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Operating instructions Temperature calibration set

KERN DIS-A01

Type TDIS-A01-A

Version 1.0

2025-10

en



TDIS-A01-BA-e-2510



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Version 1.0 2025-10

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1 Technical data

KERN	DIS-A01
Item number / Type	TDIS-A01-A
Readability -70 °C – 199.9 °C	0.1 °C
Readability 200 °C – 400 °C	1.0 °C
Units	°C
Measuring range (sensor with cable)	-70 °C to +400 °C
Accuracy of measuring range -70 °C – 0 °C	±0.9 °C
Accuracy of the measuring range 0 °C – 100 °C	±1.0 °C
Accuracy of the measuring range 100 °C – 200 °C	±1.5 °C
Accuracy of the measuring range 200 °C – 400 °C	±3.0 °C
Batteries	3 x 1.5 V LR44
Battery operation	Operating time 80 hours
Dimensions of housing	180 x Ø26 [mm]
Net weight (g)	250
Electrical protection class	Protection class III
IP protection class	IP 67

2 Device overview



2.1 Components



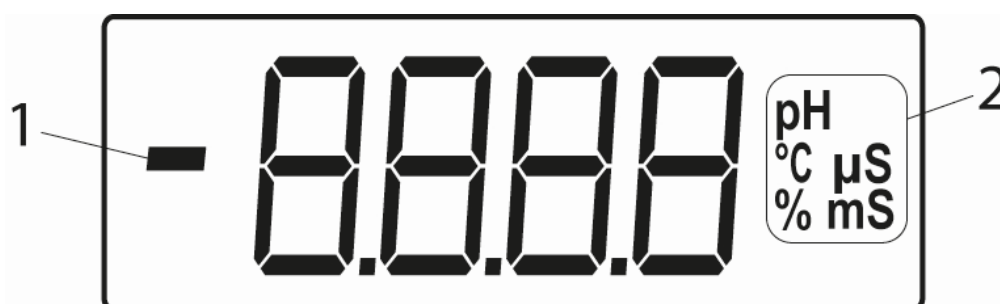
Item	Description
1	Measuring head with measuring sensor
2	Buttons
3	Display
4	Battery compartment cover


2.2 Controls

2.2.1 Keyboard overview

Key	Designation	Function in operating mode
	[ON/OFF]	<ul style="list-style-type: none"> • Switch on/off
	[Hold]	<ul style="list-style-type: none"> • Switch from HOLD to CON <ul style="list-style-type: none"> ○ HOLD: current value is frozen ○ CON: Live value is displayed

2.2.2 Display overview



Pos.	Display	Description
1		Minus display
2	Unit display	Selectable, see Technical Data

3 Basic information (general)

- The device is waterproof.
- Loosely tightened nuts will compromise the waterproofing, which may result in liquid ingress and damage to the device. Such damage is not covered by the warranty.
- The device housing is not designed for temperatures above 70 °C.
- The housing is not solvent-resistant.
- If **HLP** appears during operation, the device is defective and must be sent in for repair.

3.1 Warranty

The warranty shall be void in the event of

- Failure to observe our specifications in the operating instructions
- use outside the described applications
- Modification or opening of the device
- Mechanical damage and damage caused by media, liquids
natural wear and tear
- Overloading of the measuring mechanism

4 Basic safety instructions

4.1 Observe the instructions in the operating manual



⇒ Read the operating instructions carefully before installation and commissioning.

4.2 Training of personnel

The device may only be operated and maintained by trained personnel.

5 Transport and storage

5.1 Inspection upon receipt

Please check the packaging immediately upon receipt and the device upon unpacking for any visible external damage.

5.2 Packaging/return transport



- ⇒ Keep all parts of the original packaging in case it is necessary to return the product.
- ⇒ Only use the original packaging for return transport.
- ⇒ Before shipping, disconnect all connected cables and loose/movable parts.
- ⇒ Secure all parts against slipping and damage.

6 Temperature measurement

6.1 Temperature resistance of cables

Silicone cables with increased mechanical strength: –60 to +200 °C

NOTE



- ⇒ Contact between the cable and temperatures higher than those specified may damage the insulation.

6.2 Notes on temperature measurement



The result must have stabilised before reading.

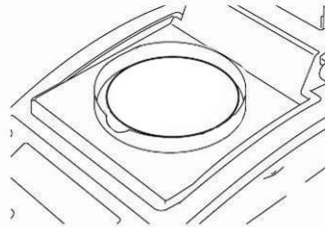
Please note that the measuring device has a response time that depends on the weight of the measuring element housing.

7 Use with DIS moisture analysers (TDIS-A)

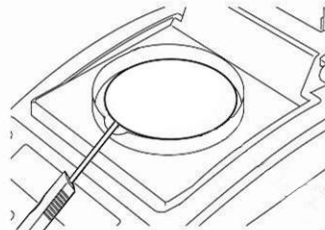
We recommend checking the temperature value of the device occasionally using the optional temperature calibration set. Before doing so, the device should have cooled down to room temperature after the last heating phase.

Preparation

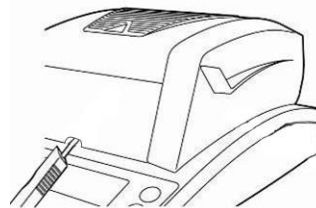
⇒ Remove the sample dish and dish holder from the moisture analyser.



⇒ Install the temperature calibration set as shown in the illustration.



⇒ Close the heating hood.



⇒ Switch on the temperature calibration set using the **ON/OFF** button.

Completed measurement setup:

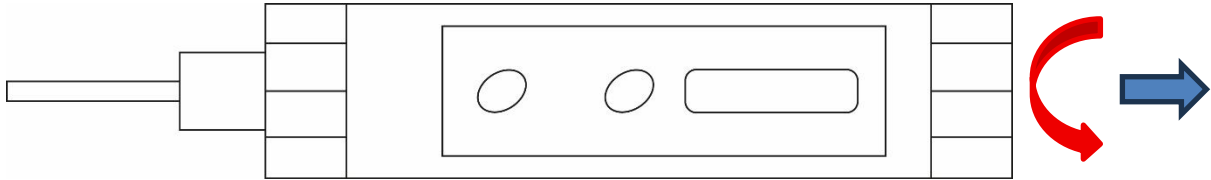


Settings for adjusting the temperature can be found in the instructions for the TDIS-A moisture analyser series.

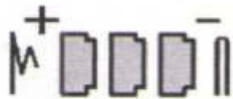
8 Battery replacement

If the symbol "Lo." appears alternately with the measured value on the display, the batteries need to be replaced.

1. Unscrew the top of the device.



2. Remove the three used batteries using the strap.
3. Insert new batteries (3x type 1.5 V Lr44) in the following order.



Note:

1. If the device is not to be used for a long period of time, remove the batteries (leakage possible). Even new batteries can be discharged after approx. 7 months.
2. Removing the batteries will not result in the loss of calibration data.

9 Error messages

Error message	Explanation
HLP	Device defective
Lo	Battery/rechargeable battery capacity exhausted