



Cat.No.8311-00

WBGT Heat Stress Monitor Model SK-160GT

Model

SK-160GT



This is a Wall-mount/desk-top type instrument that indicates the indoor WBGT Index a guideline with four warning levels and measures temperature and humidity. When the value exceeds the set WBGT index, buzzer sounds and LED lights. Atomic clock is equi

Features

This instrument is indoor use only.

The wet bulb globe temperature (WBGT) index integrates the three factors of air temperature, humidity and radiation heat, each of which greatly affects the heat balance of the human body. The index is normally obtained using the dry, wet and black bulb temperature measurement values.

Measurement of wet or black bulb temperature requires considerable expertise, and the equipment handling and location are limited.

The unit calculates the WBGT index by using the measured temperature and humidity, in accordance with the "Guidelines to prevent heat disorder in daily life" of the Japanese Society of Biometeorology.

The WBGT index is low when the air temperature and humidity are low, while it is high when the air temperature and humidity are high.

The risk of heatstroke increases with the WBGT index. Thus, the determined WBGT index can be used as a guideline for preventing heatstroke.

Source: "Guidelines to prevent heat disorder in daily life" of the Japanese Society of Biometeorology

[Guideline for preventing heatstroke in daily life]

WBGT Index	Risk of occurrence in relation to physical activity	Remarks
Danger (31°C or higher)	Risk during any physical activity	Risk of occurrence is high in the elderly, even in the resting state. Avoid going out and stay in a cool room
Severe warning (28 to 31°C)		Avoid direct sunlight outdoors and watch for any rise in room temperature indoors
Warning (25 to 28°C)	Risk during moderate to vigorous physical activity	Regularly take adequate rest when exercising or doing vigorous work.
Caution (25°C or lower)	Risk during very vigorous physical	Basically low in risk, but high in risk when doing vigorous exercise or heavy labor

Specifications

Product	WBGT Heat Stress Monitor	
Cat. No.	8311-00	
Model	SK-160GT	
Measuring range	WBGT Index	0 to 50 °C (calculated)
	Temperature	0.0 to 50.0°C
	Humidity	20.0 to 95.0%rh
Accuracy	Temperature	±1.0°C (10 to 40°C) ±1.5°C (at other range)
	Humidity	±5%rh (40 to 70%rh at 20 to 30°C) ±8%rh (at other range)
Resolution	WBGT Index	1°C
	Temperature	0.1°C
	Humidity	0.1%rh
Sampling	approx. 30 sec.	
sensing elements	Temperature	Thermistor
	Humidity	High polymer resistance change type
Alarm setting range	Available to set by 1°C step in the range of WBGT Index (0 to 50°C)	
Clock	Atomic clock (40kHz/60kHz Automatic reception) 12/24 hours display	
Clock accuracy	±1 sec.: when the time calculation signals is receiving	
	±45 sec. per month: without the time calculation signals	

Operation ambient	0 to 50°C,less than 95%rh (no condensing)
Storage ambient	0 to 50°C (no condensing)
Power requirement	AA size battery x 3 pcs. (4.5V)
Battery life	Approx. one year (use of alkali batteries, alarm is used once a day, without manual reception of clock)
Materials (body)	ABS resin, acryl resin
Dimensions	approx. (W)225 x (H)165 x (D)25mm
Weight	approx. 500g (includes batteries)
Accessories	AA manganese battery (R6P) 3 pcs. For monitoring purpose Instruction manual

The attached batteries are used for monitoring and the battery life may be shorter than standard.