

**NEW**

# Handheld Digital Thermometer DP-700

Easy-to-use

Data logging function

USB connection to PC



### >> Handheld Use

- Fits in one hand for easy use
- Superior Display visibility and viewing angle

Handheld type Temperature Sensor  
: Many other type are available.

### >> Data logging (recording)

Measured temperature, date, time, and user name can be manually or automatically stored in memory.

- DP-700A : Max 99 logs
- DP-700B : Max 9999 logs

- When DP-700B is used, measured data can be stored in the file in the CSV format using the USB port of each personal computer.

### >> Display Information

- LCD indicates measured temperature, remaining battery service life, total number of data points stored.

- Message display indicates measured date/time, user name, tag name and each message
- Measured temperature display indicates also peak high and low temperature and function.

### >> Peak high and low temperature

The maximum and minimum measured-temperature can always be stored.

### >> Easy to reading and manage data with PC

- By connecting DP-700B to USB port, a PC recognizes DP-700B as outside media. Like a floppy disk, a PC read data of DP-700B.  
\* OS : Windows Me/2000/XP
- Measured data can be stored in the file in the CSV format.

154 23.9	FLYn9-011	Comment (Max.11 characters)
73.2°C	2003 12/24	Measured date and time (Year, Month, Day, Time)
12/24 13:26	12/24 13:26	

DP-700B stores up to 99 points of logging temperature data including comment, measured date and time.

## Specifications

Input and Measuring range	Universal input Thermocouple K	-200 to +1372°C (Resolution: 1°C) -328 to +2501°F (Resolution: 1°F) -199.9 to +999.9°C (Resolution: 0.1°C) -199.9 to +999.9°F (Resolution: 0.1°F)
	Thermocouple J	-200 to +1200°C (Resolution: 1°C) -328 to +2192°F (Resolution: 1°F) -199.9 to +999.9°C (Resolution: 0.1°C) -199.9 to +999.9°F (Resolution: 0.1°F)
	RTD Pt100	-200 to +850°C (Resolution: 1°C) -328 to +1562°F (Resolution: 1°F) -199.9 to +850.0°C (Resolution: 0.1°C) -199.9 to +999.9°F (Resolution: 0.1°F)
Sampling time	0.5 sec	
Measuring accuracy	±(0.1% of + 1 digit) or ±0.3°C(±0.6°F) (Whichever is larger) Cold junction temperature error ±0.5°C(±0.9°F) [Between 5 and 40°C (41 and 104°F)] ±1.0°C(±1.8°F) [Between -20 and 5°C (-4 and 41°F), 40 and 50°C (104 and 122°F)] Ambient temperature influence ±0.01% of span / °C [Between 5 and 40°C (41 and 104°F)] ±0.02% of span / °C [Between 5 and 40°C (41 and 104°F)]	
Display	Reflective FSTN LCD Measuring value (PV) : 4-digit, Logging (Recording) No : 4-digit, Total number of logging data : 4-digit, Message : 68 x 8 dots Logging execution : Lit during execution Burnout (Sensor broken) : Lit when the sensor is broken. Remaining battery service life : The remaining battery service life is indicated in three steps. Temperature unit : 12 x 8 dots (°C/°F)	
Data logging (recording)	Recording method: Manual log mode : Can be manually recorded in the memory. Interval log mode : Can be automatically recorded (in a set interval) Interval time: 0 (Manual log mode), 1 to 3600 sec Recording items: Measured temperature, Date, Time, Tag name, User No. Recording capacity: DP-700A: Max. 99 logs DP-700B: Max.9999 logs Memory backup: DP-700A: Backed up by SRAM The recorded data may be lost if battery service life has expired or the battery is replaced. DP-700B: Backed up by EEPROM Number of writing : Approx. 100,000 times Data retaining period: Approx. 10 years	
Temperature gradient indication	The evaluation points of high and low temperature are set. When within the evaluation points, "O" is displayed while when out of the evaluation point, "X" is displayed.	

Tag number function	Number of maximum registration: DP-700A: 5 tags DP-700B: 99 tags Registration items: Tag name, evaluation points of high and low temperature Tag name: 11 characters (Numerical, Alphabets, Symbols) Memory backup: Same as Memory backup of data logging
User name function	Any user name can be registered for each user number. Logging data can store into register name. Number of maximum registration : 99 names, Number of character : 11 characters (Numerical, Alphabets, Symbols) Memory backup: Same as Memory backup of data logging
USB function (Only for DP-700B)	Interface: USB (Universal Serial Bus) Ver2.0 Communication speed: Full Speed compliant Connector type: USB series Mini-B Power supply: Bus power (The power is supplied from the USB port on the PC side) Device class: Mass Storage Class (Bulk-Only Transport)
Waterproof and dustproof	DP-700A : IP67 DP-700B : IP54
Other functions	Peak high and low temperature PV bias: -99.9 to +99.9°C (°F) PV digital filter: 0 to 100 sec (0 : OFF) Calendar timer (year, month, date, hour, minute) Operation lock, Self-diagnostic
Power	Type LR6 (based on IEC and JIS) alkaline battery, One battery 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/m <sup>3</sup> dry air at 101.3kPa.)
Weight	Approx.450g (Including LR6 Alkaline battery)
Accessories	LR6 (IEC and JIS) Alkaline battery, Strap, USB cable 1m (Only for DP-700B)

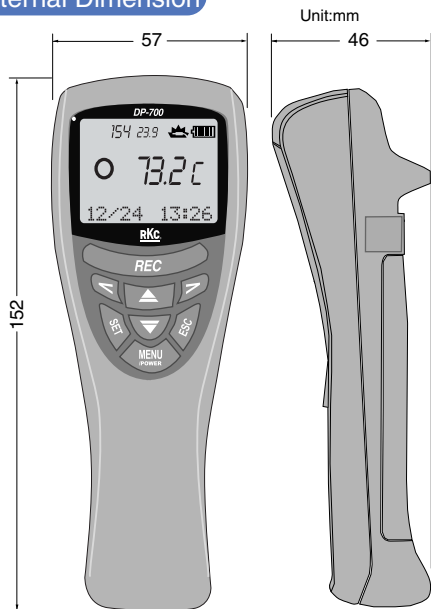
## Model Code

Model Code	Specifications
DP-700A/J	No USB, Data logging : 99 logs, Waterproof/Dustproof : IP67 Data backup : Backed up by SRAM
DP-700B/J	With USB, Data logging : 9999 logs, Waterproof/Dustproof:IP54 Data backup : Backed up by EEPROM

DP-700A allows for temporary immersion in water.

DP-700B is water resistant to splashing. It is not suitable to be immersed in water.

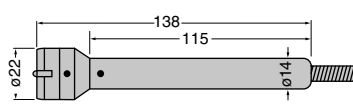
## External Dimension



## Handheld type Temperature Sensor (Accessories)

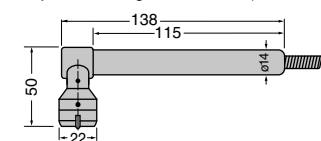
Thermocouple : Type K

**ST-23** For static surface  
Temperature range: 0 to 300°C (Non-condensing)



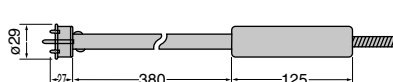
Model Code : ST-23-6C

**ST-23L** For static surface  
Temperature range: 0 to 300°C (Non-condensing)



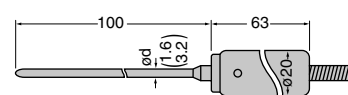
Model Code : ST-23L-6C

**ST-29** For static surface  
Temperature range: 0 to 800°C (Non-condensing)



Model Code : ST-29-6C

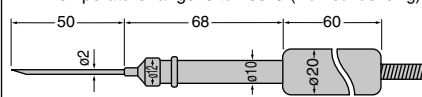
**JB-16** For semi-solid, viscous material and liquid  
Temperature range : 0 to 650°C (ø1.6) (Non-condensing)  
0 to 750°C (ø3.2) (Non-condensing)



Model Code : JB-16-6C

(Specify ød when ordering)

**JB-15** For semi-solid, viscous material and liquid  
Temperature range: 0 to 400°C (Non-condensing)

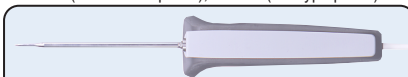


Model Code : JB-15-6C

• Consult factory for other probe types that are available.

Released soon

JB-715 (Penetration probe), JB-716 (Bar type probe)



Installing a sensor is a snap.

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