

# Air temperature

Technical features - MODELS



## Air temperature sensor (Pt100 output)

Pt100 Air temperature sensor for indoor use and, coupled with a radiant screen, for meteorological applications. A 4-wire, Pt100 1/3 DIN B sensing element guarantees very good accuracy over an extended temperature range. This sensor is ideal for virtually any kind of environmental application.

### Order numb.

Connector

Data logger compatibility

### DMA033

Free wires (4-wire)

M-Log (ELO007-008)  
R-Log (ELR515)  
E/X-Log (all models)

### EST033

Mini-Din connector

M-Log (ELO009)  
R-Log (ELR510)

### Common features

Temperature	<i>Principle</i>	Pt100 1/3 DIN B (Class AA)
	<i>Measuring range</i>	-50÷70°C
	<i>Accuracy</i>	0,10°C (@0°C)
	<i>Output</i>	Pt100 DIN-IEC 751 table (EN 60751)
	<i>Resolution</i>	0,01°C (M/R/ELog)
	<i>Response time (T90 air)</i>	30 sec. without protective filter, 6 min. with protective filter
General information	<i>Protection type</i>	IP54
	<i>Power consumption</i>	None
	<i>Operative temperature</i>	-40÷80°C
	<i>Cable</i>	L = 5 m
	<i>Input type on X/E/M/R-Log</i>	Analog

### Accessories

### Order numb.



**DYA230** Multi plate natural ventilation radiant screen



**DYA233** Multi plate natural ventilation radiant screen for DYA046 arm



**DYA231** Multi plate forced ventilation radiant screen.  
12 Vdc power supply

**DYA232** Multi plate forced ventilation radiant screen.  
24 Vac power supply

**DYA049** Mast-mounting device for ø 45-65 mm pipe

**DZC101.S** ISO9000 type calibration certificate

**CSIT.T.10** ACCREDIA type calibration certificate

# Surface temperature

Technical features - MODELS



## Contact temperature sensor (Pt100 output)

Plate-made sensor for surface temperature measurements. Its compact dimensions facilitate installation even in small spaces. It can be easily fixed using sylicon, adhesive band or thermoconductive paste.

Order numb.	DLE124 (1)	DLE125 (1)	EST124 (2)
Connector	Free wires (4-wire)	Connector for DPA870-873 pyranometers	Mini-Din connector
Cable	L = 20 m		L = 10 m (flat)
Use	Indoor e outdoor		Indoor
Data logger compatibility	M-Log (ELO007-008) R-Log (ELR515) E/X-Log (all models)	DPA870 (pyranometer) DPA873 (pyranometer)	M-Log (ELO009) R-Log (ELR510)

### Common features

Temperature	<i>Principle</i>	Pt100 1/3 DIN B (Class AA)
	<i>Measuring range</i>	-50÷70°C
	<i>Accuracy</i>	0,15°C (@0°C)
	<i>Output</i>	Pt100 DIN-IEC 751 table (EN 6075)
	<i>Resolution</i>	0,01°C (M/R/ELog)
	<i>Response time (T90)</i>	35 sec.
General information	<i>Dimension</i>	30 x 20 mm Thickness 2,5 mm
	<i>Power consumption</i>	None
	<i>Operative temperature</i>	-40÷80°C
	<i>Input type on E/X/M/R-Log</i>	Analog

### Accessories

	Order numb.	
	<b>DZC101.S</b>	ISO9000 type calibration certificate
	<b>CSIT.T.10</b>	ACCREDIA type calibration certificate
	<b>MM7500</b>	Thermo conductive paste for sensor installation on surfaces

# Wet Temperature sensor (Tnw)

Technical features - MODELS



## Wet natural ventilation temperature sensor (Pt100 output)

Thermometric probe with wet bulb and natural ventilation. ISO7726 standard. The PT100 element is closed inside a wet cotton sock from a water tank. The water tank has a high reflection factor to avoid water temperature increase due to radiant sources. This sensor is needed for WBGT (ISO7243) heat stress index assessment.

### Order numb.

### DMA121

Wet Temperature

<i>Principle</i>	Pt100 1/2 DIN A
<i>Measuring range</i>	0÷80°C
<i>Accuracy</i>	0,15°C (0°C)
<i>Output</i>	Pt100 DIN-IEC 751 table (EN 60751)
<i>Resolution</i>	0,01°C
<i>Response time (T90 Air)</i>	10 min. (air flow 0,2 m/s)

General information

<i>Standard</i>	ISO7726
<i>Protection</i>	IP65
<i>Power consumption</i>	none
<i>Operative temperature</i>	0÷80°C
<i>Cable</i>	L = 3 m
<i>Mounting</i>	On DYA049
<i>Water tank capacity</i>	500 cc
<i>Water replacement</i>	Every 30 days (25°C, 60% RH)

### Accessories

### Order numb.

<b>CSIT.T.20</b>	Calibration certificate ACCREDIA type
<b>DYA032.1</b>	Horizontal arm for fixing ESU121.1 to DYA049 collar
<b>DYA049</b>	Collar for fixing arms to meteo pole diam. 45-65 mm
<b>MN3101</b>	Spare cotton sock

# ▶ Radiant temperature (T<sub>g</sub>)

Technical features - MODELS



## Black globe radiant temperature sensor (Pt100 output)

Black globe thermometric probe. Black opaque copper (reflection <2% ASTM 97-55) made, to measure radiant temperature. ISO7726 standard.

### Order numb.

**EST131**

Temperature	<i>Principle</i>	Pt100 1/2 DIN A
	<i>Measuring range</i>	Depending by the data acquisition system
	<i>Uncertainty</i>	0,15°C (0°C)
	<i>Output</i>	Pt100 DIN-IEC 751 table (EN 60751)
	<i>Resolution</i>	0,01°C
	<i>Response time (T90 Air)</i>	20 min (air flow 0,2 m/s)
General information	<i>Standard</i>	ISO7726
	<i>Diameter</i>	150 mm
	<i>Protection type</i>	IP54
	<i>Power consumption</i>	none
	<i>Operative temperature</i>	-40÷+80°C
	<i>Cable</i>	L 1 m
	<i>Connector</i>	Min-din
	<i>Input type on E/M/R-Log</i>	Analog
	<i>E/M/R-Log derived quantities obtained</i>	- Mean radiant temperature - WBGT Index* (ISO7243) * required additional wet temperature (T <sub>nw</sub> ) sensor (ESU121)
<i>Mounting</i>	On BVA311-313 stand	

### Accessories

### Order numb.

**CSIT.T.20**

Calibration certificate ACCREDIA type

