

# THERMOPORT 20

## Temperature Hand-Held

Hand-held thermometers of the THERMOPORT series set new standards because of the combination of the latest technology and design.

Excellent readability of the very large and illuminated display, the simple thumbwheel operation and the very robust case also allow usage in tough industrial environments.

Two measuring channels, one to connect a PT100 probe and the other to connect a thermocouple probe (E/K/J/N/R/S/T type), provide measurements between -200...1200°C (-328...2192°F).



### Features

- PT100 + thermocouple connectors**
- large, illuminated display**
- HOLD / MIN / MAX / AVG readout**
- auto power off**
- real time clock**
- °C / °F selectable**
- recalibration by user**

### Technical Data

#### Measuring values

	Channel 1	Channel 2
Sensor type	PT100 (4-wires)	thermocouple
Measuring range	-200...500°C (-328...932°F)	-200...1200°C (-328...2192°F)
Accuracy electronics	±0.1°C (-100...200°C) otherwise ±0.2°C ±0.18°F (-148...392°F) otherwise ±0.36°F	± (0.5°C/0.9°F ± 0.2% of AVG)
Resolution	±0.01°C (-100...200°C) otherwise ±0.1°C ±0.018°F (-148...392°F) otherwise ±0.18°F	0.1°C (0.18°F)

#### General

Supply voltage	4x 1.5V AA alkali-manganese battery		
Battery lifetime	typ. > 500h		
Working temperature range	0...50°C (32...122°F)		
CE compatibility according	EN50081-2	EN50082-2	EN55011
	EN61000-4-2	EN61000-4-3	
Housing / protection class	ABS / IP40		
Dimensions (HxWxD)	145 x 85 x 37 mm (5.7 x 3.3 x 1.5")		
Weight	approx. 400g (1 lbs)		
Display	LC display, 90 x 50 mm (3.5 x 2"), illuminated		

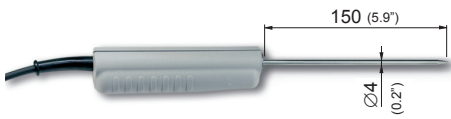


### Ordering Guide

MODEL	
portable thermometer without sensing probe	(THERMOPORT 20)

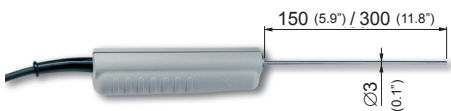
## Temperature Probes:

### PT100 cut-in probe, short



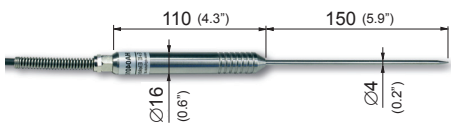
Application: solid, liquid and powdery media  
 Measuring range: -40...400°C (-40...752°F)<sup>1)</sup>  
 Type of sensing probe: PT100 class B in a stainless steel protection tube  
 Response time  $\tau_{90}$ : 10 sec.  
 Cable length: approx. 1m (3.3ft), PUR-cable and handgrip applicable up to 80°C (176°F)  
 Order code: **HA040101**

### Accurate PT100 immersion probe, short and long version



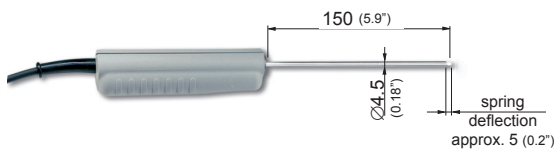
Application: gaseous, liquid and powdery media  
 Measuring range: -40...400°C (-40...752°F)<sup>1)</sup>  
 Type of sensing probe: PT100 class A in a stainless steel protection tube  
 Response time  $\tau_{90}$ : 10 sec.  
 Cable length: approx. 1m (3.3ft), PUR-cable and handgrip applicable up to 80°C (176°F)  
 Order code: short (150mm): **HA040102** long (300mm): **HA040103**

### Robust and accurate PT100 cut-in food probe made of stainless steel



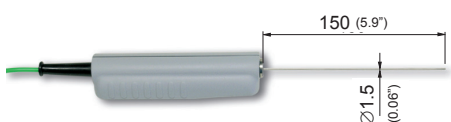
Application: solid, liquid and powdery media  
 Measuring range: -40...400°C (-40...752°F)<sup>1)</sup>  
 Type of sensing probe: PT100 class A  
 Response time  $\tau_{90}$ : 10 sec.  
 Cable length: approx. 1m (3.3ft), PUR-cable and handgrip applicable up to 80°C (176°F)  
 Order code: **HA040104**

### PT100 surface probe



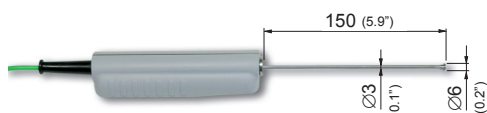
Application: measurement probe with a spring flexure, which undergoes a defined deflection when pressed against the surface.  
 Working range: -50...400°C (-58...752°F) (grip of sensing probe up to approx. 80°C 176°F)  
 Accuracy: PT100 class B, basic device:  $\pm 0.5^\circ\text{C}$  ( $\pm 0.9^\circ\text{F}$ )  
 Response time  $\tau_{90}$ : 10 sec. (at even, smooth or metallic surfaces)  
 Cable length: 1m (3.28ft)  
 Order code: **HA040105**

### Fast thermocouple-immersion probe for temperatures up to 1100°C (2012°F)



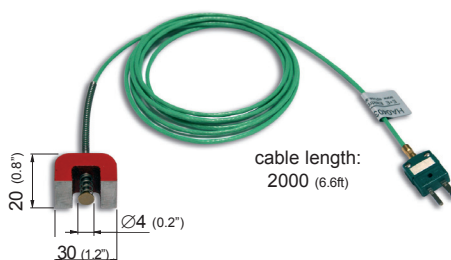
Application: liquid and powdery media  
 Measuring range: -50...1100°C (-58...2012°F)<sup>1)</sup>  
 Type of sensing probe: Typ K, cl. 1, Inconel  
 Response time  $\tau_{90}$ : 4 sec.  
 Cable length: approx. 1m (3.3ft), cable and handgrip applicable up to 80°C (176°F)  
 Order code: **HA040302**

### Thermocouple surface sensor for temperatures up to 600°C (1112°F)



Application: solid media  
 Measuring range: -50...600°C (-58...1112°F)<sup>1)</sup>  
 Type of sensing probe: Type K, cl. 1, stainless steel protection tube with nickel contact-plate  
 Response time  $\tau_{90}$ : 5 sec.  
 Cable length: approx. 1m (3.3ft), cable and handgrip applicable up to 80°C (176°F)  
 Order code: **HA040303**

### Magnetic thermocouple surface sensor, spring-mounted thermocouple, connection via 2m PTFE cable up to 150°C (302°F)



Application: solid media  
 Measuring range: -50...150°C (-58...302°F)<sup>1)</sup>  
 Type of sensing probe: Typ K, cl. 1  
 Cable length: approx. 2m (6.6ft), PTFE cable and handgrip applicable up to 150°C (302°F)  
 Order code: **HA040304**

1) Pay attention to the approved working temperature range of the probe grip!