probe for crystallization and fluid temperatures while agitating liquids. 3/4" wide paddle tip; .125" diameter. shank is 10" long to the paddle tip. 900°F limit with 2 second response⁽²⁾.

205LF Heavy-Duty Immersion Probe for solder baths, liquids or granular materials, and gas. 8" shank. Also with **-12"**, **-18"**, and **-24"** shank lengths. All have .125" diameter tip. 900°F limit; 3 second response⁽²⁾.

212LF Fully Immersible Probe for plating baths, dipping solutions, brewing vats, storage vats and tanks. Temperature limit of 450°F; 2 second response⁽²⁾. 12" length shank, .125" diameter with 10" Teflon cable and no handle.

302LF Air/Gas Probe with perforated sensor shield to induce good-velocity and to prevent radiation errors for ovens, stacks, ducts. 850°F temperature limit, 6 second response⁽³⁾. 6-5/8" shank, 3/8" diameter shield.

Platinum RTD Probes Response time legend (to 63%):

⁽¹⁾ Measured on flat surface at 400°F

⁽²⁾ Measured in boiling water, ⁽³⁾ Measured in air at 10 fps

Type K Thermocouple Probes *

TC801LF Immersion Probe S.S. sheath with grounded junction and 1/8" diameter, 10" shank for fluids, corrosive mixtures, solder baths and viscous materials to 1600°F. 6 sec. response⁽²⁾. For 24" shank, order **LU801-24**.

TC803LF Electronics Tip Probe for electronic and biological applications. Low mass, 0.032" diameter fine-point sensing tip measures small components with minimal disturbance. Limit of 900°F, 5 sec response⁽¹⁾.

TC805LF Air/Gas Probe with perforated radiation shield over bare head thermocouple junction for fast response and good accuracy in high temperature radiation backgrounds. 8" shank, to 1200°F, 45 sec. response in circulation oven. Available as **LF805-24** with 24" shank.

TC805FLF HVAC Test Probe Low-mass, high-response (10 seconds in air) bare sensor protected by a Delrin guard. Temperature limit, 450°F. 6" shank.

TC814LF Hypodermic Probe for minimal disruption when inserted into semi-solids up to 1000°F. 2-1/2" long stainless steel shank is 0.05" diameter. Sharpened tip yields extremely fast readings (0.5 second⁽²⁾ response).

TC817LF Heavy-Duty Piercing Probe for plastic melts, rubber, asphalt, frozen foods, or other semi-solids. Adjustable penetration depth limiter. 1000°F temperature limit with 4 second response⁽²⁾. 4-1/2" shank length is 1/8" diameter with penetration tip.

TC861LF Pencil-Type Electronic Tip Probe with 7/16" hardened shank, 0.032" diameter. for electronic component testing up to 600°F. Response of 2 seconds⁽¹⁾.

TC869LF 45° Spring Articulated Surface Probe provides certain surface contact for platens, hot plates, molds, etc. to 1000°F. 1/8" diameter x 8" shank., 250" tip diameter. 4 sec. response⁽¹⁾.

Type K Thermocouple Probes Response time legend (to 99% of 212°F)

⁽¹⁾ clean hot plate surface,

⁽²⁾ immersion in boiling water

⁽³⁾ immersion in liquid solder bath

*Type K Thermocouple Probes not pictured. To see pictures of the Type K Thermocouple Probes see pages 14 and 15 of the Wahl Heat Prober Catalog.



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Calibration Services Available