MIIGO
MAKE IN INDIA

ARE YOU FACING PROBLEMS WITH

Digital Thermo Hygrometer?

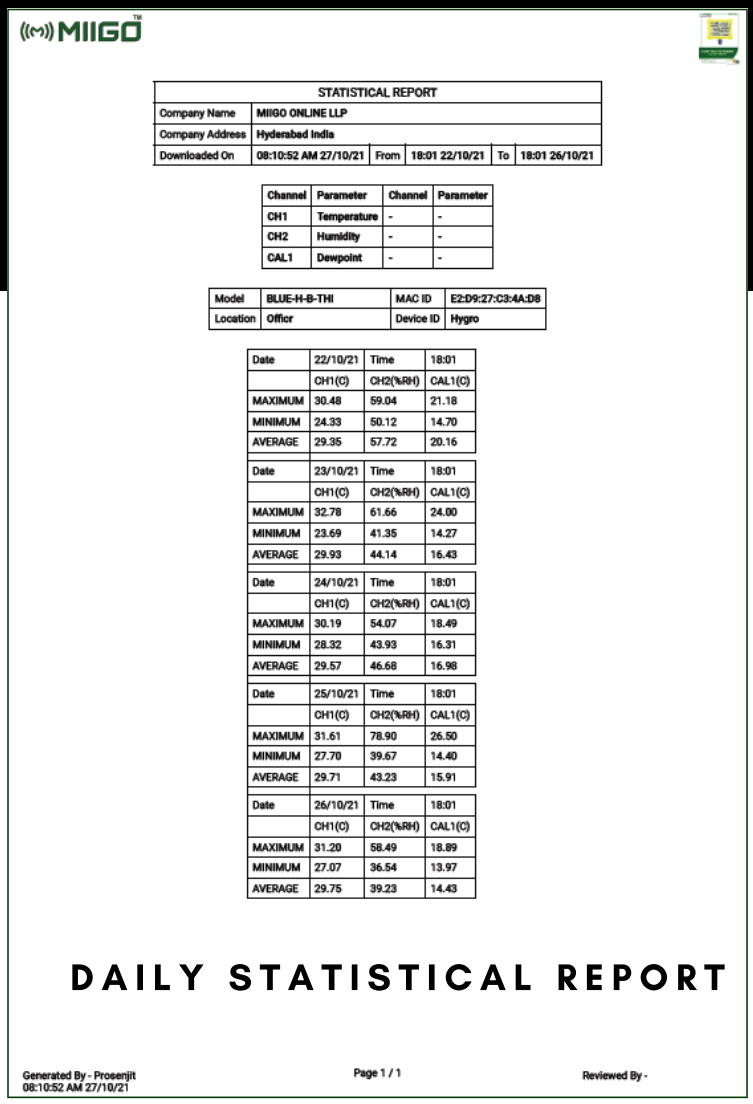
Let's END IT

Over 14+ Problems

BLUE-H-B Series can make a difference in your process

ARE YOU STILL WRITING DOWN DAILY

" MAX-MIN-AVG "



MIIGO

STATISTICAL REPORT

Company Name	MIIGO ONLINE LLP					
Company Address	Hyderabad India					
Downloaded On	08:10:52 AM 27/10/21	From	18:01 22/10/21	To	18:01 26/10/21	

Channel	Parameter	Channel	Parameter
CH1	Temperature	-	-
CH2	Humidity	-	-
CAL1	Dewpoint	-	-

Model	BLUE-H-B-THI	MAC ID	E2:D9:27:C3:4A:D8
Location	Office	Device ID	Hygro

Date	22/10/21	Time	18:01
	CH1(C)	CH2(%RH)	CAL1(C)
MAXIMUM	30.48	59.04	21.18
MINIMUM	24.33	50.12	14.70
AVERAGE	29.35	57.72	20.16

Date	23/10/21	Time	18:01
	CH1(C)	CH2(%RH)	CAL1(C)
MAXIMUM	32.78	61.66	24.00
MINIMUM	23.69	41.35	14.27
AVERAGE	29.93	44.14	16.43

Date	24/10/21	Time	18:01
	CH1(C)	CH2(%RH)	CAL1(C)
MAXIMUM	30.19	54.07	18.49
MINIMUM	28.32	43.93	16.31
AVERAGE	29.57	46.68	16.98

Date	25/10/21	Time	18:01
	CH1(C)	CH2(%RH)	CAL1(C)
MAXIMUM	31.61	78.90	26.50
MINIMUM	27.70	39.67	14.40
AVERAGE	29.71	43.23	15.91

Date	26/10/21	Time	18:01
	CH1(C)	CH2(%RH)	CAL1(C)
MAXIMUM	31.20	58.49	18.89
MINIMUM	27.07	36.54	13.97
AVERAGE	29.75	39.23	14.43

DAILY STATISTICAL REPORT

Generated By - Prosenjit
08:10:52 AM 27/10/21

Page 1 / 1

Reviewed By -

PROBLEM - 1

Writing down daily MAX-MIN-AVG from multiple units across the facility is a monotonous activity and consumes a high amount of time.

SOLUTION

BLUE-H-B Model comes with default 60 days "MAX-MIN-AVG" data memory and up to 60 alarm logs memory on a FIFO basis, which can be downloaded into .pdf / .csv format.

PROBLEM - 2

While noting down the reading manually, it is observed that the chance of manipulation on written values are always a threat to the management

SOLUTION

A direct .pdf report on statistical value from **BLUE-H-B Model** eliminates the chances of manipulation.

PROBLEM - 3

While doing the activity of writing down the MAX-MIN-AVG value, human body temperature and humidity due to the breathing process might impact the reading of the hygrometer to a certain extent (if proper procedure is not maintained).

PROBLEM - 4

Every day, mechanical pressing of the key for MAX-MIN-AVG value reduces the life of the unit and requires purchasing a new unit. Further, in a few cases, the chances of dropping off units during key press are not very remote.

NOT A PROBLEM

BUT

CAN BE A

PROBLEM

ALARM MANAGEMENT

PROBLEM - 5

MAX-MIN-AVG data won't provide how many times alarms occurred during the last 24 hours.

PROBLEM - 6

Typically for all makes of Digital Thermo Hygrometers, users can set an alarm for only one parameter out of %rh- temp - dewpoint. not all the three parameters.

PROBLEM - 7

Typically none of the manufacturers provides a "**Judgment Alarm"** facility. Due to this, users can't avoid false alarms.

.

MIIGO

ALARM SUMMARY REPORT					
Company Name	MIIGO ONLINE LLP				
Company Address	Hyderabad India				
Downloaded On	08:11:02 AM 27/10/21	From	05:23:42 AM 25/10/21	To	05:47:47 AM 27/10/21

ALARM LOGGING REPORT							
Model		BLUE-H-B-THI		MAC ID		E2:D9:27:C3:4A:D8	
Location		Office		Device ID		Hygro	
Date	Time	Channel No	Set Value	Alarm Value	Parameter	Alarm Type	Alarm Description
25/10/21	05:23:42 AM	2	52	52	Humidity	HIGH HIGH	CH2 crosses HIGH HIGH alarm set point.
25/10/21	05:27:02 AM	2	52	52	Humidity	HIGH HIGH	CH2 crosses HIGH HIGH alarm set point.
25/10/21	09:01:22 AM	2	52	52	Humidity	HIGH HIGH	CH2 crosses HIGH HIGH alarm set point.
25/10/21	09:48:42 AM	2	50	50.01	Humidity	HIGH	CH2 crosses HIGH alarm set point.
25/10/21	10:37:32 AM	CAL1	15	14.99	Temperature	LOW	CAL1 crosses LOW alarm set point.
25/10/21	11:57:53 AM	2	52	57.5	Humidity	HIGH HIGH	CH2 crosses HIGH HIGH alarm set point.
25/10/21	11:57:54 AM	2	50	57.5	Humidity	HIGH	CH2 crosses HIGH alarm set point.
25/10/21	11:57:54 AM	2	50	57.5	Humidity	HIGH	CH2 crosses HIGH alarm set point.
25/10/21	11:58:03 AM	CAL1	21	23	Temperature	HIGH HIGH	CAL1 crosses HIGH HIGH alarm set point.
25/10/21	11:59:02 AM	1	30	29.83	Temperature	LOW	CH1 crosses LOW alarm set point.
24/10/21	11:24:32 PM	2	50	50	Humidity	HIGH	CH2 crosses HIGH alarm set point.
24/10/21	11:30:52 PM	2	50	50	Humidity	HIGH	CH2 crosses HIGH alarm set point.
24/10/21	11:41:52 PM	2	50	50	Humidity	HIGH	CH2 crosses HIGH alarm set point.
24/10/21	11:46:02 PM	2	50	50	Humidity	HIGH	CH2 crosses HIGH alarm set point.
25/10/21	05:17:42 AM	2	52	52	Humidity	HIGH HIGH	CH2 crosses HIGH HIGH alarm set point.
26/10/21	04:28:17 PM	2	40	39.99	Humidity	LOW	CH2 crosses LOW alarm set point.
26/10/21	04:34:37 PM	1	30	29.99	Temperature	LOW	CH1 crosses LOW alarm set point.
26/10/21	05:22:09 PM	1	31	31.01	Temperature	HIGH	CH1 crosses HIGH alarm set point.
26/10/21	05:28:47 PM	CAL1	15	14.97	Temperature	LOW	CAL1 crosses LOW alarm set point.
26/10/21	05:51:37 PM	1	30	29.97	Temperature	LOW	CH1 crosses LOW alarm set point.
26/10/21	06:20:57 PM	2	40	39.98	Humidity	LOW	CH2 crosses LOW alarm set point.
26/10/21	06:24:17 PM	1	30	29.98	Temperature	LOW	CH1 crosses LOW alarm set point.
26/10/21	06:28:37 PM	2	40	39.95	Humidity	LOW	CH2 crosses LOW alarm set point.
26/10/21	06:44:47 PM	CAL1	15	14.98	Temperature	LOW	CAL1 crosses LOW alarm set point.
26/10/21	06:48:37 PM	CAL1	15	14.98	Temperature	LOW	CAL1 crosses LOW alarm set point.
26/10/21	07:08:57 PM	2	40	39.98	Humidity	LOW	CH2 crosses LOW alarm set point.
26/10/21	07:13:37 PM	1	30	29.99	Temperature	LOW	CH1 crosses LOW alarm set point.
27/10/21	03:21:49 AM	2	50	50	Humidity	HIGH	CH2 crosses HIGH alarm set point.
27/10/21	03:25:09 AM	2	50	50	Humidity	HIGH	CH2 crosses HIGH alarm set point.
27/10/21	05:47:47 AM	2	52	52	Humidity	HIGH HIGH	CH2 crosses HIGH HIGH alarm set point.

ALARM LOG WITH DATE& TIMESTAMP

Generated By - Prosenjit
08:11:02 AM 27/10/21

Page 1 / 1

Reviewed By -

SOLUTION WITH MIIGO

USER CAN SELECT TOGETHER ALL THE 3 PARAMETERS INCLUDING JUDGEMENT TIME

VISUAL LED ALARM

Programmable limits can be set for both %RH-Temp-Dew-point.

AUDIBLE ALARM

Programmable limits can be set for both %rh-Temp - Dew-point.

JUDGEMENT TIME - UNIQUE WITH BLUE-H SERIES

Example: Temperature sensor is inserted in a Freezer and Hi-Low limit is set as 2 to 8 °C. Now as many times the freezer door is opened either to put in or take out a sample, naturally those many times it will make the temperature rise. Which will immediately initiate an alarm. But in this scenario, if we make JUDGEMENT TIME for 2 minutes, after closing the door - Freezer will be back to its normal Temperature and it will not shoot

" FALSE ALARM "

PROPER ANALYSIS OF ALARMS REDUCES COST OF HVAC PROCESS AND ACHIEVE THE HIGHEST STABILITY

BLUE-H SERIES WITH 4 VERSIONS: ADDRESS MULTIPLE APPLICATION

BLUE-H-B-THI

BLUE-H-B-THIE

BLUE-H-B-THIT1

BLUE-H-B-THIT2

ACCURACY & RESOLUTION

A 14-bit system ensures a resolution of 0.01 for both temperature & humidity and when it comes to accuracy, it delivers

- Temperature ± 0.3 °C/± 0.54 °F
- Humidity ± 1.8% RH

External precision digital temperature sensors deliver an 11-bit system which ensures resolution of 0.01 and accuracy of ± 0.3 °C /± 0.54 °F

PROBLEM: 8
ISSUES DURING AUDIT

Many a time, before the audit, a user finds that few hygrometers are out of accuracy, which requires an immediate calibration and drifts adjustment (mostly dependent on a third party or the manufacturer), or a new purchase.

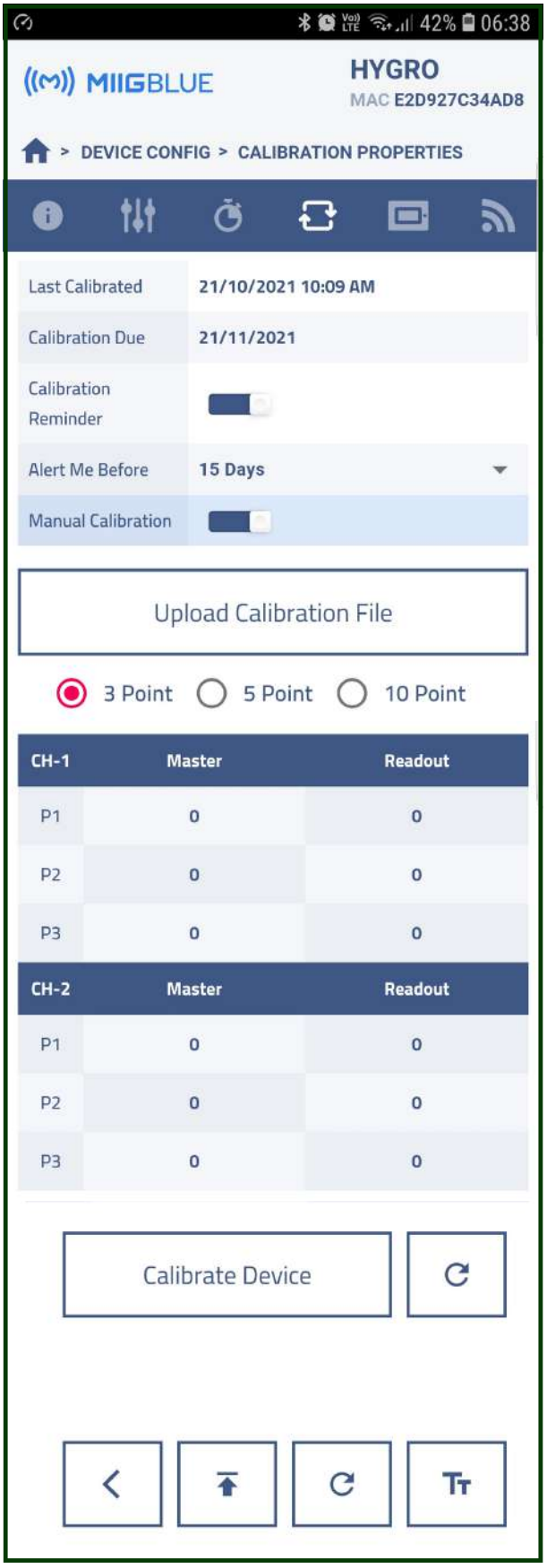
PROBLEM: 9
ROUTINE CHECKING

After a period of proper working, during a routine check, many a time user finds that the Thermo Hygrometer is showing wrong reading and after comparing with the master instruments, its found beyond accuracy limit. So it calls for a new purchase of drift adjustment.

DON'T WORRY

we offer multipoint drift adjustment and calibration features inbuilt in each instrument

MULTIPOINT DRIFT ADJUSTMENT & CALIBRATION



PROBLEM - 10

Typically, Digital Thermo Hygrometers are with large displays and due to the bigger size, hardly a few numbers of instruments come inside a humidity chamber. Further humidity temperature calibration process is time-consuming because the stability of set points takes a reasonably long time.

PROBLEM - 11

If drift is found during calibration, then the user has to discard the unit and buy a new unit. No direct options of drift adjustment are available for users on-site (applicable for most of the manufacturers).

PROBLEM - 12

While sending the units for third-party calibration, no option for the user/management to understand, whether real calibration is done or not.

SOLUTION

BLUE-H-B series Digital Thermo Hygrometers comes with

- **Extension sensor cable (optional) which can be used to take out the sensor part from the unit and same can be kept at calibrator. Thus it allows multiple units to go for calibration in a single set.**
- **While calibration, if drift is found, it can be rectified using a 3-5-10 point drift adjustment facility.**
- **Calibration points can be updated into the instrument and that date will be recorded.**
- **If the user wants, a reminder for calibration due date can be set to get calibration reminders.**

A DRIFT-FREE HIGHLY ACCURATE INSTRUMENT DELIVERS PERFECT FACILITY MONITORING

PROBLEM: 13 DUST - MOIST - POWDER

It's commonly found that various process area contains dust, moisture, powder, etc, over a period it creates a membrane over the sensor resulting in failure of the unit. Whatsoever the reason, if the sensor is not functioning, it calls for a new purchase.

NOTE -

Replacement of unit due to sensor drift or sensor damage, end of the day it calls a long and very expensive process for management, which includes BUT NOT LIMITED TO

> **U**sers to raise indent
> **A**pproval by his/her manager
> **F**inancial approval by HOD
> **I**nvolvement of purchase dept
> **I**nvolvement of store department

Last but not least, involvement of instrumentation department for testing of the new instruments received and document it to **change control.** and finally, during the audit, the user has to give an explanation for each of such entries **OF REPLACEMENT** to the auditor.

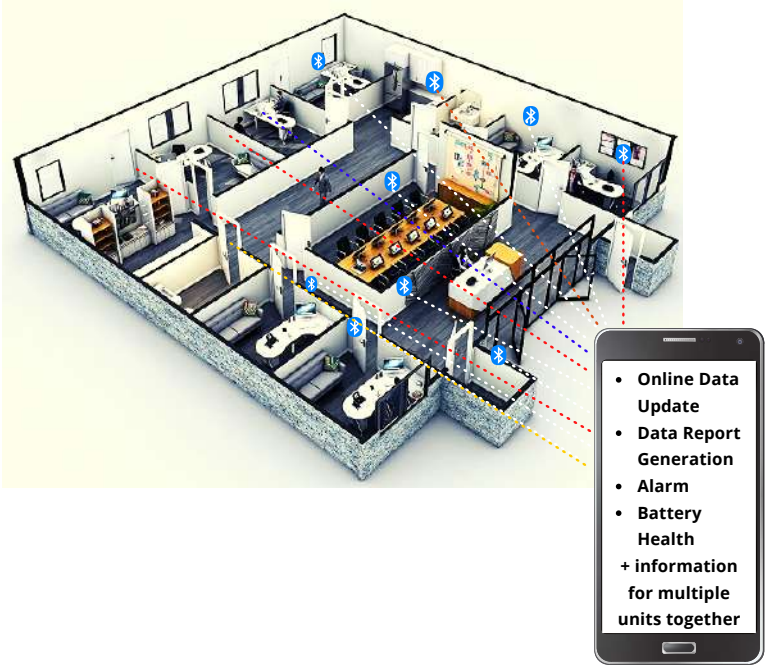
DO YOU KNOW-MIIGO OFFERS

5 YEARS MIIG-WARRANTY

FIND OUT - WHAT ELSE

WE ARE DIFFERENT

ONLINE PROCESS DATA & ALARMS MONITORING OVER MOBILE / TAB / LARGE DISPLAY



After generating the report in the mobile app, data can be transferred to the laptop, desktop, or other media via email/ Whatsapp, etc.

ONLINE DATA STREAMING ON "MIIG-WATCH"

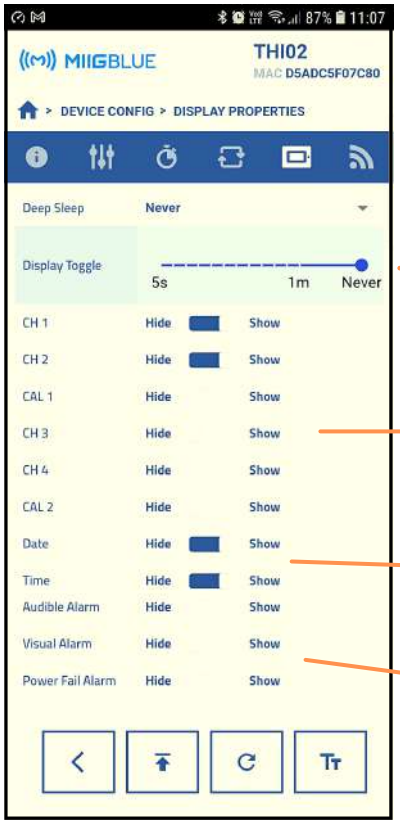
A display (2.8" - 8") unit can be used at the entrance of the facility, which will show the live data and alarms (loud buzzers) from multiple units.

DISPLAY MANAGEMENT

"PROGRAM" - WHAT YOU WANT TO SEE IN THE DISPALY

DISPLAY FOR INTERNAL SENSORS

DISPLAY FOR EXTERNAL SENSORS



AUTO SWITCHING of the display from small to big & big to small with programmable scanning time helps the user to read data from a very long distance.

SELECT WHAT YOU WANT: Users can select the desired parameters to show them in the display. applicable for 4 channels and 2 calculated channels.

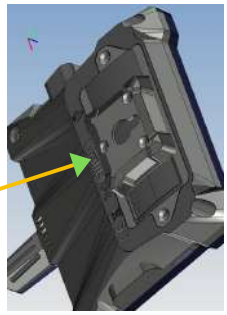
WHAT DO YOU WANT: Users can select whether to show the date and time on the screen.

HIDE/SHOW: Users can select desired alarm conditions.

MOUNTING PROBLEM + BATTERY DRAIN ISSUE

PROBLEM - 13

Mounting in a clean room with a screw is often not desirable and mounting with a double tape sticker causes problems while taken for calibration or repair.



SOLUTION

BLUE-H-B series Digital Thermo Hygrometers come with a magnetic ring for mounting on the metal surface.

PROBLEM - 14

Battery draining issue with hygrometer is very common. Especially with alarm function, the unit consumes more battery. In addition to that, the BLUE-H-B unit can also send online live data (value + alarm notification). which means, more consumption of batteries.

SOLUTION

BLUE-H-B series Digital Thermo Hygrometers come with a charging port and customers may opt for a Power adaptor for continuous operation. Once the main power is off, it will switch to battery and once the power is back, it will switch to main power.

WHAT IS UPCOMING WITH BLUE-H SERIES

MIIG-DOCK

Can collect data from various Blue-H series instruments via BLE function and all data can be dumped into PC Software for report

MIIG-WATCH

2.4" - 8" display screen with a loud buzzer that can show current reading and alarms from about 10 units or 40 channels. Optional relay for the hard hooter.

MIIG-GATE

Units can be connected to various types of gateways (WiFi-RS485/ Ethernet / GSM-GPRS) to extend the monitoring range from a 1 room small facility to monitor a multi-floor building or even multiple locations across the globe.

LOCAL-HOST/ PC BASED SOFTWARE OR CLOUD-HOST SOFTWARE

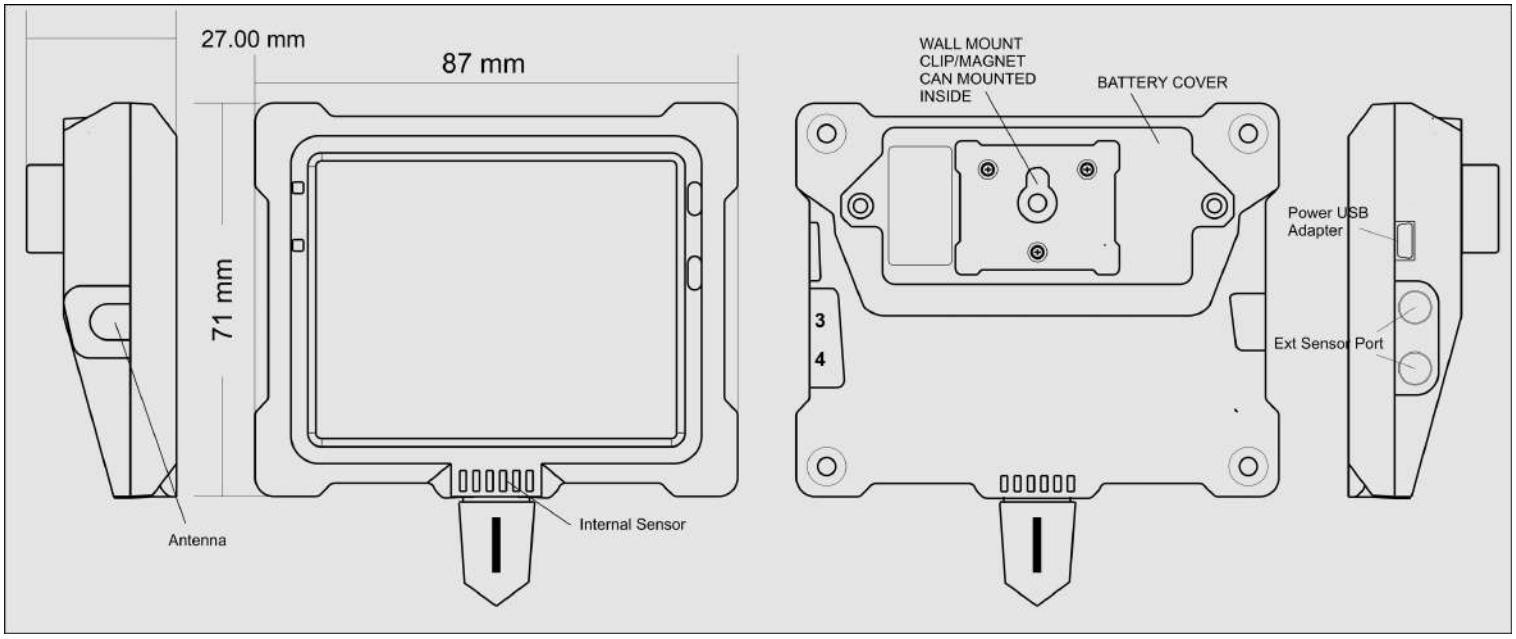
Users can select the Standard version / Professional Version or 21CFR Part II compliant Version software based on the application and legal requirement.

GENERAL SPECIFICATIONS FOR BLUE-H-B SERIES

Unit dimension In mm:	**71(H) X 87(W) X 27 (D)**
Display dimension In mm:	51(H) X 66 (W)
Display Type:	**High-Quality Large Clear LCD Display**
MOC:	ABS Plastic
Mounting:	**Wall Mount**
Battery specification :	Alkaline / Lithium: AAA Type 1.5 VDC (2 nos) or 1/2 AA 3.6VDC (1 no) [pre-ordered]
Battery life with internal sensor (at 25°C) :	**Typically 12 months**
Battery life with internal & external sensor:	Typically 9 months
Working temperature :	**0 to 60 °C/32 to 140°F**
Storage temperature:	-20 to 60 °C/-4 to 140°F
5 VDC port to run the unit via main power:	**Yes (adaptor to be purchased extra)**
External sensor input port:	2 nos 3.5mm jack pin port
External antenna input port:	**1 no**
Magnetic ring (screwless mounting) :	Optional
Memory:	**60 days Max-Min-Avg and 60 nos alarm log, both on FIFO method**
Certification (BLUE-H-B SERIES) :	CE, RoHS, GMP (Pending)
IP protection :	**Equivalent to IP52**

Note -

1. Battery life is with 15 min login using Lithium 1/2 AA 3.6 VDC (Low power mode).
2. Recommended selecting 1/2 AA 3.6VDC for 3 or 4 channel applications.



FEW APPLICATIONS

WAREHOUSE

PHARMACEUTICAL

COLD STORAGE

CLEAN ROOMS

SUPER MARKET

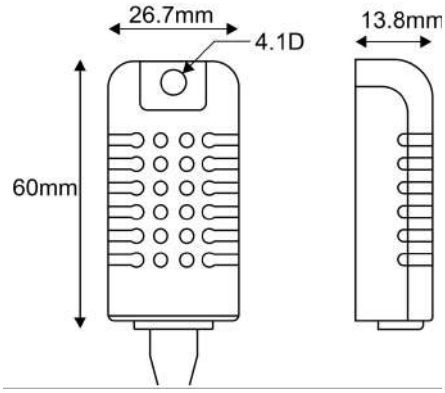
FOOD MFG

SERVER ROOM MONITORING

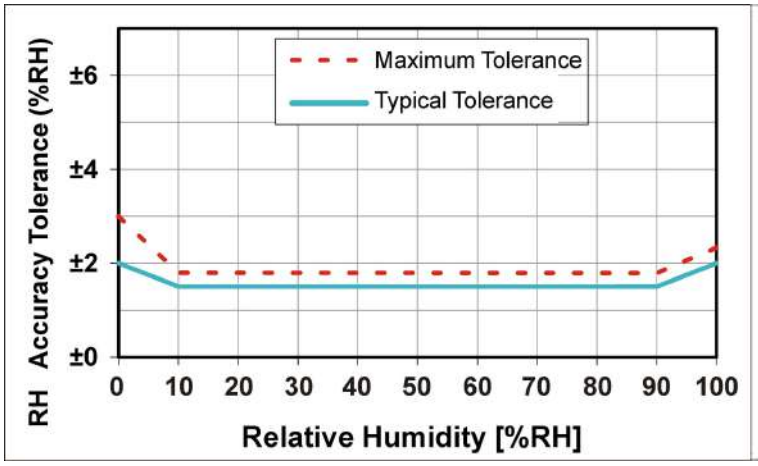
AUTOMOBILE

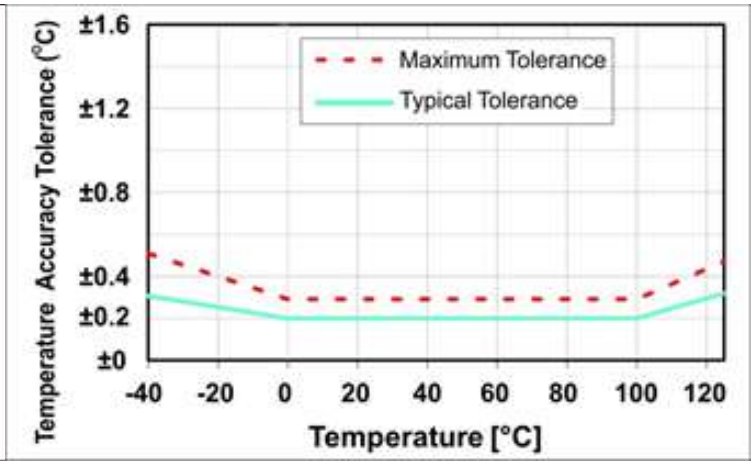
TECHNICAL SPECIFICATION FOR INTERNAL & EXTERNAL TEMPERATURE HUMIDITY SENSORS

Sensor type:	**Capacitance Type Digital Sensor**
Humidity range :	0 to 100 % RH
Typical humidity accuracy @ 25° C :	**± 1.8 % rH (10 to 90 % RH), beyond refer graph**
Humidity resolution :	14-bit, 0.01
Response time:	**Typically 8 sec (T63)**
Long term stability :	± 0.25% RH (typical) / year
Temperature sensor type:	**High Precision Digital Temperature Sensor**
Temperature range:	Internal sensor: 0 to 60 °C, 32 to 140°F External Sensor -30 to 70°C, -22 to 158°F
Temperature accuracy:	**Internal sensor: ± 0.3 °C/± 0.54 °F** **External Sensor ± 0.3°C/± 0.54°F**
Temperature resolution:	14-bit, 0.01
Response time:	**Typically 8 sec (T63)**
Long Term stability:	± 0.1°C °C/± 32.18°F(typical) / year
Calculated dew-point range	**- 40 to +70 °Ctd / -40 to 158 °F**
Dew-point resolution :	0.01



NOTE: External temperature humidity sensor comes with a fixed 1-meter cable length and can be connected to the unit using a 3.5mm jack pin.



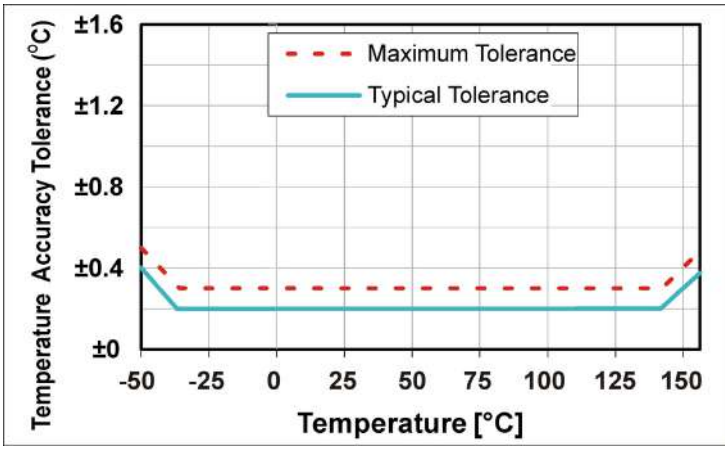


TECHNICAL SPECIFICATION FOR EXTERNAL TEMPERATURE SENSORS

DESCRIPTION	
Connected via :	**(4 pins) 3.5mm Jack pin**
Temperature sensor type :	Digital Sensor
Temperature range :	**- 40 to 150 °C / - 40 to 302°F**
Temperature accuracy :	± 0.3 °C / ± 0.54°F
Temperature resolution :	**14-bit, 0.01 / 0.1**
Temperature long term stability / year :	< ± 0.2°C / ± 0.36°F
Cable length :	**1/2/3/4/5 meter**
Cable MOC :	Silicon
Cable dia :	**3 mm**
Cable temperature limit :	- 50 to 160 °C / -58 to 320°F
Storage temperature :	**- 20 to 60°C / - 4 to 140°F**
Stem dia :	6.5mm
Stem length :	**50/100/200----1000 mm**

BLUE-H SERIES CAN MONITOR ROOM TEMPERATURE-HUMIDITY WITH THE HELP OF INTERNAL SENSORS AND AT THE SAME TIME FREEZER AND DEEP FREEZER MONITORING WITH THE HELP OF EXTERNAL TEMPERATURE SENSORS.

NOTE - On request, the sensor can be made as per requirement from the customer, like the length of cable (max 5 meter), stem length.



MODEL SELECTION GUIDE : BLUE-H-B-X1-X2-X3

Bluetooth Enabled Programmable Digital Thermo Hygrometer with Statistical Memory of daily MAX-MIN-AVG for up to 60 days and up to 60 alarm logs with FIFO method

X1

THI - 2 channel with an internal Temp-%rH sensor
THIE - 4 channel with an internal Temp-%rH sensor and an external Temp-%rH sensor with 1-meter cable
THIT1 - 3 channel with an internal 1-meter cable and 1 no external temperature sensor having 3 meters cable
THIT2 - 4 channel with an internal Temp-%rH sensor and 2 nos external temperature sensors having 3 meters cable each

X2

B1 - AAA type 1.5 VDC battery 2 nos
B2 - 1/2 AA type 3.6VDC battery 1no (recommended for 3/4 channel application)

X3

NM - No Magnetic Ring
WM - With Magnetic Ring (Part Code - MI-MGRING)

ACCESSORIES LIST

BATTERY OPTIONS

1.5 V AAA type battery

PART CODE - BAT-AAA-1.5V

3.6V 1/2 type battery

PART CODE - BAT-1/2AA-3.6V

POWER ADAPTER

5 VDC , 0.5 amp Power Adapter for continuous operation with USB cable

PART CODE – MI-ADOP

MAGNETIC MOUNTING

This helps screw-less mounting. Otherwise general mounting type available by default.

PART CODE – MI-MGRING

EXTERNAL TEMPERATURE SENSOR

Sensor assembly for external Temperature sensor with 3 meters cable, Stem dia 6.5mm, stem length - 50mm

PART CODE – MI-DTC-3-6.5-50

Cable length: 1 meter to 5 meter option
Stem Length: 50 mm to 1000 mm option

EXTERNAL TEMPERATURE HUMIDITY SENSOR

External Temperature Humidity sensor assembly with 1 meter cable

FEW APPLICATIONS

CRO

BLOOD BANK

PHARMACY

HOSPITAL

MUSEUM

GREEN HOUSE

ELECTRONIC MFG

TOBACO MFG

SPINNING MILL

PAPER MILL

CONTROL ROOM

MANY MORE ....

WANT TO UPGRADE?

GO FOR **BLUE-H-A** SERIES

ONLINE + OFFLINE DATA LOGGER

MIIGO ONLINE LLP
1-95/35/A, Saraswati Nagar, Uppal, Hyderabad, Telangana, India, Asia.
PIN – 500039.
(Landmark: Krishna Hospital Lane)

+91-9398693085 info@miigo.online +91-9398693085 www.miigo.online