

INDICATOR

Handheld Thermometer

DP-350  
DP-700

DP-700 :  
Discontinued Products



DP-350

 RoHS compliant

DP-700

   
 RoHS compliant

**RKC**<sup>®</sup>

**RKC INSTRUMENT INC.**

# Simple Type Thermometer

**Easy-to-use**

## DP-350

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.

- No optional

Model Code :  
**DP-350\*A**

- With anti-shock cover (Silicon jacket)

Model Code :  
**DP-350\*A-1**

- With hard carrying case

Model Code :  
**DP-350\*A-2**

- With soft case

Model Code :  
**DP-350\*A-3**

\* Temperature sensor is separately



Measured Value Hold Function

Peak High & Low Temperature Function

Automatic Power OFF Function

Battery Low Alarm Function

Burnout (Sensor broken) Function

## Temperature Sensor (Separately)

Many other types are available.

For static surface (Tilting Sensor Head Type) **Max. 300°C**

Unit:mm



**ST-230-K-1000-3C/F** (For DP-350)  
**ST-230-K-1000-6C/F** (For DP-700)

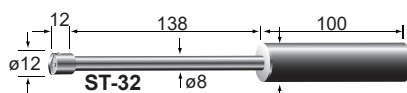


**ST-230L-K-1000-3C/F** (For DP-350)  
**ST-230L-K-1000-6C/F** (For DP-700)

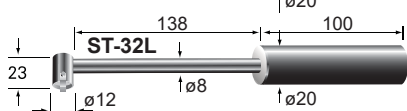
For High temperature static surface

**Max. 600°C**

Unit:mm

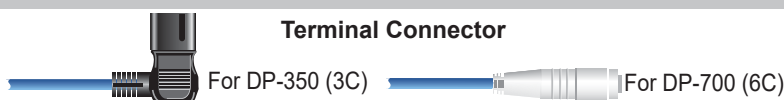


**ST-32-K-1000-3C/A** (For DP-350)  
**ST-32-K-1000-6C/A** (For DP-700)



**ST-32L-K-1000-3C/A** (For DP-350)  
**ST-32L-K-1000-6C/A** (For DP-700)

### Terminal Connector



For semi-solid, viscous material and liquid Unit:mm

**JB-160**



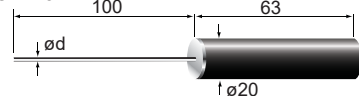
**Max. 650°C**  
( $\phi d=1.6$ )

**JB-160-K-1.6-150-1000-3C/F** (For DP-350,  $\phi d=1.6$ )  
**JB-160-K-1.6-150-1000-6C/F** (For DP-700,  $\phi d=1.6$ )

**Max. 750°C**  
( $\phi d=3.2$ )

**JB-160-K-3.2-150-1000-3C/A** (For DP-350,  $\phi d=3.2$ )  
**JB-160-K-3.2-150-1000-6C/F** (For DP-700,  $\phi d=3.2$ )

**JB-16**



**Max. 650°C**  
( $\phi d=1.6$ )

**JB-16-K-1.6-100-1000-3C/A** (For DP-350,  $\phi d=1.6$ )  
**JB-16-K-1.6-100-1000-6C/A** (For DP-700,  $\phi d=1.6$ )

**Max. 750°C**  
( $\phi d=3.2$ )

**JB-16-K-3.2-100-1000-3C/A** (For DP-350,  $\phi d=3.2$ )  
**JB-16-K-3.2-100-1000-6C/A** (For DP-700,  $\phi d=3.2$ )

**JB-150 (Tip Sharpened Form)**

**Max. 400°C**



**JB-150-K-50-1000-3C/F** (For DP-350)  
**JB-150-K-50-1000-6C/F** (For DP-700)



# Multi-Function Thermometer

**Data logging function, Accuracy :  $\pm 0.1\%$**

## DP-700

Model Code :

**DP-700B/E**

**With USB**

- Data Logging : 9999 logs
- Waterproof/Dustproof : IP54

Model Code :

**DP-700A/E**

**No USB**

- Data Logging : 99 logs
- Waterproof/Dustproof : IP67

• Temperature sensor is separately.

The DP-700 is a high accuracy thermometer with powerful functions, such as data logging, USB connection, peak high and low temperature, burnout (Sensor broken) display, remaining battery service display and automatic power off. The variety of functions supports you to manage temperature data efficiently.

Logging No./Total number of data points stored

Temperature gradient indications

Logging execution display

Burnout (Sensor broken) display

Remaining battery service life

Measured temperature

Message display

<sup>\*1</sup> Data Logging (Recording), Max 9999 logs

Tag Number, User Name Function

Waterproof /Dustproof <sup>\*2</sup>

Operation Lock Function

USB Function (Only for DP-700B)

Measured Value Hold Function

Peak High & Low Temperature Function

Automatic Power OFF Function

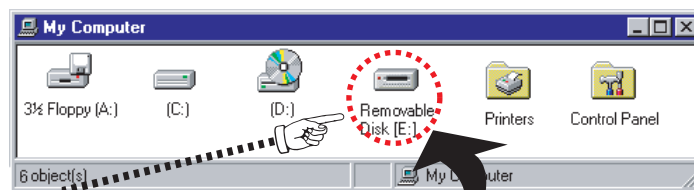
PV Bias, PV Digital Filter Function

Burnout (Sensor broken) Function

<sup>\*1</sup> DP-700A : 99 logs

<sup>\*2</sup> DP-700A : IP67  
DP-700B : IP54

## Easy to reading and manage data with PC

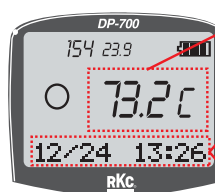


External Memory Device



USB

- By connecting DP-700B to USB port, a PC recognizes DP-700B as outside media.  
\* OS : Windows 10/8.1/7/Vista/XP
- Measured data can be stored in the file in the GSV format.



Measured temperature

Flying-oil

Comment  
(Max. 11 characters)

24/12 13:26

Measured date and time  
(Month, Day, Time)

12/24 13:26

(Day, Month, Time)

\* Selectable

DP-700B stores up to 9999 points of logging temperature data including comment, measured date and time.

## DP-350 Specifications

|                        |                                                                                                                                                                                                           |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input • Range          | Thermocouple : K (JIS/IEC)<br>-200 to 1200°C (-199.9 to +199.9°C)<br>-328 to 1999°F (-199.9 to +199.9°F)                                                                                                  |
| Sampling time          | Approx. 0.3 sec                                                                                                                                                                                           |
| Measuring accuracy     | ±(0.2% of indicated value + 1digit) or ±2°C (4°F)<br>(Whichever is larger)<br>• ±4°C (8°F) in the range of -100°C (-150°F) or less.                                                                       |
| Display                | Reflective TN LCD                                                                                                                                                                                         |
| Function               | Peak high and low temperature, Measured Value Hold Function, Burnout (Sensor broken) Function, Decimal point selection (0/0.1), Battery Low Alarm Function, Automatic Power OFF Function (3min/30min/OFF) |
| Power supply           | LR6 Alkaline battery x 2pcs.<br>Life of battery : Approx. 1000 hours<br>(Continuous operating time, Around the ambient temperature 23°C)                                                                  |
| Operating environments | 0 to 50°C (32 to 122°F), 45 to 85% RH                                                                                                                                                                     |
| Net weight             | Approx. 140g (Including LR6 Alkaline battery)                                                                                                                                                             |
| Accessories            | LR6 (IEC and JIS) Alkaline battery, Hand strap                                                                                                                                                            |

## External Dimension

Unit:mm



## DP-350 Optional

### Anti-shock cover (Silicon jacket)



### Hard carrying case



### Soft case



## DP-350 Model Code

| Model Code  | Accessory (Optional)                     |
|-------------|------------------------------------------|
| DP-350C*A   | No optional                              |
| DP-350C*A-1 | With anti-shock cover (Silicon jacket) * |
| DP-350C*A-2 | With hard carrying case *                |
| DP-350C*A-3 | With soft case *                         |

\* Purchase of each cover only is available.

Refer to the following part numbers:

350P-K01: Anti-shock cover (Silicon jacket)

350P-K02: Hard carrying case

350P-K03: Soft case

## DP-700 Specifications

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input • Range<br>(Universal input)       | Thermocouple K -200 to +1372°C (-328 to +2501°F)<br>-199.9 to +999.9°C (-199.9 to +999.9°F)<br>RTD Pt100 -200 to +850°C (-328 to +1562°F)<br>-199.9 to +850.0°C (-199.9 to +999.9°F)                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Sampling time                            | Approx. 0.5 sec                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Measuring accuracy                       | ±(0.1% of reading + 1digit) or ±0.3°C(±0.6°F) (Whichever is is larger)<br>Cold junction temperature error<br>±0.5°C(±0.9°F) [Between 5 and 40°C (41 and 104°F)]<br>Ambient temperature influence<br>±0.01% of span / °C [Between 5 and 40°C (41 and 104°F)]                                                                                                                                                                                                                                                                                                                                                                     |
| Display                                  | Reflective FSTN LCD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Data logging (recoding)                  | Recording method: Manual log mode : Can be manually recorded in the memory.<br>Interval log mode : Can be automatically recorded (in a set interval)<br>Interval time: 0 (Manual log mode), 1 to 3600 sec<br>Recording items: Measured temperature, Date, Time, Tag name, User No.<br>Recording capacity: DP-700A: Max. 99 logs<br>DP-700B: Max.9999 logs<br>Memory backup: DP-700A: Backed up by SRAM<br>The recorded data may be lost if battery service life has expired or the battery is replaced.<br>DP-700B: Backed up by EEPROM<br>Number of writing : Approx. 100,000 times<br>Data retaining period: Approx. 10 years |
| Tag number function                      | Number of maximum registration: DP-700A: 5 tags<br>DP-700B: 99 tags<br>Registration items: Tag name, evaluation points of high and low temperature<br>Tag name: 11 characters (Numeral, Alphabets, Symbols)<br>Memory backup: Same as Memory backup of data logging                                                                                                                                                                                                                                                                                                                                                             |
| User name function<br>(Only for DP-700B) | Any user name can be registered for each user number.<br>Logging data can store into register name.<br>Number of maximum registration : 99 names,<br>Number of character : 11 characters (Numeral, Alphabets, Symbols)<br>Memory backup: Same as Memory backup of data logging                                                                                                                                                                                                                                                                                                                                                  |
| USB function<br>(Only for DP-700B)       | Interface: USB (Universal Serial Bus) Ver2.0<br>Communication speed: Full Speed compliant<br>Connector type: USB series Mini-B<br>Power supply: Bus power (The power is supplied from the USB port on the PC side.<br>Device class: Mass Storage Class (Bulk-Only Transport)<br>OS : Windows XP/Vista/7                                                                                                                                                                                                                                                                                                                         |
| Function                                 | Peak high and low temperature<br>PV bias: -99.9 to +99.9°C (°F)<br>PV digital filter: 0 to 100 sec (0 : OFF)<br>Calendar timer (year, month, date, hour, minute)<br>Automatic Power OFF (1 to 60min/OFF)<br>Decimal point selection (0/0.1), Temperature gradient indication                                                                                                                                                                                                                                                                                                                                                    |
| Waterproof and dustproof                 | DP-700A : IP67<br>DP-700B : IP54                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Power supply                             | Type LR6 (based on IEC and JIS) alkaline battery, One battery<br>Battery life: Approx. 400 hours (Continuous operating time, Around the ambient temperature 23°C)                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Ambient temperature                      | -20 to +50°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Ambient humidity                         | 5 to 95%RH (Absolute humidity: Max. W.C 29g/m³ dry air at 101.3kPa.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Weight                                   | Approx. 150g (Including LR6 Alkaline battery)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Accessories                              | LR6 (IEC and JIS) Alkaline battery, Strap, USB cable 1m (Only for DP-700B)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

## Cable adapter (For DP-700) Separately

3C (For DP-350 connector) to  
6C (For DP-700 connector)

Model Code : A-DP700



\* Only for thermocouple sensor

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- Before operating this product, read the instruction manual carefully to avoid incorrect operation.
- This product is intended for use with industrial machines, test and measuring equipment. It is not designed for use with medical equipment.
- If it is possible that an accident may occur as a result of the failure of the product or some other abnormality, an appropriate independent protection device must be installed.

### Caution for the export trade

All transactions must comply with laws, regulations, and treaties.

### Caution for imitated products

As products imitating our product now appear on the market, be careful that you don't purchase these imitated products. We will not warrant such products nor bear the responsibility for any damage and/or accident caused by their use.

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