BENETECH®

MODEL: GM1365

Temperature & Humidity Data Logger Instruction manual

Version No：GM1365-EN-00
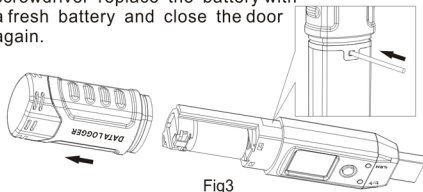
I、Introduction

Out of clusters of humidity and temperature instruments, this low power consumption Data-Logger combines the functions of signal-sampling, display, storage and analysis, widely be applied in the industries of medics, food, agriculture, laboratory, electronics, air-conditioning, weather service, archives management, archaeology study, fibre manufacturing and cold chain logistics, because this device can provide just-in-time solution of environment-monitoring, alerting and recording.

Introduction This device features
► In measuremeat:
With high sensitivity detector to pick up temperature and humidity with quick response and high precison this device can review the readings of the current、max、min、up limit、low limit。
► In Memory:
Automatically record and store the data of temperature、humidity。
► Data transfer:
Directly connect the device with PC USB interface to transfer data with PC。
► In programmiug:
To sef up sampling period，storage interval and alarming。
► In Analyzing:
With specialized software to analyze the data of temperature and humidity with easy and reliable operation。
► In safety:
The bracket allows screw fastening with transparent water dust proof cover to protect the device from moisture and a up low limit can be set to alarm is overflow readimgs。
► In Convenience:
Both temperature and humidity can be displayed with battery volume alert，This device is compact and portable to be placed and worked like a flash disk。

II、To be noted:

1.The main device has its water proof level P67 so do not use it in liquid。

2. ABS cover of the device is vulnerable to acid alkali corrosion.
3. If there is any problem please ask the authorized professionals to fix it and replace the battery acording to the steps specified in the manual。
4. The lithium battery of 1/2AA3.6V inclnded is not rechargeable,and short circuit is forbidden to prevent from danger,The old battery shall be dealt with in accordance with local law.

III、The key operation

Pressing on the key for 2 seconds is to turn on/off the device. After powering on, click on the key to review the current reading, max reading, min reading, upper limit, lower limit.

IV、Battery installing

1.Sturcture of the device(Fig 1)
（1）Overflow alarm LED
（2）Key
（3）LCD
（4）Position for battery replacement
（5）USB interface
（6）Waterproof rubber ring
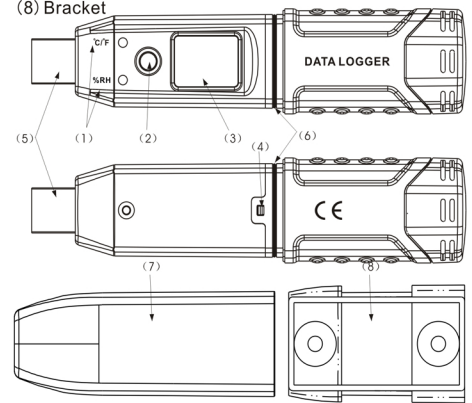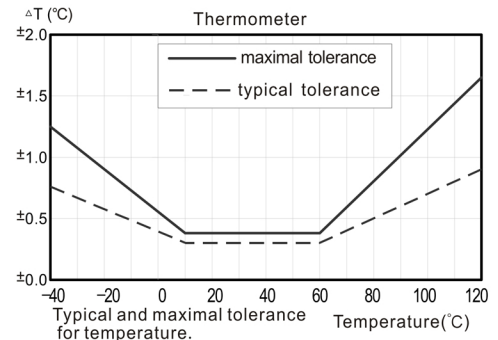（7）Transparent waterproof cover
（8）Bracket

Fig 1

2. LCD display(Fig2)
A. Blue tooth
B. Temperature reading
C. Temperature unit
D. Upper limit overflow
E. Lower limit overflow
F. Max value
G. Min value
H. Battery volume
I. Humidity reading
J. Humidity unit

Fig2

V、Battery installing

Icon "⊏⊐" indicates low battery,please replace the battery immediately,Open the door with a screwdriver replace the battery with a fresh battery and close the door again.

Fig3

VI、How To Use Data-Logger

1.Configuration requirements of the PC
（1）Only be installed under Windows OS.
（2）With CPU frequency above 1.6Ghz and inner memory above 256M.
（3）At least one USB interface is required.

2 Data-Logger installing
（1）Put the disc into the drive and run the file "Setup.msi" to install the program. If it is failed to install the program, please install first this program "Microsoft.NetFramework 3.5" and reinstall the program.
（2）Operate as the alerted by the installation wizard to finish the installation.(Note: It is not recommended to install the program in the OS partition of the PC so as to protect the file be lost in case of reinstall the OS program for PC.)

3 Data-Logger operation
（1）Steps of Data-Logger operation
①Connect the device with PC with USB port.
②Click the icon on the desk to enter into Data-Logger and then click the icon in the tool bar to make communication between the PC and the device, if the connection succeeds there will be a icon indicating Connected shown on the left bottom the status bar, which means the operation of download, setup, clear, review and print can be performed.
③lick the icon and icon to exit the Data-Logger program, and then take out the device note click Download after setup.
（2）Data-Logger downloading
After connection with Data-Logger, click the icon to download the data stored in the device with maximum memory to 32256 pieces of readings. The following are figs of downloading interface and downloaded interface.
（3）Data-Logger setup
Clit the icon iu menu bar or to select temperature unif in a dialogue hor as weu asue setap of sampling period,vrcord interval.UP/low limit. Please be noted that after these setup steps cliek download key.

VII、Technical parameters

	Temperature	Humidity
Measuring range	−30~80°C	0~100%RH
Memory size	32256	
Power	1/2AA 3.6V Lithium Battery	
Size	126*28*22mm	
Weisht	49g	
Accessories: Cover、Braclcet、Screw*2、CD、Lithium Battery		

Parameter	Condition	min	typical	max	Units
Accuracy	typical		±0.3		°C
Tolerance	max		See Fig 2-1		°C
Repeatability			±0.1		°C
Response Time	τ63%	5		30	s
Operating Range	extended	-40		125	°C
Long Term Drift			<0.04		°C/yr

△T (°C)   Thermometer
Typical and maximal tolerance for temperature.
Temperature(°C)

Parameter	Condition	min	typical	max	Units
Accuracy	typical		±2		%RH
Tolerance	max		See Fig 2-2		%RH
Repeatability			±0.1		%RH
Hysteresis			±1		%RH
Nonlinearity			<0.1		%RH
Response Time	τ 63%		8		s
Operating Range	extended	0		100	%RH
Long Term Drift	normal		<0.5		%RH/yr

△RH (%RH)   The relative humidity table
Max error of RH at25°C   Relative humidity(%RH)
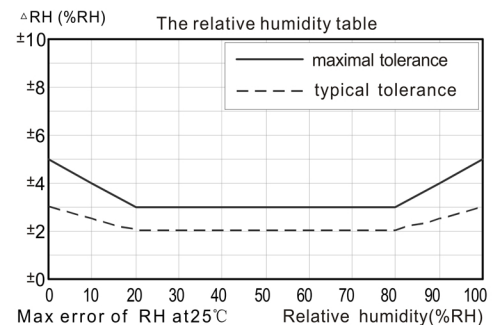
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