



designed for scientists



ETS-D7 Wireless Sensor

/// Data Sheet

More than just a temperature sensor!

The ETS-D7 redefines temperature measurement. As an intelligent, wireless temperature sensor, it combines precise measurement, maximum flexibility and true independence – perfectly tailored to the demands of modern laboratories. Thanks to wireless communication, the ETS-D7 reliably measures the medium temperature and transmits the values wirelessly or, alternatively, via USB-C to compatible IKA devices. The integrated high-resolution touch display shows temperature and pH values with a display resolution of two decimal places (0.01) – ensuring precise and reliable readability directly at the measuring point.



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But the ETS-D7 offers even more: it is a fully functional stand-alone measuring device for both temperature and pH. Via the integrated BNC interface, a pH electrode can be connected directly – without the need for an additional measuring instrument. This makes the ETS-D7 a compact all-in-one solution for a wide range of laboratory applications.

A particular highlight is the intelligently controlled display:

It automatically detects when a user wants to read a measured value and activates only when needed. This enables a battery life of up to 100 hours. Alternatively, the display can be permanently switched on – deliberately at the expense of battery life and ideal for applications where continuous visibility is required.

In combination with IKA magnetic stirrers (RCT and RET basic), EUROSTAR control, and the laboratory software labworldsoft®, the ETS-D7 can be seamlessly integrated into existing laboratory environments. Thanks to bidirectional communication, set values can be synchronized and – depending on the device combination – even adjusted directly via the sensor. In addition, the ETS-D7 can be used as a second, independent temperature sensor, further increasing process safety.

Compatibility with labworldsoft® enables central acquisition, control, visualization and documentation of measurement data, supporting reproducible processes and efficient data management.

With exchangeable temperature probes, IP54 protection class, intelligent power management and a well-designed operating concept, the ETS-D7 is consistently developed for everyday laboratory use.

Compatible with devices from the new series: RET basic, EUROSTAR control, RCT basic (wired, or wireless with USB WD)

Technical Data

Temperature measuring range min. (with H62 sensor) [°C]	-20
Temperature measuring range max. (with H62 sensor) [°C]	400
Temperature measurement resolution [K]	0.01
Accuracy of temperature measurement [K]	±0.1 + tolerance PT1000 (DIN IEC 751 Class A)
pH measurement	yes / BNC socket female
pH measuring range [pH]	0 - 14
Accuracy of pH measurement [pH]	±0.1
pH measurement resolution [pH]	0.01
Battery capacity [mAh]	700
Display	TFT
Immersion depth min. [mm]	20
Touch function	yes
Warning function acoustic	yes
Rechargeable battery	yes
Perm. duration of operation (battery)	max. 50 h (display on) / 100 h (display off)
Battery charging time	50% at 60 Minutes; 75% at 90 Minutes
Battery charging current max. [mA]	500
Changeable temperature sensor	H62.51
Brightness detection	yes
Infrared detection	yes
Status LED	yes
Sensor type	PT1000 (DIN IEC 751 Class A)
Communication distance (depend on building) max. [m]	15
Dimensions (W x H x D) [mm]	52 x 40 x 385
Weight [kg]	0.125
Permissible ambient temperature [°C]	5 - 40
Permissible relative humidity [%]	80
Protection class according to DIN EN 60529	IP 54
USB interface	USB-C
WPAN interface	yes
DC Voltage [V=]	5
Batteries included with the product?	yes
Battery Cell Type	RCR123A 16340
Number of Batteries	1
How is the Battery packaged	within appliance
Battery Voltage [V]	3.7