

# Temperature calibrator TP Basic Marine

TP Basic // Dry block // RT...650 °C // RT...1202 °F



TP Basic Marine



TP Basic Marine set with calibration inserts and transport bag

## Highlights

- Optimized for the requirements of the marine market
- Extremely competitive
- Smaller, lighter and technically better than all other comparable models on the market

## 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 Basic Marine can be operated with only three buttons: Two arrow buttons for setting the target temperature and one button for confirmation.
- 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



## Small block with particularly small calibration inserts

- The TP Basic Marine has a small block that provides extremely fast heat-up and cool-down times thanks to its low thermal mass. This saves time and money with every calibration process
- The particularly small calibration inserts are specially designed for temperature sensors in the marine sector. They are available with two different borehole sizes as standard: Ø 3.5 mm and 6.5 mm. For Ø 13.5 mm, the calibrator is simply operated without a calibration insert. These sizes cover most temperature sensors in the marine sector. Customised borehole sizes are also available. The small size of the calibration inserts enables cost savings on accessories.


## 5-Year Warranty: Low Maintenance, Comprehensive Service!

With regular service and adherence to the SIKA recalibration recommendation, you receive a 5-year warranty.

- Instead of annual recalibration, recalibration is only necessary every 500 operating hours or every three years thanks to long-lasting SIKA technology.
- This results in only 1/3 of the usual maintenance costs.
- Significant reduction in the total cost of ownership.



# Technical Data

TP Basic Marine		
<b>Temperature range</b>	RT...650 °C	RT...1202 °F
<b>Dimension of the calibration insert</b>	Ø 13.5 x 110 mm (Calibration insert easy to replace)	
<b>Device under test diameter</b>	Up to Ø 13 mm (without calibration insert)	
Dry block		
<b>Accuracy</b>	±1.2 °C	±2.16 °F
<b>Temperature stability</b>	±0.2 °C	0.36 °F
<b>Resolution of the temperature display</b>	0.1 °C	0.1 °F
<b>Temperature units</b>	°C / °F	
<b>Reference temperature sensor</b>	internal, fixed installation	
Dimensions		
→ Width	127 mm	
→ Height	274 + 50 mm (Handle)	
→ Depth	272 mm	
<b>Weight</b>	Approx. 5.1 kg	
<b>Power supply</b>	115 V or 230 V Nominal voltage (two variants)	
<b>Power consumption</b>	Approx. 650 W	
Display		
<b>Display and control</b>	2.4 inch color display, operation via three capacitive keys	
Approvals		
		

# Article numbers

Temperature Calibrator		
Type	Power supply	Article number
TP Basic Marine	230 V	EPMA650M131100
TP Basic Marine, set with calibration inserts Ø3.5 mm / Ø6.5 mm	230 V	EPMA650M131100S2
TP Basic Marine, set with calibration inserts Ø3.5 mm / Ø6.5 mm and transport bag	230 V	EPMA650M131100S1
TP Basic Marine	115 V	EPMA650M131102
TP Basic Marine, set with calibration inserts Ø3.5 mm / Ø6.5 mm	115 V	EPMA650M131102S2
TP Basic Marine, set with calibration inserts Ø3.5 mm / Ø6.5 mm and transport bag	115 V	EPMA650M131102S1

Calibration insert				
Bore holes [mm]	Function	Calibration insert [mm]	Material	Article number
Without bore hole	Dry block	Ø 13	Brass	EZ11013000MS01
1x Ø 3.5	Dry block	Ø 13	Brass	EZ11013035MS01
1x Ø 5.0	Dry block	Ø 13	Brass	EZ11013050MS01
1x Ø 6.5	Dry block	Ø 13	Brass	EZ11013065MS01
1x Ø 8.5	Dry block	Ø 13	Brass	EZ11013085MS01
1x Ø 9.5	Dry block	Ø 13	Brass	EZ11013095MS01
1x Ø 10.5	Dry block	Ø 13	Brass	EZ11013105MS01
1x Ø 11.5	Dry block	Ø 13	Brass	EZ11013115MS01
Calibration insert incl. 1 bore hole of choice	Dry block	Ø 13	Brass	Please indicate bore hole in the order

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)		EKWPEPLIKDBI
DAkKS calibration certificate (3 test points + measurement uncertainty determination)		EKDAKKSEPLIKDBI
Each additional test point DAkKS calibration certificate		EKTPDAKKSZUSP

Accessories		Article number
Transport bag		XE2422
Transport case		EZTPKOFFERMARINE

# Overview of SIKA temperature calibrators

## Our series: Basic. Solid. Premium.

- **Dry block calibrators** of the **TP Basic** series impress with their **uncomplicated operation** and **high cost-effectiveness**. They are particularly suitable for use on ships or in industrial applications.
- Equipped with a **PC interface**, the **dry block calibrators** and **calibration baths** of the **TP Solid** series cover a wide temperature range with high accuracy.
- For the highest demands on accuracy and flexibility: The dry-block and multi-function temperature calibrators of the **TP Premium** series represent the pinnacle of our technical development. Equipped with an **integrated touch screen**, a **PC interface**, an **external reference sensor** and **integrated measuring instrument**, this series offers **extreme accuracies** for **all calibration tasks**.

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	TP Basic	28 x 150	TP 17200
	Dry block	±0.2 °C	±0.36 °F	TP Solid	28 x 150	TP 17200S
	Dry block	±0.1 °C	±0.18 °F	TP Premium	28 x 150	TP 37200E.2
-35 °C ... 155 °C -31 °F ... 311 °F	Calibration bath	±0.1 °C	±0.18 °F	TP Solid	60 x 170	TP M165S
-35 °C ... 165 °C -31 °F ... 329 °F	Dry block	±1 °C	±1.8 °F	TP Basic	28 x 150	TP 17165M
	Dry block	±0.4 °C	±0.72 °F	TP Basic	28 x 150	TP 17165
	Dry block	±0.2 °C	±0.36 °F	TP Solid	28 x 150	TP 17165S
	Dry block	±0.1 °C	±0.18 °F	TP Premium	28 x 150	TP 37165E.2
	Dry block Air Shield Insert Calibration bath Infrared Surface	±0.1 °C ±0.07 °C ±0.19 °C ±0.5 °C ±1 °C	±0.18 °F ±0.126 °F ±0.342 °F ±0.9 °F ±1.8 °F	TP Premium	60 x 170	TP 3M165E.2
-30 °C ... 165 °C -22 °F ... 329 °F	Dry block	±0.4 °C	±0.72 °F	TP Basic	60 x 150	TP 17166
	Dry block	±0.2 °C	±0.36 °F	TP Solid	60 x 150	TP 17166S
-10 °C ... 100 °C 14 °F ... 212 °F	Dry block	±0.05 °C	±0.09 °F	TP Solid	7 x 6.5 x 150	TP 17Zero
RT ... 200 °C RT ... 392 °F	Dry block	±1 °C	±1.8 °F	TP Basic	18 x 150	TP 18200E
RT ... 255 °C RT ... 491 °F	Calibration bath	±0.2 °C	±0.36 °F	TP Solid	60 x 170	TP M255S
	Dry block Air Shield Insert Calibration bath Infrared Surface	±0.25 °C ±0.08 °C ±0.18 °C ±0.5 °C ±1 °C	±0.45 °F ±0.144 °F ±0.324 °F ±0.9 °F ±1.8 °F	TP Premium	60 x 170	TP 3M255E.2
	Dry block	±0.6 °C	±1.08 °F	TP Basic	60 x 150	TP 17450
	Dry block	±0.3 °C	±0.54 °F	TP Solid	60 x 150	TP 17450S
	Dry block Air Shield Insert Infrared Surface	±0.25 °C ±0.2 °C ±0.5 °C ±1 °C	±0.45 °F ±0.36 °F ±0.9 °F ±1.8 °F	TP Premium	60 x 150	TP 37450E.2
RT ... 650 °C RT ... 1202 °F	Dry block	±1 °C	±1.8 °F	TP Basic	28 x 150	TP 17650M
	Dry block	±0.8 °C	±1.44 °F	TP Basic	28 x 150	TP 17650
	Dry block	±1.2 °C	±2.16 °F	TP Basic	13.5 x 110	TP Basic Marine
	Dry block	±0.4 °C	±0.72 °F	TP Solid	28 x 150	TP 17650S
RT ... 700 °C RT ... 1292 °F	Dry block Air Shield Insert	±0.43 °C ±0.27 °C	±0.744 °F ±0.486 °F	TP Premium	29 x 150	TP 37700E.2
RT ... 850 °C RT ... 1562 °F	Dry block	±1 °C	±1.8 °F	TP Basic	18 x 100	TP 18850E

Subject to technical modifications and errors