

Heat Stroke Prevention Meter



Taiwan Patent Pending

Handheld type WBGT meter 8758/8778

- ▲ SIMULTANEOUSLY DISPLAY TEMPERATURE AND HUMIDITY
- ▲ EASY-TO-READ BIG LCD DISPLAY
- ▲ CHECK DANGEROUS HEAT CONDITIONS THROUGH WBGT
- ▲ PROGRAMABLE DANGER ZONE FOR WARNING PURPOSE
- ▲ DESIGN WITH CAPACITANCE TYPE RH SENSOR TO GET ACCURATE AND QUICK READING
- ▲ CLEAR SHEATH TO PROTECT HUMIDITY SENSOR
- ▲ TEMPERATURE UNIT °C/°F SELECTABLE
- ▲ HOLD FUNCTION TO FREEZE CURRENT READING
- ▲ BATTERY LOW INDICATOR
- ▲ SLEEP MODE CAN BE DISABLED
- ▲ TRIPOD RECEPTACLE DESIGN FOR LONG TIME USE
- ▲ AUDIBLE BEEPER FOR DANGER ZONE WARNING
- ▲ BUILT-IN RS232 INTERFACE FOR PC DOWNLOAD
- ▲ HUMIDITY SELF-CALIBRATION VIA SALT BOTTLES KIT

Model	8758	8778
Temp. range	0~50°C	
Temp. resolution	0.1°C/°F	
Temp. accuracy	+/-0.6°C	
Humidity. range	0%~100%RH	
Humidity resolution	0.1%RH	
Humidity accuracy	+/-3%RH (at 25°C, 10~90%RH, others +/-5%RH)	
Globe Temp.(inside black ball)	0~80°C	
Globe Temp. Acc.	Indoor: +/-2 °C(at 15~40°C),others2. 5 °C outdoor: +/-3 °C(at 15~40°C),others3. 5 °C	+/-1 °C(at 15~40°C),others1. 5 °C +/-1.5 °C(at 15~40°C),others 2 °C
WBGT temp. range	0~50°C	
Black ball size(mm)	Dia. 40, height:35	Dia. 75, height:75
Stabilization time	15 ~25 minutes typical	
RH% Self calibration	YES	
Battery life	>250hour	
LCD size (mm)	28(H)x33(W)	
Operation temp.	0~50°C	
Operation RH%	Humidity < 80%	
Storage temp.	-20~50°C	
Storage RH%	Humidity < 90%	
Dimension(mm)	254x48.7x30.9(H)	278.2x75x75(H)
Weight	~120g	~140g
Battery	AAA x2pcs	
Standard Package	Meter/Battery/Manual/Paper box	
Optional	Software Kit /RH calibration kit	

What is WBGT?

The Wet Bulb Globe Temp. (WBGT) is a composite temperature used to estimate the effect of temperature, humidity, wind speed and solar radiation on humans. It is used by industrial hygienists, athletes, and the military to determine appropriate exposure levels to high temperatures.

WBGT Formula

Formula:(Reference)
Indoors / Outdoors and no sun
 $WBGT = 0.7 \times WB + 0.3 \times TG$
Outdoors and full sun
 $WBGT = 0.7 \times WB + 0.2 \times TG + 0.1 \times TA$

WBGT & Physical exercise

WBGT	Flag	Activity Intensity
< 80°F < 26.7°C	White	Normal activity. Caution should be taken.
80-84.9°F 26.7-29.4°C	Green	Discretion is required in planning intense physical activity.
85-87.9°F 29.4-31°C	Yellow	Intense activity for new and unacclimatized persons should be curtailed.
88-89.9°F 31-32.2°C	Red	Intense exercise must be curtailed for those with less than 12 weeks training in hot weather. Be on high alert
> 90°F > 32.2°C	Black	Cancel all outdoor exercise.

Source: Manual of Naval Preventive Medicine (NAVMED P-5010)

Optional



CAL. SALT BOTTLE
 P/N: VZHR33AZ (33%)
 P/N: VZHR75AZ (75%)
 FOR 8758/8778 CAL. PURPOSE.



RS232 cable & software
 P/N: VZRS232BN
 USB cable & software
 P/N: VZUSBAZM