

## TP M // Micro calibration bath // -35...255 °C



Technical data		
Type	TP M165S	TP M255S
Control sensor	internal	
Temperature range*	-35...165 °C	RT...255 °C
Micro calibration bath		
Accuracy	±0.1 °C	±0.2 °C
Stability	±0.05 °C	±0.05 °C
Measurement zone	110...150 mm	
Display unit		
Display	2-line, 4-digit display red / green, unit °C / °F	
Display range	-50...165 °C	0...255 °C
Resolution	0.01 °C between -9.99...99.99 °C, else 0.1 °C	

\* At an ambient temperature of 20 °C / 68 °F

<b>General data</b>		
<b>Type</b>	TP M165S	TP M255S
<b>Interface</b>	RS485, RS232 or USB (optional)	
<b>Calibrator dimensions</b>		
→ Width	210 mm	150 mm
→ Height	380 + 50 mm	330 + 70 mm
→ Depth	300 mm	270 mm
<b>Block dimensions</b>		
→ Diameter	Ø 60 mm	
→ Depth	170 mm	
<b>Weight</b>	Approx. 12.5 kg	Approx. 7.5 kg
<b>Power supply</b>		
→ Standard	100...240 VAC, 50 / 60 Hz	230...240 VAC, 50 / 60 Hz,
→ Optional		100...230 VAC, 50 / 60 Hz
<b>Power consumption</b>	Approx. 375 W	Approx. 1000 W

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To order a complete calibrator, you need three order numbers:

1. Calibrator type	EPMB	xx	x	x	xxxxxx
2. Linearisation	EPLIK	xx	x	xx	x
3. Insert	EZxxxxxxxxxxxxx				

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

Order code					
1. Calibrator type					Order number
Temperature range	Function	Block	Power supply	Type	
-35...165°C	Bath	Ø 60 x 170 mm	100...240 V	TP M165S	EPMB160S601503
RT...255°C			230 V	TP M255S	EPMB250S601500
RT...255°C			100...230 V	TP M255S	EPMB250S601503
<b>Example order number calibrator</b>					<b>EPMB250S601503</b>

Order code			
2. Linearisation			
With linearisation	EPLIK		
Function			
Micro calibration bath (direct)	LII		
Micro calibration bath (with tub insert)	TII		
Medium			
Water (2...95 °C)			01
Silicone oil 10 cSt (-35...155 °C)			10
Silicone oil 20 cSt (7...220 °C)			20
Silicone oil 50 cSt (50...270 °C)			50
Test points			
Standard			0
Customised			K
<b>Example order number linearisation</b>			<b>EPLIK LII 00 0</b>

Order code				
3. Adapter sleeve / Calibration insert				Order number
Bore holes	Function	Block	Material	
Tub insert	Bath	Ø 60 x 170 mm		EZTPMBEK000000
<b>Example order number insert</b>				<b>EZTPMBEK000000</b>

Order code		Order number
<b>4. Calibration certificate - Select your certificates as required*</b>		
SIKA-Works calibration certificate for 1. function		EKTPWP1FKT
SIKA-Works calibration certificate for 2. function		EKTPWP2FKT
DAkKS calibration certificate for 1. function		EKTPDAKKS1FKT
DAkKS calibration certificate for 2. function		EKTPDAKKS2FKT
Additional test point DAkKS calibration certificate		EKTPDAKKSZUSP

Order code			Order number
<b>5. Accessories</b>			
<b>Transport case</b>	<b>For type</b>		
Without trolley attachment frame	TP M165S		EZTPKOFFER005
	TP M255S		EZTPKOFFER003
With trolley attachment frame	TP M165S		EZTPKOFFER005TG
	TP M255S		EZTPKOFFER003TG
<b>More accessories</b>			
Tripod	All TP M		EZTPMSG0000000
Calibration liquid (Silicone oil), 50cSt	All TP M		EZSÖ0500000000
Calibration liquid (Silicone oil), 20cSt	All TP M		EZSÖ0200000000
Calibration liquid (Silicone oil), 10cSt	All TP M		EZSÖ0100000000
Calibration liquid (Silicone oil), 5cSt	All TP M		EZSÖ0050000000
PC software (without TT-Scan)	All TP M		EZ999999999971
PC software (with TT-Scan)	All TP M		EZ380000000001
Converter RS485 to USB	All TP M		EZ170000000002
Converter RS232 to USB	All TP M		EZ380000000002



\* Each calibrator comes with a standard test certificate.

# 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	±0.2 °C	±0.36 °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	±1.80 °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	±0.2 °C	±0.36 °F	TP Premium	28 x 150	TP 37165E.2
	Dry block ext. Dry block int.	±0.2 °C ±0.3 °C	±0.36 °F ±0.54 °F	TP Premium	60 x 170	TP 3M165E.2
	Air Shield Insert	±0.099 °C	±0.1782 °F			
Calibration bath Infrared Surface	±0.1 °C ±0.5 °C ±1 °C	±0.18 °F ±0.9 °F ±1.88 °F				
-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	±1.80 °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 ext. Dry block int.	±0.25 °C ±0.5 °C	±0.45 °F ±0.9 °F	TP Premium	60 x 170	TP 3M255E.2
	Air Shield Insert	±0.08 °C	±0.144 °F			
	Calibration bath, tub insert, ext.	±0.35 °C	±0.63 °F			
	Calibration bath, tub insert, int.	±0.53 °C	±0.954 °F			
	Calibration bath, direct filling, ext.	±0.18 °C	±0.324 °F			
	Calibration bath, direct filling, int.	±0.46 °C	±0.828 °F			
	Infrared Surface	±0.5 °C ±1 °C	±0.9 °F ±1.8 °F			
RT ... 450 °C RT ... 842 °F	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	±0.3 °C ±0.2 °C	±0.54 °F ±0.36 °F	TP Premium	60 x 150	TP 37450E.2
	Infrared Surface	±0.5 °C ±1 °C	±0.9 °F ±1.8 °F			
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	±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
400 °C ... 1300 °C 752 °F ... 2372 °F	Dry block	±2 °C	±3.6 °F	TP Solid	28 x 200	TP 281300E

Subject to technical modifications and errors