

Temperature measuring device XP101 0.005°C accuracy



High-precision reference measurement standard for industrial temperature calibrations. Suitable as temperature reference in block calibrators, climate chambers or liquid baths. Mini USB interface with software, online data collection.

Hand-held device XP	101		Order No.	
rence standard. Ex characteristic curve Integrated root 2 fu automatic eliminati	cellent stability throug e is determined individ Inction for determinati	5°C) for temperature. Ideal as refe- h multiple annealing cycles. Sensor lually and is saved in the device. ion of the sensor self-heating, plus voltage. For traceability to national is attached.	5810.10	
Technical data	Dimensions	170x62x34mm		
	Weight	Approx. 205g		
Temperature	Measurement range	-150450°C		
	Accuracy	0.005°C at 0.005°C otherwise -40+200°C 0.02°C		
	Measuring technique	Four terminal sensing		
	Reaction time	10s		
Measuring current in normal operation	1 mA DC with duty cycle of 50% = 0.50 mA, 1.85 measurements/sec. Automatic elimination of thermo voltage			
Measuring current "root 2 function	1 mA DC with duty cycle of 33% = 0.30 mA, 1.25 measurements/sec. Automatic elimination of thermo voltage			
Integrated sensor characteristic curves	DIN EN IEC 60751 / ITS-90 or XP101-mode			
Storage conditions	Permitted ambient temperature	-2060°C		
	Permitted rel. humidity	<90% RH non-condensing		
Operating conditions	Permitted rel. humidity	<90% RH non-condensing		
	Permitted altitude above sea level	4000m		
Power supply	Power supply	4 Alkaline LR6 AA 1.5V / USB 5V		
	Active power consumption	Approx. 400mW		
	Battery life passive	Approx. 1 year		
	Battery life active	Min. 24 hours		
	Sensor power supply	5.5V ± 10% DC, max. 200mA		
Data storage	Integrated data storage	Up to 200 data/approx. 1 Mio measured values		
Interface	USB	Cable and SmartGraph3 software included in delivery		
Resolution	Definition of measured values	3 decimal places		
Display	Control	Touch screen, capacitive		
	Technology	TFT, resolution 240x320, 65k colours, very good contrast, suitable for sunlight		
	Surface, toughened glass	Degree of hardness: 7, scratch-resistant		
Accessories	Extension and/or connecting cable for digital sensor, 10m Power supply adapter 8120.NT 8			

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High quality wooden case and PT100 ceramic sensor are included in delivery

PT100 (immersion) probe, long				
Precision PT100, ceramic sensor, bifilar coiled, mineral insulated version				
Technical data	Dimensions, probe	300 x 4 mm		
	Dimensions, housing Weight	19x2//35mm 120g		
	Protective housing	IP40		
	Max. permitted operating temperature	PUR cable and handle can be used up to 80°C		
Compatibility	XP100, XP101			

