Tenmars TM-188B

Heat Stress WBGT Meter with Data Logger and Bluetooth Function

SKU: TENTM188BWH
Manufacture Warranty period: 12 months
Country of Origin: Taiwan

Application

The HEAT STRESS WBGT METER is quick-response with accurate measurement for the effects of temperature, humidity, and direct or radiant sunlight.

Featuring automatic data recording and BLE wireless transmission, it can monitor and transmit data in real time to smartphones or tablets via a dedicaed app, for in-depth analysis and advanced applications. It is ideal for environments where real-time monitoring is essential, such as sports training facilities, outdoor event venues and high-temperature workplaces. The system supports faster, more convenient heat hazard monitoring and provides early warning capabilities.

In order to measure the WBGT index, you should refer to the following regulations:
ISO7243 : Hot environments. Estimation of the heat stress on working man.
ISO7726 : Ergonomics of the thermal environment-instruments for measuring physical quantities.

BLE. Connection & App Function Tutorial

Please search for "WBGT TM" in the APP Store (iOS) or Google Play Store (Andriod) to download and install the application.

Android

(Andriod supports version 8.0 and above)

iOS

(iOS supports version 14.0 and above)

Short video from YouTube for **How to Use the APP.**
https://www.youtube.com/watch?v=C5MgFq4fGzw

Features

- High-sensitivity, fast-response capacitive humidity sensor
- Wet bulb globe temperature (WBGT), Black globe temperature (TG), Air temperature (TA), Relative humidity (%RH), Dew point temperature (DEW), Wet bulb temperature (WET).
- Max/Min/Ave readings and Data Hold function (HOLD)
- Low battery indicator
- LCD digital display with LED backlight
- Manual data recording (up to 50 entries) and reading
- Selectable temperature units: °C or °F
- 50 mm diameter black globe made of brass
- WBGT alarm setting
- Alarm buzzer on/off
- Auto power-off function and option to disable auto power-off
- BLE. connection for real-time heat environment monitoring
- USB interface for computer connection
- Data memory capacity up to 12,000 entries
- Sampling interval: maximum 24 hours, minimum 1 second

Specifications

Wet Bulb Globe Temperature (WBGT) Indoor & Outdoor without sunlight: WBGT = (0.7×WET) + (0.3×TG)	
Range:	0~59.0℃
Resolution:	0.1℃
Accuracy @15~50℃:	±1.0℃

Wet Bulb Globe Temperature (WBGT) Outdoor with sunlight: WBGT = (0.7×WET) + (0.2×TG) + (0.1×TA)	
Range:	0~56.0℃
Resolution:	0.1℃
Accuracy @15~50℃:	±1.5℃

Air Temperature (TA)	
Range:	10~60.0°C
Resolution:	0.1°C
Accuracy @15~50℃:	±0.8°C

Black Globe Temperature (TG)	
Range:	20~80.0℃
Resolution:	0.1℃
Accuracy @15~60℃:	±0.6℃

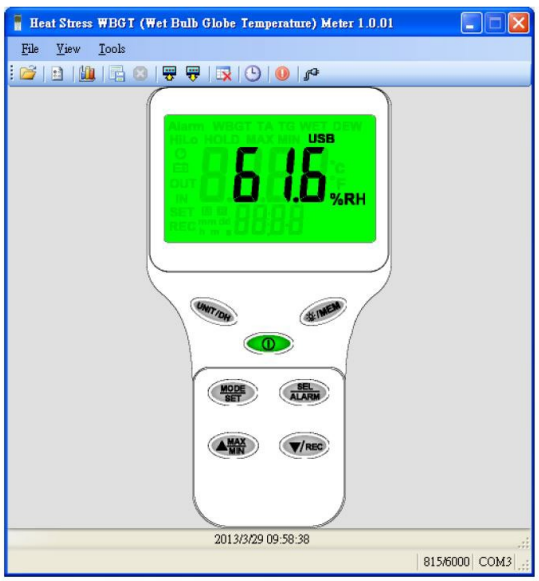
Relative Humidity (%RH)	
Range:	1%~99%RH
Resolution:	0.1%RH
Accuracy:	±3.0%RH (20~80%) @25°C
	±5.0%RH (<20, >80%) @25°C

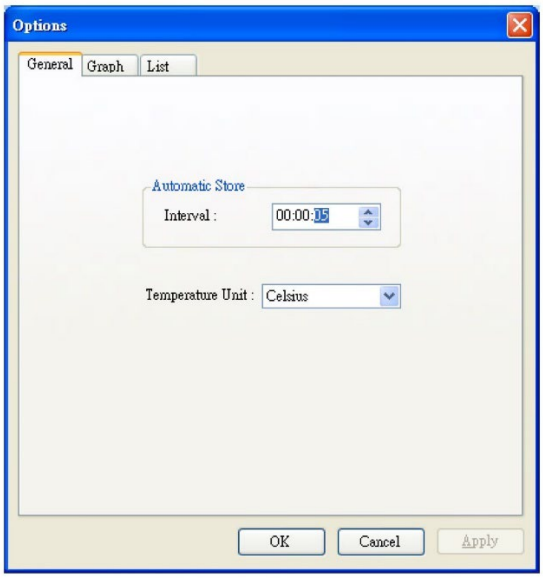
Dew Point Temperature (DEW) The value is calculated from the RH and Air Temperature	
Range:	-35.3~48.9°C
Resolution:	0.1°C

Wet Bulb Temperature (WET) The value is calculated from the RH and Air Temperature	
Range:	-21.6~50.0°C
Resolution:	0.1°C

Data memory	12,000 entries
Data Output	USB PC serial interface
Power Supply	9V Battery or
	AC100~240V DC 9V/0.5A
LCD Display	52mm(W)x36mm(L) monochrome LCD and backlight.
Dimension	243 x 70 x 50mm
Weight	220 grams (without battery)

Package includes
1 x TM-188B Meter
1 x User Manual
1 x USB Cable
1 x 9V Battery
1 x Hard Carrying case





188-130308_1.csv

Graph

*...	Date/Time	WBGT In	WBGT Out	TA	TG	WET	DEW	Humidity
1	2013/3/8 15:12:05	21.8 ℃	21.5 ℃	27.6 ℃	30.5 ℃	18.0 ℃	9.8 ℃	32.8 %
2	2013/3/8 15:12:17	21.9 ℃	21.5 ℃	27.4 ℃	31.1 ℃	17.9 ℃	9.5 ℃	32.6 %
3	2013/3/8 15:12:29	22.2 ℃	21.8 ℃	27.8 ℃	31.9 ℃	18.1 ℃	9.5 ℃	31.9 %
4	2013/3/8 15:12:39	22.5 ℃	22.1 ℃	28.1 ℃	32.7 ℃	18.2 ℃	9.6 ℃	31.4 %
5	2013/3/8 15:12:49	22.9 ℃	22.4 ℃	28.4 ℃	33.4 ℃	18.4 ℃	9.7 ℃	31.2 %
6	2013/3/8 15:12:59	22.9 ℃	22.4 ℃	28.3 ℃	33.9 ℃	18.2 ℃	9.3 ℃	30.5 %
7	2013/3/8 15:13:08	23.2 ℃	22.7 ℃	28.5 ℃	34.3 ℃	18.5 ℃	9.9 ℃	31.4 %
8	2013/3/8 15:13:20	23.4 ℃	22.8 ℃	28.7 ℃	34.9 ℃	18.5 ℃	9.5 ℃	30.1 %
9	2013/3/8 15:13:30	23.5 ℃	22.8 ℃	28.6 ℃	35.4 ℃	18.4 ℃	9.3 ℃	29.9 %
10	2013/3/8 15:13:40	23.7 ℃	23.0 ℃	28.8 ℃	35.8 ℃	18.5 ℃	9.4 ℃	29.9 %
11	2013/3/8 15:13:50	23.9 ℃	23.2 ℃	29.0 ℃	36.3 ℃	18.6 ℃	9.4 ℃	29.4 %
12	2013/3/8 15:13:59	24.0 ℃	23.3 ℃	29.0 ℃	36.7 ℃	18.6 ℃	9.4 ℃	29.5 %
13	2013/3/8 15:14:11	24.3 ℃	23.5 ℃	29.4 ℃	37.2 ℃	18.8 ℃	9.5 ℃	29.0 %
14	2013/3/8 15:14:21	24.5 ℃	23.7 ℃	29.6 ℃	37.5 ℃	18.9 ℃	9.4 ℃	28.5 %
15	2013/3/8 15:14:31	24.6 ℃	23.8 ℃	29.8 ℃	37.8 ℃	19.0 ℃	9.6 ℃	28.5 %
16	2013/3/8 15:14:40	24.8 ℃	24.0 ℃	30.0 ℃	38.1 ℃	19.1 ℃	9.7 ℃	28.3 %
17	2013/3/8 15:14:52	24.8 ℃	24.0 ℃	29.8 ℃	38.2 ℃	19.1 ℃	9.8 ℃	28.9 %
18	2013/3/8 15:15:02	24.6 ℃	23.7 ℃	29.3 ℃	38.2 ℃	18.8 ℃	9.6 ℃	29.3 %
19	2013/3/8 15:15:12	24.4 ℃	23.5 ℃	28.9 ℃	38.1 ℃	18.6 ℃	9.6 ℃	30.0 %
20	2013/3/8 15:15:22	24.4 ℃	23.4 ℃	28.6 ℃	38.0 ℃	18.5 ℃	9.8 ℃	30.9 %
21	2013/3/8 15:15:31	24.0 ℃	23.1 ℃	28.0 ℃	37.7 ℃	18.2 ℃	9.7 ℃	31.8 %
22	2013/3/8 15:15:43	24.0 ℃	23.0 ℃	27.9 ℃	37.4 ℃	18.2 ℃	9.7 ℃	32.1 %