

HOBO Thermocouple Logger



Thermocouple Logger HOBO U12 J,K, S, T U12-014

5.8 x 7.4 x 2.2 cm
(2.3 x 2.9 x 0.85 in)
46 g (1.6 oz)

The HOBO U12 Thermocouple data logger provides exceptional measurement flexibility by accepting J, K, S, or T thermocouple probes.

Key Advantages:

- High-accuracy J, K, S, T thermocouple recordings
- Automatic cold-junction compensation
- Accepts industry-standard subminiature thermocouple connectors

Memory: 43,000 measurements
Sample rate: 1 second to 18 hours (user-selectable)
Battery life: 1-year (typical)—user-replaceable



Temperature	Temperature Ranges	Accuracy	Resolution (12-bit)
with J Thermocouple	0° to 750°C (32° to 1382°F)	± 2.5°C or 0.5% of reading, whichever is greater	0.21° @ 375°C (0.38° @ 707°F)
with K Thermocouple	0° to 1250°C (32° to 2282°F)	± 4.0°C or 0.5% of reading, whichever is greater	0.32° @ 625°C (0.58° @ 1157°F)
with S Thermocouple	-50° to 1760°C (-58° to 3200°F)	± 6.0°C or 0.5% of reading, whichever is greater	0.44° @ 855°C (0.79° @ 1571°F)
with T Thermocouple	-200° to 100°C (-328° to 212°F)	± 1.5°C (± 2.7°F)	0.10° @ -50°C (0.18° @ -58°F)



Beaded Thermocouple Probes on Spool Caddies

TC6-J, TC6-K, TC6-T
1.8 m (6 ft)

Probe and Wires

Exposed-junction thermocouple probes include 6 ft of insulated 30-AWG wire wound on an integrated spool caddy/
subminiature connector

100' coils of insulated 24-AWG thermocouple wire



Thermocouple Wire
TCW100-J,
TCW100-K, and TCW100-T
30.5 cm (100 ft.)

Temperature	Temperature Ranges	Accuracy
Type J TEFLON insulation:	0° to 250°C (32° to 482°F)	± 2.2°C (± 4°F)
Type K glass braid insulation:	0° to 285°C (32° to 545°F)	± 2.2°C (± 4°F)
	285° to 482°C (545° to 900°F)	± 0.75%
Type T TEFLON insulation:	-200° to -65°C (-330° to -85°F)	± 1.5%
	-65° to 130°C (85° to 270°F)	± 1.0°C (± 1.8°F)
	130 to 180°C (270° to 356°F)	± 0.75%

HOBO Thermocouple Logger Accessories



High-temperature Stainless Steel Probe

— Type K

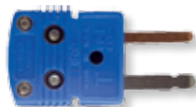
TCP6-K12

30.5 cm (12 in)

Temperature Ranges	Accuracy
0° to 293°C (32° to 559°F)	±2.2°C (±4°F)
293° to 900°C (559° to 1650°F)	±0.75%**

**** Percentage is of degrees above or below 0°C (32°F)**

- 12 in 304 stainless-steel probe; 3/16in diameter with isolated thermocouple
- 1 in Handle with spring-type strain relief
- 6 ft 19-AWG cable



Subminiature Thermocouple Connectors

SMC-J, SMC-K, SMC-T

- Accept stranded or solid wire up to 20 AWG Internal silicone grommet for strain relief
- Captive cover screws
- Write-on window
- Type J, K, and T versions available

Complete system requires logger, temperature probe(s), and software.

Ordering Information

Thermocouple Logger

HOBO U12 J, K, S, T

U12-014

Thermocouple Probes and Wires

1.8 m (6 ft) Beaded Thermocouple with connector—J Type
 1.8 m (6 ft) Beaded Thermocouple with connector—K Type
 1.8 m (6 ft) Beaded Thermocouple with connector—T Type
 30.5 cm (12 in) Stainless-Steel Probe Thermocouple—K Type
 30.5 m (100 ft) of 24-AWG Thermocouple wire—J Type
 30.5 m (100 ft) of 24-AWG Thermocouple wire—K Type
 30.5 m (100 ft) of 24-AWG Thermocouple wire—T Type

TC6-J
 TC6-K
 TC6-T
 TCP6-K12
 TCW100-J
 TCW100-K
 TCW100-T

Thermocouple Connectors

Subminiature Type J
 Subminiature Type K
 Subminiature Type T

SMC-J
 SMC-K
 SMC-T

Software

HOBOWare Pro Software (Windows/Mac)

BHW-PRO-CD

Optional Communications

HOBO U-Shuttle*

U-DT-1

**Requires HOBOWare Pro software*

HOBOWare includes USB interface cable