USER MANUAL

EXTECH ®
INSTRUMENTS

Model 42270 Temperature & Humidity Datalogger

Additional User Manual Translations available at www.extech.com

Introduction

Model 42270: Temperature and Humidity Datalogging Module
Model 42275: 42270 module, Docking station, Software CD

This Datalogger 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. **Programming and data retrieval instructions are included on the Software CD located in the 42275 kit or on www.Extech.com.**

Description

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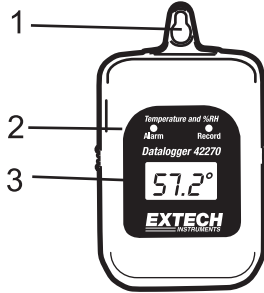
Displays

LCD Display

REC: Displayed while logging readings.
HI and LOW: Displayed when the High or Low Alarm limit is exceeded.
RH%:   Relative Humidity
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
RH range & accuracy	0.0 to 99.9% Relative Humidity; Accuracy: ± 3%
Datalogger Memory	16,000 temperature readings
	(8,000 temperature & 8,000 RH readings)
Sampling rate	Programmable from 1 to 7200 seconds (2 hours)
Power supply	3.6V ½ 'AA' lithium battery (SAFT LS-14250)
Battery Life	1 year: 5 second sample rate in sleep mode
	3.8 months: 24-hour 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")

> **NOTE:** *This datalogger cannot be used without the software and docking station included in the 42275 kit.*

> **NOTE:** *The datalogger display will not switch on until activated by software.*

Battery Replacement

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

1. Open Datalogger 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 bottom of PCB board.
4. Replace the battery, observing polarity.
5. Assemble the Datalogger housing.

Never dispose of used batteries or rechargeable batteries in household waste.
As consumers, users are legally required to take used batteries to appropriate collection sites, the retail store where the batteries were purchased, or wherever batteries are sold.
Disposal: Do not dispose of this instrument in household waste. The user is obligated to take end-of-life devices to a designated collection point for the disposal of electrical and electronic equipment.