PROFESSIONAL MEASURING
SINCE 1844

KERN

Product brochure

31.10.2026

KERN DIS 50-4

High-precision moisture analyzer for demanding analyses, particularly suitable for plastic granulate

ENGLISH



CONTACT

KERN & SOHN GmbH
Ziegelei 1
72336 Balingen
Germany

+49 7433 9933-0
info@kern-sohn.com
www.kern-sohn.com







APPLICATION EXAMPLE



FEATURES

- Very high resolution: 0,1 mg readout for precise analyses even with low moisture content
- Intuitive operation in three steps (tare – add sample – start) for simple and reproducible analyses
- Real-time visualisation: Drying curves can be shown directly on the display
- Backlit LCD graphic display, digit height 15 mm
- Configurable display: Drying curve can be shown in display. Results can be displayed either as moisture content, dry content, ATRO value or absolute residual weight
- Digit display, contrast and background lighting can be set individually
- Halogen quartz glass heater 400 W
- Excellent temperature control thanks to halogen technology, suitable for temperature-sensitive samples
- Internal scale memory for up to 1.000 measurement results
- The last measured value remains visible in the display until the next measurement
- Password protection to prevent manipulation of stored settings, data, etc.
- Sample description for up to 1.000 samples, freely programmable, and is printed in the measuring protocol
- Date and time display as standard
- Weighing system with overload protection based on electromagnetic force compensation
- USB data interface for transferring weighing data to the PC, printer etc.
- 50 sample plates included
- Protective working cover included with delivery
- Application handbook: In the download centre you will find a practical application handbook containing many examples, field reports, settings and tips for each KERN moisture analyzer

MAIN SCOPE OF APPLICATIONS

- Food processing and quality control
- Pharmaceutical industry
- Chemical industry
- Cosmetics industry
- Plastics and polymer industry
- Analytical and chemical laboratories
- Building materials and cement industry
- Agricultural product recording and quality assurance
- Water and wastewater management (e.g. sewage treatment plants)
- Energy generation from biomass
- Ceramics industry and non-metallic materials industry

PICTOGRAMS

Standard



Option



MODEL OVERVIEW

Model	Weighing capacity [Max]	Readability [d]	possible moisture content	possible dry content	Temperature range (in steps up to)
DIS 50-4	50 g	0,0001 g	0,001% - 100%	100% - 0,001%	30 °C - 175 °C (1 °C)
DIS 100-3	120 g	0,001 g	0,01% - 100%	100% - 0,01%	30 °C - 175 °C (1 °C)

ACCESSORIES

Model	Description
315-306-303	Safety set 315-306-303, included weight 5 g (F2); 50 g (F2)
822-903	Power cord (UK) 822-903
DBS-A04	USB 2.0 cable DBS-A04
DIS-A01	Temperature calibration set DIS-A01
MLB-A05	RS232 interface cable MLB-A05
RH-A01	Sample plates aluminium RH-A01
RH-A02	Round fibre glass filter KERN RH-A02
RH-A03	Round fibre glass filter KERN RH-A03

Model	Description
YBA-A23	Protective working cover YBA-A23
YBA-A23S05	Protective working cover YBA-A23S05
YKC-01	Thermal printer YKC-01
YKH-01	Thermal printer YKH-01
YKI-10	RS232-Ethernet adapter YKI-10 (RS-232 standard, Ethernet, RS-485)
YKI-11	RS232-Ethernet adapter YKI-11 (Ethernet, RS-232 standard - 2x)
YKI-12	RS232-WiFi adapter YKI-12
YKK-01	Power cord (CH) YKK-01
YKT-01	Needle printer YKT-01

SERVICES

Model	Description
963-127	DAkkS calibration certificate 963-127
964-305	Factory calibration certificate (Temperature) 964-305
965-243	Testing individual substances (Moisture Analyzers) 965-243
969-517	Confirmation of the manufacturer's specification (only in combination with DAkkS calibration certificate)969-517
970-109	Warranty extension (+2 years) 970-109

KERN Pictogram Overview

	External adjustment: Adjusting accuracy using external adjustment weight
	Memory: Device-internal memory capacity, e.g. for article data, measuring data, tare weights, PLU etc.
	Data interface RS-232: For connection to printers, PCs or other peripheral devices for data transfer over longer distances. Network in bus topology possible
	Data Interface USB: For connection to printers, PCs or other peripheral devices
	GLP/ISO protocol: The measuring device generates a GLP-compliant printout
	Value & time: The measuring device displays the value, date, and time, regardless of the connected printer
	Units can be switched to e.g. non-metric units
	Measuring with tolerance range (checkweighing): Upper and lower limit values can be programmed, e.g. for sorting, portioning or for measuring coatings or material thicknesses. The process is supported by an acoustic and/or optical signal
	Integrated power supply unit: Integrated in device. 230 V/50 Hz standard EU. More standards e.g. GB, USA or AUS on request
	Weighing principle electromagnetic force compensation: Coil inside a permanent magnet. For the most accurate weighings
	Package shipment by courier service: The duration of internal product provision is one day
	Accredited calibration (DKD): The duration of the accredited calibration is 3 working days