

Temperature calibrator TP 18850E

TP Basic // Dry block // Room temperature...850 °C // RT...1562°F



TP 18850E - Highlights

- Very easy operation with 4-button control and integrated reference temperature sensor
- Use of an extremely resilient metal alloy for long life
- Stable bow handle for easy transport
- Optional accessory: Transport case
- Qualified for SIKA Gold Service
- Especially suitable for the calibration of resistance thermometers over the entire standardized temperature range up to 850 °C (1562 °F)

TP Basic

The temperature calibrators of the TP Basic series are characterised by their **efficiency and portability**. The series consists of dry block calibrators covering a wide temperature range and are used on site, e.g. in **marine applications**.

The easy operation, the integrated internal reference temperature sensor and the dry block calibration function ensure an **extremely easy calibration process**.

SIKA temperature calibrators

Temperature calibrators are used for the verification of the functionality and calibration of temperature measuring devices and temperature sensors. As the sole German manufacturer of these devices, we develop and produce our "Made in Germany" temperature calibrators with a special focus on **long-term reliability** and **utmost accuracy** in combination with **easy operation**. We can rely on more than 40 years of experience in doing this: SIKA's **first dry block temperature calibrator** was launched all the way back in 1980.

Every SIKA temperature calibrator is meticulously tested for **accuracy** and **stability**. This is attested by our standard calibration certificate, which we issue with every temperature calibrator, or by means of an optional DAkkS calibration certificate [German accreditation body]. This is to guarantee that you receive a **perfect product** which can be traced back to national and international temperature measurement standards.

Features

Easy operation

- The TP 18850E can be operated with only four buttons: Two arrow buttons for setting the target temperature, one button for confirmation and one return button
- Thus, temperatures can be set as easily as, for example, in the air conditioning system in your car
- Any operational errors can be nearly excluded. You do not need any specifically trained staff or time-consuming briefings



SIKA Gold Service

SIKA Gold Service provides a comprehensive service package for the regular recalibration of your temperature calibrator. You will benefit from exclusive savings and discounts as well as special promotions reserved to SIKA Gold Service members.

- You will save 33% in the recalibration of your temperature calibrator
- You will receive a 10% discount on any repairs that may become necessary
- You will receive preferential invitations to product presentations, symposia, practice days and exclusive training offers



Register now and benefit from the SIKA Gold Service: gold-service.sika.net

Technical data

TP 18850E		
Temperature range	Room temperature...850 °C	Room temperature...1562 °F
Dimension of the calibration insert	Ø 18 x 100 mm (calibration insert easily exchangeable)	
Dry block		
Display accuracy	±1 °C	±1.8 °F
Temperature stability	±0.1 °C	±0.18 °F
Resolution of the temperature display	1 °C	1 °F
Reference temperature sensor	internal, fixed installation	
Dimensions		
→ Width	330 mm + 70 mm (Handle)	
→ Height	270 mm	
→ Depth	150 mm	
Weight	Approx. 14 kg	
Power supply	230...240 VAC, 50 / 60 Hz	
Power consumption	Approx. 2000 W	
Display		
Display	2-line, 4-digit digital display red / green, unit °C / °F	

Article numbers

To order a complete calibrator, you need two article numbers:

1. Calibrator
2. Calibration insert

In addition, depending on your individual calibration requirements, you can order additional calibration inserts, necessary certificates and other accessories.

1. Calibrator					
Temperature range		Function	Calibration insert [mm]	Power supply	Article number
Room temperature...850 °C	RT...1562 °F	Dry block	Ø 18 x 100	230 V	EP18850E181000

2. Calibration insert				
Bore holes	Function	Calibration insert [mm]	Material	Article number
Calibration insert incl. 1 bore hole of choice	Dry block	Ø 18 x 100	Copper-Alu	Please indicate bore holes in the order
Each additional bore hole	Dry block	Ø 18 x 100	Copper-Alu	

3. Calibration certificate - Select your calibration certificates as needed		Article number
Each calibrator is already delivered with a standard calibration certificate (6 test points).		
SIKA works calibration certificate (similar to standard calibration certificate + marking on the calibrator)		EKTPWP1FKT
DAkKS calibration certificate (3 test points + measurement uncertainty determination)		EKTPDAKKS1FKT
Each additional test point DAkKS calibration certificate		EKTPDAKKSZUSP
SIKA Gold Service works calibration certificate		EKTPGOLDWP
SIKA Gold Service DAkKS		EKTPGOLDDAKKS

4. Accessories		Article number
Transport case		EZ999999990005

Overview of SIKA temperature calibrators

Temperature range (RT=Room temperature)	Function	Accuracy	Features	Block dimensions [Ø mm x depth mm]	Type
-55 °C ... 200 °C -67 °F ... 392 °F	Dry block	±0.4 °C ±0.72 °F		28 x 150	TP 17200
	Dry block	±0.2 °C ±0.36 °F	PC interface	28 x 150	TP 17200S
	Dry block	±0.2 °C ±0.36 °F	Touch screen PC interface External reference sensor Integrated measuring instrument	28 x 150	TP 37200E.2
-35 °C ... 165 °C -31 °F ... 329 °F	Dry block	±1 °C ±1.80 °F		28 x 150	TP 17165M
	Dry block	±0.4 °C ±0.72 °F		28 x 150	TP 17165
	Dry block	±0.2 °C ±0.36 °F	PC interface	28 x 150	TP 17165S
	Dry block	±0.2 °C ±0.36 °F	Touch screen PC interface External reference sensor Integrated measuring instrument	28 x 150	TP 37165E.2
	Dry block	±0.4 °C ±0.72 °F		60 x 150	TP 17166
	Dry block	±0.2 °C ±0.36 °F	PC interface	60 x 150	TP 17166S
	Calibration bath	±0.1 °C ±0.18 °F	PC interface	60 x 170	TP M165S
	Dry block Air Shield Insert Calibration bath Infrared Surface	±0.3 °C ±0.54 °F ±0.099 °C ±0.1782 °F ±0.1 °C ±0.18 °F ±0.5 °C ±0.9 °F ±1 °C ±1.88 °F	Touch screen PC interface External reference sensor Integrated measuring instrument	60 x 170	TP 3M165E.2
-10 °C ... 100 °C 14 °F ... 212 °F	Dry block	±0.05 °C ±0.09 °F	PC interface	7 x 6.5 x 150	TP 17Zero
RT ... 200 °C RT ... 392 °F	Dry block	±1 °C ±1.80 °F		18 x 150	TP 18200E
RT ... 255 °C RT ... 491 °F	Calibration bath	±0.2 °C ±0.36 °F	PC interface	60 x 170	TP M255S
	Dry block	±0.3 °C ±0.54 °F	Touch screen		
	Calibration bath	±0.2 °C ±0.36 °F	PC interface	60 x 170	TP 3M255E.2
	Infrared Surface	±0.5 °C ±0.9 °F ±1 °C ±1.8 °F	External reference sensor Integrated measuring instrument		
RT ... 450 °C RT ... 842 °F	Dry block	±0.6 °C ±1.08 °F		60 x 150	TP 17450
	Dry block	±0.3 °C ±0.54 °F	PC interface	60 x 150	TP 17450S
	Dry block Air Shield Insert	±0.3 °C ±0.54 °F ±0.2 °C ±0.36 °F	Touchscreen PC interface	60 x 150	TP 37450E.2
	Infrared Surface	±0.5 °C ±0.9 °F ±1 °C ±1.8 °F	External reference sensor Integrated measuring instrument		
RT ... 650 °C RT ... 1202 °F	Dry block	±1 °C ±1.80 °F		28 x 150	TP 17650M
	Dry block	±0.8 °C ±1.44 °F		28 x 150	TP 17650
	Dry block	±0.4 °C ±0.72 °F	PC interface	28 x 150	TP 17650S
RT ... 700 °C RT ... 1292 °F	Air Shield Insert	±0.53 °C ±0.954 °F	Touchscreen PC interface External reference sensor Integrated measuring instrument	29 x 150	TP 37700E.2
RT ... 850 °C RT ... 1562 °F	Dry block	±1 °C ±1.80 °F		18 x 100	TP 18850E
400 °C ... 1300 °C 752 °F ... 2372 °F	Dry block	±2 °C ±3.6 °F	PC interface	28 x 200	TP 281300E

Subject to technical modifications and errors