HEAT STRESS WBGT METER

- Quick-response capacitance sensor, accurate measurement for wet bulb globe temperature (WBGT), black globe temperature (TG), humidity (%RH), air temperature (TA), wet bulb (WET) and dew point(DEW)
- Max/Min and data hold
- Low battery indication
- LCD display with LED backlight
- Recall recorded data
- Switch the temperature unit to °C or °F
- Brass black ball in 50mm diameter
- WBGT alarm setting
- Auto power off with disable function
- Data logging capacity : 12000 records, USB PC serial interface (WBGT-188D)
- Sampling interval : Max 24 hours; Min 1 Second (WBGT-188D)

APPLICATION

The WBGT 188 and 188D is capable of quick response and accurate measurements of the effects of temperature, humidity and direct or radiant sunlight.

This instrument is ideal for athletic trainers, military, occupational (Industrial) hygienists, outdoor worker and sports medicine specialists; and it is designed according to the regulations mentioned below.

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.

OSHA : Occupational Safety and Health Administration.

JISHA : Japan Industrial Safety and Health Association.

SPECIFICATION

Wet Bulb Globe Temperature (WBGT)

Unit		Range	Resolution	Accuracy@15~40°C
Indoor & outdoor without sunlight	°C	0°C ~ 59.0°C	0.1°C	±1.0°C
	°F	32.0°F ~ 138.0°F	0.1°F	±1.8°F
Outdoor with sunlight	°C	0°C ~ 56.0°C	0.1°C	±1.5°C
	°F	32.0°F ~ 132.0°F	0.1°F	±2.7°F

*Indoor & outdoor without sunlight : WBGT = (0.7xWET) + (0.3xTG)

Outdoor with sunlight : WBGT = (0.7xWET) + (0.2xTG) + (0.1xTA)

*Technical Specifications & Appearance are subjet to change without prior notice

Air Temperature (TA)

Unit	Range	Resolution	Accuracy@15~40°C
°C	0°C ~ 50.0°C	0.1°C	±0.8°C
°F	31°F ~ 122.0°F	0.1°F	±1.5°F

Black Globe Temperature (TG)

Unit	Range	Resolution	Accuracy@15~40°C
°C	0°C ~ 80.0°C	0.1°C	±0.6°C
°F	32°F ~ 176.0°F	0.1°F	±1.1°F

Relative Humidity (%RH)

Range	1%-99%
Accuracy	±3.0%RH (20% ~ 80%)
	±5.0%RH (<20%, >80%)
Resolution	0.1%
Response time	<4 sec

Dew point temperature (DEW)

Unit	Range	Resolution
°C	-35.3°C ~ 48.9°C	0.1°C
°F	-31.5°F ~ 120.1°F	0.1°F

The value is calculated from the RH and air temp

Wet Bulb Temperature (WET)

Unit	Range	Resolution
°C	-21.6°C~50.0°C	0.1°C
°F	-6.9°F~122.0°F	0.1°F

The value is calculated from the RH and air temp

GENERAL SPECIFICATIONS

Dimension : 300 x 70 x 50mm (L x W x H)
Weight : 220g. (Without batteries).
Power Supply : 006P 9V,or AC100~240V DC 9V/ 0.5A(9mm).
Battery Life : 200 hours.
Operating Temperature & Humidity : 0°C to +50°C.
Storage Temperature & Humidity : -10°C to +50°C .
Data Output : USB PC serial interface,12000 records (TM-188D)
LCD : 52(W)x36(L)mm monochrome LCD and backlight
Standard Accessories : 006P 9V battery, User's manual, Carrying Case

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