

DP-350 DP-500



DP-350

DP-500

General Description

The DP-350 is an economical thermometer with a wide temperature range and useful functions, such as measured value and peak hold, sensor burnout, battery alarm, and automatic power off.

The DP-500 is a high accuracy thermometer with powerful functions, such as data memory, high and low alarm, stopwatch, as well as the functions available for DP-350. The variety of functions supports you to manage temperature data efficiently.

For DP series, there are more than 50 types of sensors available so that it allows you to select an appropriate sensor for your application.

Features

DP-350

☆ Wide Temperature Range

The temperature range is between -200 to 1200°C (-328 to 1999°F).

The range of -199.9 to 199.9°C (-199.9 to 199.9°F) is also available.

☆ Measured Value Hold

Press the HOLD button to hold the current measured value on the display. Press the HOLD button again to go back to the normal display mode.

☆ Peak Hold

The maximum/minimum measured value is automatically stored.

☆ Automatic Power OFF

The power will be automatically turned off after 3 (or 30) minutes from power-on. (This function can be inactivated.)

☆ 1°C/0.1°C (°F) Measuring Resolution

The temperature measuring resolution can be switched between 0.1°C and 1°C (°F).

The temperature range varies with resolution.

☆ Burnout

In case the temperature sensor is broken, "BO" will be displayed on the display.

☆ Battery Alarm

"BAT" is displayed on the display when the batteries become low. It tells you the time to change the batteries for precise temperature measurement.

(Two pieces of 1.5V R6 type dry cell).

DP-500

☆ Data Memory

Up to 99 measured values can be stored in the DP-500. Manual storing or automatic storing at preset intervals can be selected. The interval time can be set between 1 second and 59 minutes and 59 seconds.

☆ Peak Hold

The maximum/minimum measured value is automatically stored.

☆ High and Low Alarm

The alarm sounds for 20 seconds when the measured value goes into the alarm range.

☆ 1°C/0.1°C (°F) Measuring Resolution

The temperature measuring resolution can be switched between 0.1°C and 1°C (°F).

The temperature range varies with resolution.

☆ Variety of Input Type

Six types of thermocouple input and two types of RTD input are available.

☆ Stopwatch

The stopwatch can count the time up to 9 hours 59 minutes and 59 seconds.

☆ Burnout

In case the temperature sensor is broken, "BO-" or "BO+" will be displayed on the display.

☆ Battery Alarm

"B" is displayed on the display when the batteries become low. It tells you the time to change the batteries for precise temperature measurement. (Four pieces of 1.5V R6 type dry cell)

Specifications

DP-350C

Input

Thermocouple : K (JIS/IEC)

Input	Scale range
K	-200 - 1200°C (-199.9 - 199.9°C)
	-328 - 1999°F (-199.9 - 199.9°F)

Sampling time

Approx. 0.6 sec

Performance

Measurement accuracy

- ±(0.2% of indicated value + 1 digit) or ±2°C (4°F)
(Whichever is larger)
- ±4°C (8°F) in the range of -100°C (-150°F) or less.

Display

LCD

General specifications

External dimensions (W x H x D)

52 x 145 x 25 mm

Power supply

R6 type dry cell, 1.5V x 2pcs.

Life of battery

Approx. 400 hours

Operating environments

0 to 50°C (32 to 122°F), 45 to 85% RH

Net weight

Approx. 140g (Including dry cells)

DP-500C (TC type) / DP-500R (RTD type)

Input

- a) Thermocouple : K, J, E, R, T, N (JIS/IEC)
- b) RTD : Pt100 (JIS/IEC), JPt100(JIS)

Input	Scale range
K	-200 - 1300°C (-99.9 - 799.9°C)
	-328 - 2372°F
J	-200 - 800°C (-99.9 - 799.9°C)
	-328 - 1472°F
E	-200 - 800°C (-99.9 - 799.9°C)
	-328 - 1472°F
R	0 - 1700°C
	32 - 3092°F
T	-200 - 200°C (-99.9 - 200.0°C)
	-328 - 392°F
N	0 - 1300°C (0.0 - 799.9°C)
	32 - 2372°F

Input	Scale range
Pt100	-200 - 600°C (-99.9 - 600.0°C)
	-328 - 1112°F
JPt100	-200 - 600°C (-99.9 - 600.0°C)

Sampling time

Approx. 0.4 sec

Performance

Measurement accuracy

- a) Within ±(0.1% of indicated value + 0.3°C) at 0.1°C display
- b) Within ±(0.1% of indicated value + 1°C [2°F]) at 1°C display
- c) Within ±(0.1% of indicated value + 2°C [4°F]) at thermocouple R type

Cold junction compensation error

Within ±0.5°C (±1°F)

Display

LCD with back-light

General specifications

External dimensions (W x H x D)

66 x 160 x 37 mm

Power supply

R6 type dry cell, 1.5V x 4pcs.

Life of battery

Approx. 200 hours

(Consumption by back-light and alarm sound is not considered.)

Operating environments

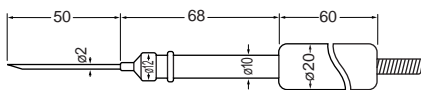
0 to 50°C (32 to 122°F), 45 to 85% RH

Net weight

Approx. 310g (Including dry cells)

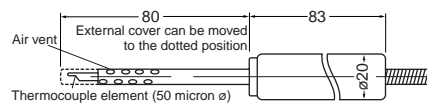
Temperature Sensors (Type K Thermocouple)

① Maximum usable temperature ② Applications (Unit : mm)



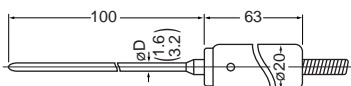
JB-15

- ① 400°C
- ② For semi-solid, viscous material and liquid



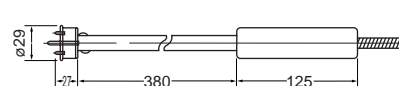
ST-26

- ① 300°C
- ② For gases



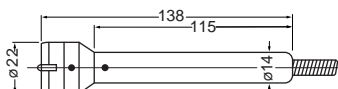
JB-16

- ① 800°C
- ② For semi-solid, viscous material and liquid



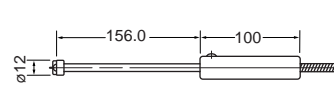
ST-29 (H)

- ① 800°C (1,000°C)
- ② For static surface



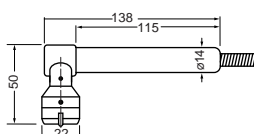
ST-23

- ① 300°C
- ② For static surface



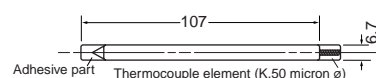
ST-30

- ① 300°C
- ② For static surface



ST-23L

- ① 300°C
- ② For static surface



ST-50 (Adhesive type)

- ① 300°C
- ② For very small spaces

※Many other types are available.