

**McKESSON**

# Refrigerator/Freezer Thermometer DATA LOGGER DUAL PROBE

For use with MFR # MCK80022P.

**FEATURES**

- High accuracy
- 24 million readings / Max 170 files (.csv)
- Internal and external sensors reading display
- Minimum and maximum reading memories
- Low / high alarm limit setting
- Flashing light alarm indicator
- °C / °F Scale
- Real time display
- Waterproof external sensor
- Low battery indication
- Removable SD memory card or USB interface for data retrieval
- Optional external power supply
- Flip out desk stand
- NIST compliant® (each thermometer individually serialized with certificate provided)

**SPECIFICATIONS**

Measuring range	External: -58 - 158°F (-50 - 70°C) (bottle probe) Internal: 32 - 122°F (0 - 50°C)
Display accuracy	±0.5°C / ±0.9°F over full range
Display resolution	0.1°
Display reading update	10 seconds
Memory	Removable 2G micro SD card / Max 170 files (.csv)
Memory capacity	24 million readings
Data logging interval	Once per minute to once per 720 minutes user option
Alarm limit setting resolution	0.1°
Default alarm value	Low: 0°C, High: 50°C
Time accuracy	±1 second per day
Time display format	12 / 24 hours format user option
Effective calendar period	2014 - 2099
Battery	1.5 volt, type AA or equivalent x3 pieces
Battery life	About 2000 hours in continuous operation with no alarm triggered
Working ambient temperature	32 - 122°F (0 - 50°C)
Display size	70(W) x 64(H) mm
External sensor cable length	2000 mm
External sensor bottle size	19.5(Φ) x 40(H) mm PE bottle
Product size	94(W) x 110(H) x 26(D) mm
+Accessories	3 1.5 volt, type AA battery, 1 External bottle sensor 1 Mini USB cable 1000mm length, 1 100-240V power adapter and 1 Micro SD card USB adapter

**DISPLAY SYMBOLS**

SYMBOL	DESCRIPTION
	Low battery voltage, replace battery
LLL	1. Probe not connected 2. Sensor short circuit 3. The reading is out of low range -22 °F (-30°C).
HHH	1. Sensor short circuit 2. The reading is out of high range 158 °F (70°C).
:Sd	SD card installed
r:Ec	Data logging is on

**NOTE**

- Do not operate the thermometer with an environmental temperature lower than 32°F (0°C) or higher than 122°F (50°C) otherwise incorrect readings or damage to the thermometer may result.
- If there is abnormal operation or display issues then press the [RESET] button on the back of the unit.
- If the thermometer is not in use for a long period of time then remove the batteries from battery compartment to avoid battery leakage.
- When the low battery symbol appears replace with new battery of same type.

**INSTALLATION**

1. Unpack the unit and connect the bottle probe.
2. Open the battery door and pull out the battery insulation strip
3. Peel off display protective sheet.
4. Put the bottle sensor inside the fridge or freezer.

**SET TEMPERATURE SCALE**

Slide [°C/°F] switch to the desired temperature scale.

**DATE AND TIME SETTING**

1. Press [SET] and [↓] simultaneously until the display showing the hour format "12H".
2. Press [↓] to select 12 or 24 hours time format.
3. Press [SET] to confirm hour format and start year setting. The last two digits of the year will be flashing (Default is "14").
4. Press [SET] to confirm year and begin month setting. The month digit will be flashing (Default is "1").
5. Press [↑] or [↓] to set the current month.
6. Press [SET] to confirm month and start date setting. The date digit will be flashing (Default is "1").
7. Press [↑] or [↓] to set the current date.
8. Press [SET] to confirm date and begin hour setting. The hour digit(s) will be flashing.
9. Press [↑] or [↓] to set the current hour.
10. Press [SET] to confirm hour and begin minute setting. The minute digits will be flashing.
11. Press [↑] or [↓] to set the current minute.
12. Press [SET] to confirm minute and finish the date and time setting.

\* Press and hold the [↑] or [↓] button will increase or decrease the value automatically.

**LOW / HIGH ALARM LIMIT AND DATA LOGGING INTERVAL SETTING**

1. Press and hold [SET] until the third row display showing "SET" then release the button. The INT low alarm limit will be flashing (Default is -10).
2. Press [↑] or [↓] to set the value.
3. Press [SET] to confirm INT low alarm limit and start high alarm limit setting. The INT high alarm limit will be flashing (Default is 50).
4. Press [↑] or [↓] to set the value.
5. Press [SET] to confirm INT high alarm limit and start EXT low alarm limit setting. The EXT low alarm limit will be flashing (Default is -10)
6. Press [↑] or [↓] to set the value.
7. Press [SET] to confirm EXT low alarm limit and start high alarm limit setting. The EXT high alarm limit will be flashing (Default is 50).
8. Press [↑] or [↓] to set the value.
9. Press [SET] to confirm EXT high alarm limit and start data logging interval setting. The default value "1" (one minute) is flashing.
10. Press [↑] or [↓] to set the value.
11. Press [SET] to confirm data logging interval and finish the settings.
12. The alarm will sound and the red light will be flashing when the reading is lower or higher than the alarm limit. The alarm sound will stop if the reading falls within the alarm limits or any button is pressed but the LO or HI icon and the red light will still be flashing which indicates that an alarm has been triggered.
13. To cancel the icon and red light flashing, press [ON/OFF] once.

\* Press and hold the [↑] or [↓] button will increase or decrease the value automatically.

**ALARM ON/OFF**

Press [ON/OFF] once to switch the alarm limit off or on.

**DATA LOGGING ON/OFF**

Press and hold [SET] to switch on or off the data logging. "ON / rEc" display means the data logging is on. "OFF / rEc" display means the data logging is off.

**POWER ON/OFF**

1. Press and hold [ON/OFF] for about two seconds to switch off.
2. Press the button once to switch on.

**DATA RETRIEVAL**

1. Switch off the unit and do below step 2 or 3 to get the SD card connected to the Windows or Mac computer
2. Connect the unit to the Windows or Mac computer by the USB cable provided or
3. Open the SD card slot cover, push the card to take out the card and install it into the SD card USB adapter then insert the USB adapter into the computer.
4. Open the added disk on the computer.
5. Open the logging file on the disk to view the logged readings.

General Questions? Call 1-800-777-4908  
Technical Support? Call 1-973-300-9100

Manufactured by THERMCO Products, Inc.  
10 Millpond Drive, Unit 10 Lafayette, NJ 07848

Distributed by McKesson Medical-Surgical Inc  
Richmond, VA 23233  
PVN C1017 RV2-10/17  
Made in China