

MODEL

6535: TraceableGO™ Datalogging Thermometer

6537: TraceableGO™ Datalogging Hygrometer



Figure 1: 6535 (left), 6537 (right)

Dimension L x H x D: 3.5 x 2 x 0.79" (89x51x20mm)

TEMPERATURE

Operating Range: -20 to 70°C

Resolution: 0.1°C

Accuracy:

6535: ±0.4°C

6537: ±0.4°C between -10 and 70°C, otherwise ±0.5°C

RELATIVE HUMIDITY (6537 ONLY):

Range: 0% to 95%RH, non-condensing

Resolution: 0.1% RH

Accuracy: ±3% RH between 5 to 75%, otherwise ±5% RH

BATTERY

• 2 AAA Alkaline batteries (3.0V)

Battery Level Indication:

| Battery level | LCD symbol |
|----------------------|------------|
| ≥ 80% (2.78V) | |
| ≥ 60% (2.56V), < 80% | |
| ≥ 40% (2.34V), < 60% | |
| ≥ 20% (2.12V), < 40% | |
| ≥ 10% (2.01V), < 20% | |
| < 10% Flashing | |

Note: Battery level is updated every 5 minutes.

Note: Once battery level drops to below 10%, device may not work properly. Replace batteries immediately.

Note: When replacing batteries, after removing the old batteries, wait 10 seconds before inserting new batteries. Otherwise, Bluetooth may not work properly.

MEASUREMENT READING UPDATE FREQUENCY

Temperature and humidity: 5 seconds;

Note: If a reading is out of operating range, the corresponding location on LCD will display '--.-', and such out of range reading will not trigger alarm.

DATA LOGGING FREQUENCY:

5 min by default, user-adjustable between 1 minute and 12 hours with 1 minute step.

DATA STORAGE CAPACITY

Alarm: most recent 90 Alarm events

Data: 64K (65536) data points, 7.5 months on 5-minute logging interval

Note: If maximum number of alarm events is reached, device will overwrite the oldest alarm events.



Figure 2 Device not initialized

DEVICE OPERATING MODES

- **IDLE Mode:** First time battery inserted, and device has not been configured;
- **STANDBY Mode:** Device has been configured, but not started;
- **RUN Mode:** Device starts to measure and log data.
- **STOP Mode:** Device stops from RUN Mode. In STOP Mode, device does not update measurements or log data, and the last measurements are displayed.

VIEW CURRENT READING

1. Temperature ONLY unit: Current reading, minimum/ maximum reading, run time/alarm time toggling, Memory mode are shown on LCD.
2. Humidity and Temperature unit: Current temperature/humidity reading toggling every 5 seconds, minimum/maximum reading since last clearing, run time/alarm time, Memory mode are shown on LCD.

VIEW CURRENT MIN/MAX

Temperature ONLY unit: Current temperature Min/Max values are displayed on LCD.

Humidity and Temperature unit: Current temperature/humidity Min/Max values are toggled display.

Note: Every time device is configured, or resumes to run from STOP Mode, Min/Max values are reset.

VIEWING RUN TIME/ALARM TIME

Run Time/Alarm Time is toggled to display on LCD. If Run Time is displayed, LCD symbol **RUN TIME** appears; if Alarm Time is displayed, LCD symbol **ALARM TIME** appears.

Note: Alarm Time is accumulated for both Low Alarm and Hi Alarm for each channel (temperature, humidity).

VIEW MEMORY USAGE, CURRENT DATE/TIME, DEVICE'S SERIAL NUMBER

1. Press and release **START/STOP** button

2. Memory usage in percentage is shown on LCD. The percentage indicates how much internal data memory storage has been used;
3. Number of days, hours, minutes left till memory is full are also displayed on the second line;



Figure 3

4. Within 10 seconds, press **START/STOP** again, current date/time is displayed on device LCD. The following figure shows 9/14/2017, 17:30



Figure 4

5. Within 10 seconds, press **START/STOP** again, device S/N will be displayed on LCD.



Figure 5

6. To return to normal working status, press **START/STOP** again, or wait for 10 seconds and device will automatically go back to normal working status.

Note: If Memory Mode is set to WRAP WHEN FULL: LCD symbol **MEM** starts to flash on the display when the memory is full. Once memory is full, the oldest data points will be overwritten with new data points.

If Memory Mode is set to STOP WHEN FULL: LCD symbol **MEM** starts to flash on the display when the memory is 95% full. Once memory is full, the device will stop logging new data points.

ENABLE/DISABLE BLUETOOTH

1. Quick press twice **START/STOP** to enable Bluetooth, and Bluetooth LCD symbol appears;
2. Device starts to advertise to be found, and to be connected. Device Name shown on TraceableGO™ App discovered list looks like CC6535-xxxx, or CC6537-xxxx, where xxxx is the last 4 digits of device serial number.
3. If no connection has been made for **ONE MINUTE**, Bluetooth will be disabled to save battery life, and Bluetooth LCD symbol disappears, or quick press twice again to disable Bluetooth. To enable again, go to Step (1).

HOW TO SETUP DEVICE

Configure device before use

1. Enable Bluetooth on device.
2. Use TraceableGO™ App to connect to device.
3. Follow TraceableGO™ App instruction to configure device.
4. The following parameters are configured through TraceableGO™ App: START Mode, STOP Mode, ALARM Enable/Disable, Celsius/Fahrenheit, Memory Mode, Data Logging Interval, Alarm Setting.
5. Once device has been configured, device enters STANDBY Mode.

Note: While device is connected to our TraceableGO™ App, if no action has been taken for 5 minutes, device will terminate the connection from our TraceableGO™ App.

Note: If Memory Mode is set to WRAP WHEN FULL, **MEM** appears on LCD; If Memory Mode is set to STOP WHEN FULL, **MEM** appears on LCD.

ALARM

1. Once an alarm is triggered by any of temperature, humidity out of set alarm range, LCD symbol **LOW ALM** and/or **HI ALM** starts to flash. An Alarm Event will be logged.
2. Pressing **START/STOP** once will clear the alarm, LCD symbol stops flashing. An Alarm Acknowledge Event will be logged.
3. If temperature, or humidity falls back to normal range, an Alarm Event will be logged. If any of temperature, humidity measurement goes back to out of alarm range, alarm will be triggered again.

HOW TO START, STOP, AND RESUME DATA LOGGING

1. Devices are factory initialized with default setting:
 - START Mode: Push Start
 - STOP Mode: Push Stop
 - Memory Mode: Wrap when Memory is Full
 - Temperature Unit: Celsius
 - Data Logging Interval: 5 minutes
 - Alarm Enable/Disable: Enabled
 - Alarm Setting High Alarm:
 - Temperature: 8°C
 - Humidity: 75% RH (6537 only)
 - Alarm Setting Alarm Low:
 - Temperature: 2°C
 - Humidity: 25% RH (6537 only)
 - Date/Time is also set to current to central time.

Note: Devices are shipped with battery, powered on, and ready to use if using default setting. Without powered on, device will lose track of date/time.

Note: If a user intends to use device for different setting other than default, device must be re-initialized.

- If device's START Mode is configured as **PUSH BUTTON TO START** (default), device LCD displays 'push to start' (Figure 4). Press and hold **START/STOP** until LCD symbol appears. Device enters RUN Mode. If device's START Mode is configured as **IMMEDIATE START**, device enters RUN Mode immediately. If device's START Mode is configured as **DELAYED TIME START**, delayed start time set by user is counting down on device LCD. Once the counting time reaches 0, device enters RUN Mode.



Figure 6

- If in **RUN Mode**, LCD symbol **RUN** appears, and logs data at user-defined interval. If STOP Mode is configured as **PUSH BUTTON TO STOP**, press and hold **START/STOP** until LCD symbol **STOP** appears. Device enters STOP Mode. If STOP Mode is configured as **NEVER STOP**, device will ignore button press, and will stop when memory is full if Memory Mode is set to **STOP WHEN FULL**, or will stop when TraceableGO™ App is connected to device and downloads the data.
- If in STOP Mode, press and hold **START/STOP** until LCD symbol **RUN** appears. Device enters RUN Mode and resumes to log data at current setting. Anytime device resumes to log data from STOP Mode, Min/Max values are reset.

Note: If device in STOP Mode, START Mode will be set to **PUSH BUTTON TO START** regardless of previous Start Mode Setting. If Delayed Start Mode is needed while device in STOP Mode, device must be re-configured.

Note: While device is connected to TraceableGO™ App, once Device has received command from App to upload data to App, device will stop logging data and enter STOP Mode if it is still in RUN mode.

CLEAR DATA MEMORY STORAGE

- Data points stored in device internal storage can only be cleared through TraceableGO™ App.
- Each time device is configured, all stored data points will be cleared.
- Run Time/Alarm Time are also reset.

DOWNLOAD DATA

- If device is not in STOP Mode, press and hold **START/STOP** for 3 seconds until LCD symbol appears. Device enters STOP Mode
-OR-
 If Stop Mode is set to **NEVER STOP** and Memory Mode is set to **STOP WHEN FULL** and device is in RUN Mode, skip Step (1).
- Quick press **START/STOP** twice to enable Bluetooth, and Bluetooth LCD symbol **BLE** appears. Device starts to advertise.
- Connects to device through TraceableGO™ App. Once connected, device LCD displays 'ble connect':



Figure 7

- Follow TraceableGO™ App instruction on how to download data from device. While data downloading is in process, device LCD displays 'dat upload_':



Figure 8

- Once download process is complete, device LCD displays 'ble connect'.
- User can view, export data through TraceableGO™ App.

Note: Full memory data downloading takes as little as 5 minutes to complete. The actual downloading time varies on how data logged, mobile device type, and distance between device and mobile device.

WARRANTY, SERVICE, OR RECALIBRATION

For warranty, service, or recalibration, contact:

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Traceable® Products is ISO 9001:2008 Quality-Certified by DNV and ISO/IEC 17025:2005 accredited as a Calibration Laboratory by A2LA.

TRACEABLEGO® DATALOGGER INSTRUCTIONS