

User's Guide

EXTECH
INSTRUMENTS
A FLIR COMPANY

Model 42270 Temperature & Humidity Datalogger

Model 42260 Temperature Datalogger

Introduction

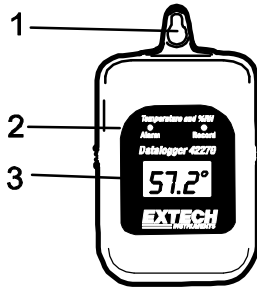
Congratulations on your purchase of the Extech Datalogging Module. The following models are covered in this manual.

Model 42270: Temperature and Humidity Datalogging Module
Model 42260: Temperature-only Datalogging Module

The Dataloggers can be used to monitor the temperature of greenhouses, warehouses, food transports, aircraft cabins, refrigerated trucks, containers, museums, and HVAC equipment. The Model 42270 records Relative Humidity readings in addition to temperature readings. Instructions on how to program the dataloggers are not included in this manual. **Programming and data retrieval instructions are included in the 42275, 42265, 42276 and 42266 kits.**

Description

1. Mounting hole
2. Status LEDs (Record and Alarm)
3. LCD display



Displays

LCD Display

REC: Displayed while logging readings.
HI and LOW: Displayed when the High or Low Alarm limit is exceeded.
RH%: Relative Humidity (42270 only)
C or F: Temperature units.
COMM: Appears when Datalogger is communicating with a PC.

Recording Status Indication

Both the RED status LED and the display indicator 'REC' will flash every 5 seconds if the sampling rate is set to 5 seconds or higher. If the sampling rate is set lower than 5 seconds, the indicators will flash every 1, 2, 3, or 4 seconds as programmed.

ALARM Status Indication

Both the YELLOW status LED and the display indicator 'ALM' will flash when the recorded value is higher than the user programmed High Alarm value or lower than the Low Alarm value. The Alarm status LED and the 'ALM' display indicator flash every 5 seconds if the sampling rate is programmed for 5 seconds or higher. If the sampling rate is set lower than 5 seconds, the indicators will flash every 1, 2, 3, or 4 seconds as programmed.

Low Battery Indication

When the lithium battery voltage nears the critical operating level, the LCD displays 'LO'. To replace the battery, refer to the Battery Replacement section of this manual.

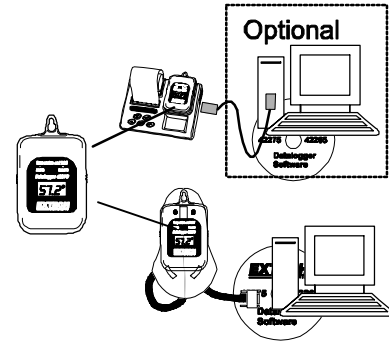
Specifications

Front panel status	LEDs Two (2): RECORD and ALARM
Temperature range	-40 to 85°C (-40 to 185°F)
Temperature resolution	0.1° up to 99.9°; 1° from 100° to 185°
Temperature accuracy	±0.6°C (1.2°F) from -20 to 50°C (-4 to 122°F) ±1.2°C (2.4°F) all other ranges
Humidity range & accuracy	0.0 to 99.9% Relative Humidity; Accuracy: ± 3%
Datalogger Memory	16,000 temperature readings (8,000 temperature and 8,000 humidity readings on the 42270)
Sampling rate	Programmable from 1 to 7200 seconds (2 hours)
Power supply	One 3.6V 1/2 'AA' lithium battery
Battery Life	1 year: 5 second sample rate in sleep mode 3.8 months: 24 hour sample rate in non-sleep mode
Low battery Indicator	Display shows 'LO'
Dimensions	76.2 x 57.2 x 22.3mm (3 x 2.3 x 0.88")



The datalogger display will not switch on until activated by software or the printer programmer.

THESE DATALOGGERS CANNOT BE USED WITHOUT THE SOFTWARE FROM KIT 42275 (42265) OR THE PRINTER PROGRAMMER 42276 (42266).



Battery Replacement

When the low battery icon ('LO') appears on the LCD display, replace the Lithium CR2 battery.

1. Open Datalogger housing by first removing the four (4) rear Phillips screws.
2. Carefully pry off the rear of the Datalogger.
3. The cylindrical lithium battery is located on the bottom of the PCB board.
4. Replace the battery, observing polarity.
5. Assemble the Datalogger housing.

You, as the end user, are legally bound (**Battery ordinance**) to return all used batteries and accumulators; **disposal in the household garbage is prohibited!**

You can hand over your used batteries / accumulators at collection points in your community or wherever batteries / accumulators are sold!

Disposal: Follow the valid legal stipulations in respect of the disposal of the device at the end of its lifecycle



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