

Black globe temperature sensor



- ▶ Accurate temperature measurement (0.15 °C)
- ▶ Design and dimensions in compliance to ISO7726 standard
- ▶ High absorption paint on the copper globe (>0,97)
- ▶ In-house ISO17025 calibration laboratory

Black globe thermometric probe. Black opaque copper made (reflection <3% ASTM 97-55), to measure radiant temperature according to ISO7726 standard. Black globe temperature is an important variable in the calculation of Thermal Environments indices; it represents the integrated effects of thermal radiation (radiant heat), air temperature and air velocity on human comfort.


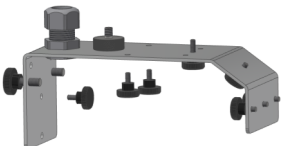
Technical Specifications

PN	EST131	PRTEA4922 PRTEA4922.1
Connector	Mini-DIN	M5-4
Cable	L=1 m + connector	L=5 m + connector (PRTEA4922) L=2 m + connector (PRTEA4922.1)
Output	Pt100 DIN-IEC 751 table (EN 60751)	Digital I2C
Accuracy	±0.15 K @ 0 °C	±0.15 K @ 0 °C
Power supply	none	none
Power consumption	none	none
Data Logger compatibility	M-Log	Alpha-Log (PRTEA4922) Sphensor (PRATEA4922.1)

Common Technical Specifications

Black globe temperature	Emissivity of the paint	> 0.97
	Measuring range	-20...80 °C
	Response time (T90 Air)	Typ. (in heating) 10 min; Max (in cooling) 20 min (air flow 0.2 m/s)
General Information	Standard	ISO7726
	Protection type	IP54
	M-Log derived quantities obtained	<ul style="list-style-type: none"> • Mean radiant temperature • WBGT Index * (ISO7243) * required additional wet temperature (T _{nw}) sensor
	Mounting	On BVA315-320 stands

Accessories

	SVICA0103	Calibration certificate ISO9001 type (Radiant temperature)
	SVACA0105	Calibration certificate ISO17025-ACCREDIA type (Radiant temperature)
	BVA315	Arm for fixing sensors on BVA304 tripod
	BVA320	Arm for fixing sensors on BVA304 tripod or on wall



▶ *LSI LASTEM is an ISO17025 accredited laboratory for air temperature measurements. All sensors manufactured are tested inside our laboratory. LSI LASTEM provides Test report for any sensor supplied and on request, ISO17025 or ISO9001 calibration certificates (see Accessories list).*

▶ *LSI LASTEM developed a high-end instrument range to assess thermal stress (heat stress and cold stress) and thermal comfort. Globe temperature (T_g) is one important measurement (together with air temperature & RH% and air speed) required by the most used thermal environment indexes.*

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