## School balance KERN EFS

NEW  SCHOOL ★  5×



## Perfect school balances for experimental teaching
## – easy to use, space-saving, stackable

### Features

- Simple and convenient 2-key operation, making them ideal for use in schools and universities
- Tare function facilitates formulation work
- Particularly flat design
- Secure and non-slip positioning with rubber feet
- ① Stackable for space-saving storage
- ② Practical battery operation using standard batteries ensures a high level of flexibility and freedom from mains adapters, sockets, chargers, etc.

### Technical data

- Large LCD display, digit height 15 mm
- Dimensions weighing surface, plastic, W×D 134×127 mm
- Overall dimensions W×D×H 145×205×46,5 mm
- Battery operation, 4×1.5 V AA standard, operating time up to 200 h, Integrated AUTO-OFF function to preserve the batteries
- Net weight approx. 0,45 kg
- Permissible ambient temperature 10 °C / 40 °C
- **Note:** The models with the suffix -S05 are delivered in a set of 5 units. i.e. the price given in the table refers to 5 items. Cannot be delivered individually. The calibration prices refers to one single balance

### Accessories

- External universal mains adapter, with universal input and optional input socket adapters for EU, CH, GB, USA, KERN YKA-27

**STANDARD**

CAL EXT | BATT | DMS | 1 DAY

**OPTION**

MULTI | DAkkS +3 DAYS

| Model KERN | Weighing capacity [Max] g | Readability [d] g | Reproducibility g | Linearity g | Quantity delivered (balance) | Option DAkkS Calibr. Certificate DAkkS KERN |
|---|---|---|---|---|---|---|
| EFS 500-2 | 500 | 0,01 | 0,01 | ± 0,03 | 1 | 963-127 |
| EFS 200-1S05 | 220 | 0,1 | 0,1 | ± 0,3 | 5 | 963-127 |
| EFS 600-1S05 | 620 | 0,1 | 0,1 | ± 0,3 | 5 | 963-127 |
| EFS 3000-1 | 3000 | 0,1 | 0,1 | ± 0,3 | 1 | 963-127 |
| EFS 2000-0S05 | 2200 | 1 | 1 | ± 3 | 5 | 963-127 |
| EFS 5000-0S05 | 5200 | 1 | 1 | ± 3 | 5 | 963-127 |

**Internal adjusting:**
Quick setting up of the balance's accuracy with internal adjusting weight (motordriven)

**Adjusting program CAL:**
For quick setting up of the balance's accuracy. External adjusting weight required

**Easy Touch:**
Suitable for the connection, data transmission and control through PC or tablet.

**Memory:**
Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.

**Alibi memory:**
Secure, electronic archiving of weighing results, complying with the 2014/31/EU standard.

**KERN Universal Port (KUP):**
allows the connection of external KUP interface adapters, e.g. RS-232, RS-485, SB, Bluetooth, WLAN, Analogue, Ethernet etc. for the exchange of data and control commands, without installation effort

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

**RS-485 data interface:**
To connect the balance to a printer, PC or other peripherals. Suitable for data transfer over large distances. Network in bus topology is possible

**USB data interface:**
To connect the balance to a printer, PC or other peripherals

**Bluetooth* data interface:**
To transfer data from the balance to a printer, PC or other peripherals

**WiFi data interface:**
To transfer data from the balance to a printer, PC or other peripherals

**Control outputs (optocoupler, digital I/O):**
To connect relays, signal lamps, valves, etc.

**Analogue interface:**
to connect a suitable peripheral device for analogue processing of the measurements

**Interface for second balance:**
For direct connection of a second balance

**Network interface:**
For connecting the scale to an Ethernet network

**KERN Communication Protocol (KCP):**
It is a standardized interface command set for KERN balances and other instruments, which allows retrieving and controlling all relevant parameters and functions of the device. KERN devices featuring KCP are thus easily integrated with computers, industrial controllers and other digital systems

**GLP/ISO log:**
The balance displays weight, date and time, independent of a printer connection

**GLP/ISO log:**
With weight, date and time. Only with KERN printers.

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

**Recipe level A:**
The weights of the recipe ingredients can be added together and the total weight of the recipe can be printed out

**Recipe level B:**
Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display

**Totalising level A:**
The weights of similar items can be added together and the total can be printed out

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

**Weighing units:**
Can be switched to e.g. nonmetric units. See balance model. Please refer to KERN's website for more details

**Weighing with tolerance range:**
(Checkweighing) Upper and lower limiting can be programmed individually, e.g. for sorting and dosing. The process is supported by an audible or visual signal, see the relevant model

**Hold function:**
(Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value

**Protection against dust and water splashes IPxx:**
The type of protection is shown in the pictogram.

**Suspended weighing:**
Load support with hook on the underside of the balance

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

**Rechargeable battery pack:**
Rechargeable set

**Universal plug-in power supply:**
with universal input and optional input socket adapters for
A) EU, CH, GB
B) EU, CH, GB, USA
C) EU, CH, GB, USA, AUS

**Plug-in power supply:**
230V/50Hz in standard version for EU, CH. On request GB, USA or AUS version available

**Integrated power supply unit:**
Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, USA or AUS on request

**Weighing principle: Strain gauges**
Electrical resistor on an elastic deforming body

**Weighing principle: Tuning fork**
A resonating body is electromagnetically excited, causing it to oscillate

**Weighing principle: Electromagnetic force compensation**
Coil inside a permanent magnet. For the most accurate weighings

**Weighing principle: Single cell technology:**
Advanced version of the force compensation principle with the highest level of precision

**Verification possible:**
The time required for verification is specified in the pictogram

**DAkkS calibration possible (DKD):**
The time required for DAkkS calibration is shown in days in the pictogram

**Factory calibration (ISO):**
The time required for Factory calibration is shown in days in the pictogram

**Package shipment:**
The time required for internal shipping preparations is shown in days in the pictogram

**Pallet shipment:**
The time required for internal shipping preparations is shown in days in the pictogram