IP protected bench scale KERN FFN-N(SK)

Robust, space-saving bench scale, protected by stainless steel and IP65, also with EC type approval [M]

Features

- [1] **Ideal for the food industry**
- [2] **Ideal for the robust industry**
- **High mobility:** thanks to battery operation, compact construction and low weight, it is suitable for use in several locations (production, warehouse, dispatch department, ...)
- **Stainless steel housing**, rust-proof and easy to clean
- **Level indicator and foot screws** to level the balance precisely, fitted as standard, to give the most accurate weighing results
- **Carrying grips on the underside** of the scale for easy transportation

- [3] **IP65:** Protected against dust and water splashes (only when using rechargeable battery pack)

Technical data

- Large LCD display, digit height 25 mm
- Dimensions of weighing plate (stainless steel) WxD 230x190 mm
- Overall dimensions 230x300x130 mm
- Rechargeable battery pack internal, standard, operating time up to 50 h, charging time approx. 12 h
- Net weight approx. 3,2 kg
- Permissible ambient temperature 0 °C / 40 °C

Accessories

- **Tare pan made from stainless steel**, ideal for weighing loose small parts, fruit, vegetables etc., WxDxH 370x240x20 mm, KERN RFS-A02

STANDARD

| CAL EXT | UNIT | IP 65 [3] | INOX | ACCU | 230 V | DMS | 1 DAY | 2 YEARS WARRANTY |

OPTION

| DKD +3 DAYS |

FACTORY

| M +3 DAYS |

Model	Weighing range [Max]	Read-out [d]	Verific. value [e]	Minimum load [Min]	Options		
						Verification	DKD Calibr. Certificate
KERN	kg	g	g	g		M KERN	DKD KERN
FFN 3K0.5IPN	3	0,5	–	–		–	963-127
FFN 6K1IPN	6	1	–	–		–	963-128
FFN 15K2IPN	15	2	–	–		–	963-128
FFN 25K5IPN	25	5	–	–		–	963-128
Note: For applications that require verification, please order verification at the same time, initial verification at a later date is not possible. Verification at the factory, we need to know the full address of the location of use.							
FFN 3K1IPM	3	1	1	20		965-227	963-127
FFN 6K2IPM	6	2	2	40		965-228	963-128
FFN 15K5IPM	15	5	5	100		965-228	963-128
FFN 25K10IPM	25	10	10	200		965-228	963-128

KERN Pictograms

Internal adjusting (CAL): Quick setting of the balance's accuracy with internal adjusting weight (motordriven).
CAL INT

Adjusting program (CAL): For quick setting of the balance's accuracy. External adjusting weight required.
CAL EXT

Memory: Balance contains memories, e.g. for item data, weighing data, tare weights etc. PLU
MEMORY

Data interface RS-232: To connect the balance to a printer, PC or network
RS 232

Control outputs (optocoupler, digital I/O) to connect relays, signal lamps, valves, etc.
SWITCH

Interface for second balance: for direct connection of a second balance
DUAL

Network interface: For connecting the scale to an Ethernet network. With KERN products you can also use a universal RS-232/LAN converter.
LAN

GLP/ISO record keeping: of weighing data with date, time and identification-no. Only with printers from KERN.
GLP PROTOCOL

Piece counting: Reference quantities selectable. Display can be switched from piece to weight
PCS

Net-total weighing: weight of tare cup and weight of components memorized in two separate stores.
RECIPE

Percentage determination: Determining the deviation in % from the target value (100%).
PERCENT

Weighing units: Can be switched to e. g. nonmetric units at the touch of a key. See balance model. Please refer to KERN's website for more details.
UNIT

Weighing with tolerance range: Upper and lower limiting can be programmed individually, e.g. dosing/sorting and portioning.
TOL

Vibration-free weighing: (Animal weighing program) Vibrations are filtered out so that a stable weight is obtained.
MOVE

Spray and dust protection IPxx: The type of protection is shown by the pictogram. For details see the glossary.
IP

Stainless steel: the balance is protected against corrosion.
INOX

Suspended weighing: load support with hook on the underside of the balance.
UNDER

Battery operation: Ready for battery operation.The battery type is specified for each device.
BATT

Rechargeable battery pack: rechargeable set.
ACCU

Mains adapter: 230V/50Hz in standard version for Germany. On request GB, AUS or USA version.
230 V

Power supply: integrated in balance. 230V/50Hz in Germany. More standards e. g. GB, AUS, USA on request.
230 V

Strain gauges: Electrical resistor on an elastic deforming body.
DMS

Tuning fork principle: A resonating body is electromagnetically excited, causing it to oscillate.
T-FORK

Electromagnetic force compensation: Coil in a permanent magnet. For the most accurate weighings.
FORCE

Single cell technology: Advanced version of the force compensation principle with the highest level of precision.
SC TECH

Verification possible: The time required for verification is specified in the pictogram.
M +3 DAYS

DKD calibration possible: The time required for DKD calibration is shown in days in the pictogram.
DKD +3 DAYS

Package shipment: The time required to manufacture the product internally is shown in days in the pictogram.
DAYS

Pallet shipment: The time required to manufacture the product internally is shown in days in the pictogram.
DAYS

Warranty: The warranty period is shown in the pictogram.
3 YEARS WARRANTY

Precision is our business

To ensure the high level of precision of your balance, KERN offers the appropriate test weight package for your balance. This consists of the test weight, box and DKD calibration certificate, as proof of its accuracy. The best way to ensure proper balance calibration.

In the extensive KERN test weight range, you will find test weights in the international OIML error limit classes: E1, E2, F1, F2, M1, M2, and M3 with weights from 1 mg to 2000 kg.

The KERN DKD calibration laboratory for electronic balances and weights has been accredited by DKD since 1994 and today is one of the most modern and best-equipped DKD calibration laboratories for balances, test weights and force-measurement in Europe.
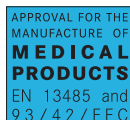(DKD = German Calibration Service ~ UKAS)

Thanks to the high level of automation, we can carry out DKD calibration of balances, test weights and force-measuring devices 24 hours a day, 7 days a week.

Range of services:
- DKD calibration of balances with a maximum load of up to 6000 kg
- DKD calibration of weights in the range of 1 mg – 500 kg
- Database supported management of checking equipment and reminder service
- Calibration of force-measuring devices
- DKD calibration certificates in the following languages
  D, GB, F, I, E, NL, PL

Do you have questions about your scale, the corresponding test weight or the calibration service ? Your KERN specialist dealer will be pleased to assist you.

Your KERN specialist dealer:

KERN – Professional measuring. Measuring technology and testing services from a single source

DQS Quality Management ISO 9001:2008

DKD-K-11801

APPROVAL FOR THE MANUFACTURE OF **MEDICAL PRODUCTS** EN 13485 and 9 3 / 4 2 / E E C

APPROVAL FOR **MANUFACTURER'S INITIAL CALIBRATION** 2009/23/EEC

German Excellence Group
Member