

User's Guide



Model 42270 Temperature & Humidity Datalogger

Model 42260 Temperature Datalogger

Introduction

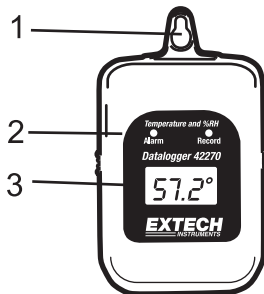
Congratulations on your purchase of the Extech Datalogging Module. The following models are covered in this manual.

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

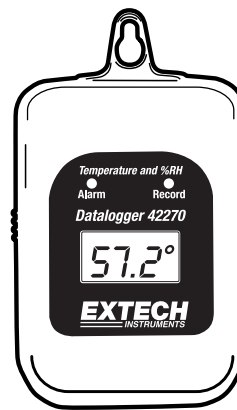
Both the YELLOW status LED and the display indicator 'ALM' will flash when the recorded value is higher than the user programmed High Alarm value or lower than the Low Alarm value. The Alarm status LED and the 'ALM' display indicator flash every 5 seconds if the sampling rate is programmed for 5 seconds 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.

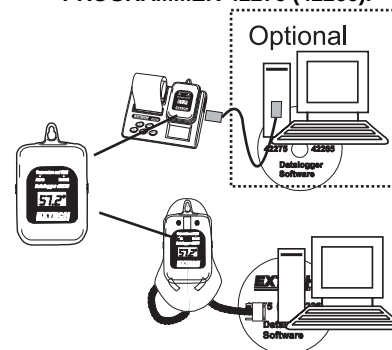
Specifications

Front panel status	LEDsTwo (2): RECORD and ALARM
Temperature range	-40 to 185°F (-40 to 85°C)
Temperature resolution	0.1° up to 99.9°; 10 from 100° to 185°
Temperature accuracy	±1.2°F (0.6°C) from -4 to 122°F (-20 to 50°C) ±2.4°F (1.2°C) 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 ½ '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	3 x 2.3 x 0.88" (76.2 x 57.2 x 22.3mm)



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.

Warranty

EXTECH INSTRUMENTS CORPORATION warrants this instrument to be free of defects in parts and workmanship for **one year** from date of shipment (a six month limited warranty applies to sensors and cables). If it should become necessary to return the instrument for service during or beyond the warranty period, contact the Customer Service Department at (781) 890-7440 ext. 210 for authorization or visit our website www.extech.com for contact information. A Return Authorization (RA) number must be issued before any product is returned to Extech. The sender is responsible for shipping charges, freight, insurance and proper packaging to prevent damage in transit. This warranty does not apply to defects resulting from action of the user such as misuse, improper wiring, operation outside of specification, improper maintenance or repair, or unauthorized modification. Extech specifically disclaims any implied warranties or merchantability or fitness for a specific purpose and will not be liable for any direct, indirect, incidental or consequential damages. Extech's total liability is limited to repair or replacement of the product. The warranty set forth above is inclusive and no other warranty, whether written or oral, is expressed or implied.

Support line (781) 890-7440

Technical support: Extension 200; E-mail: support@extech.com
Repair & Returns: Extension 210; E-mail: repair@extech.com

Product specifications subject to change without notice

For the latest version of this User's Guide, Software updates, and other up-to-the-minute product information, visit our website: www.extech.com
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