

# Visual: S E N S I N G

## Visual Heat



### Heatstroke risk

Heatstroke is the most serious heat-related illness. It occurs because the body cannot lose heat rapidly enough in conditions of extreme heat, and may cause serious injuries in the body, even the death. All this is preventable through the monitoring of temperature and humidity controlled by the right algorithms.



### Nihon Kasetzu's Visual Sensing

Visual Heat displays the WBGT (Wet-Bulb Globe Temperature) index related with human perception of heat, also known as apparent temperature.

WBGT was developed as a monitoring basis at US military training camps and became widespread for the use in workplaces and sports situations. It is suggested in an international standard ISO 7243 and many governments such as OSHA (US Occupational Safety & Health Administration), SMA (Sports Medicine Australia) and Japan Society for Occupational Health in establishing the permissible heat exposure limits in occupational health, sports or other physical activities. The Visual Heat indications can be applied in construction, iron and steel foundries, brick-firing plants, glass facilities, boiler rooms, mining sites, army training, marathon, beach activities and many others.

### Risks coming from heat?



Common heat-related emergencies are: heat cramps, heat exhaustion or heat stroke, at the most dangerous level. Risks increase with the increment of physical effort the task demands.

Visual Heat calculates WBGT using a complex and highly accurate algorithm. Knowing and understanding these Visual Heat threshold levels can prevent serious heat-illness.

**Visual Heat signals can be placed in strategic locations to communicate hazardous conditions to people so that work or outdoor activity can be accordingly.**

## Technical specifications



CONNECTION		
Power	0,7	W
Voltage	24	VDC*
Range	± 10 %	
Current	30	mA
*100-240 VAC adapter included		
MOUNTING		
Ambient	Indoor/ Outdoor	
Position	Vertical	
Protection Index	IP54	
Size	375 x Ø94	mm
Weight	0,6	Kg
OPERATION RANGES		
Temperature	-30 ÷ 80	°C
Humidity	0 ÷ 90	% relative humidity
Pressure	300 ÷ 1100	hPa
SENSOR SPECIFICATIONS		CONDITION
Temperature	Resolution	0,1 °C
	Accuracy	± 1 °C
Humidity	Response time	1 sec
	Accuracy tolerance	± 3 %
Pressure	Hysteresis	± 1 %
	RMS noise	0.2 Pa
WBGT	Offset temp coefficient	± 1.5 Pa/K, ± 12.6 cm at 1°C change
	15-40 °C	± 2 °C
Others		± 3 °C
		1 min
CAUTIONS		
Warm up time	-	1 min

## Apps for mobile devices



**Collect recorded values from Visual devices in a near area**

The Visual APP shows collected data in a graphic mode and allows to export the data via email (csv) for further analysis.



**Quick set-up to show the real time value of a selected device in a wide-screen view**

Visual Display is a simple interface straightforward to show the instantaneous value to any user present in the area.



\* Both Apps can be used simultaneously with the same device, or with a group of devices.

Available on iOS and Android.

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**Visual**  
SENSING



**Understand the environment  
making measuring easy**