

IoT-Line Bench Scale KERN FCB













#### Technical data

- Backlit LCD display, digit height 25 mm
- · Dimensions weighing surface, stainless steel, W×D 252×225 mm
- Overall dimensions W×D×H 322×267×91 mm
- · Net weight approx. 3,8 kg
- · Permissible ambient temperature
- KERN FCB: 0 °C/40 °C
- KERN FCB-M: -10 °C/40 °C

#### Accessories

- · Protective working cover, scope of delivery 5 items, KERN YBA-A14S05
- · Internal rechargeable battery pack, operating time up to 48 h without backlight, charging time approx. 8 h, KERN YKR-01
- 11 Signal lamp for visual support of weighing with tolerance range. connection is only possible in combination with KUP-01 (RS-232 interface),
- External data interface RS-232, interface cable included, KERN KUP-01
- · External data interface USB, interface cable included, KERN KUP-03
- Ethernet interface adapter, KERN KUP-04
- · WiFi interface adapter, KERN KUP-05
- · Bluetooth interface adapter, KERN KUP-06
- 2 Extension box for connecting up to three interfaces in parallel, KERN KUP-13

## The new FCB: Checkweighing and portioning scale with up to three interfaces, with optional verification

#### **Features**

- · Standardised, convenient KERN concept of operation, consistency across products in terms of design, menu structure, button functions, interface connection and interface protocol
- · Compact size, practical for small spaces
- Industry 4.0: Data and control commands can be exchanged through the KERN Universal Port (KUP) using one interface, which can be connected to the housing, or through three parallel interfaces using the KUP Extension box. The following interfaces are available as an option: RS-232, USB, Ethernet, WiFi, Bluetooth

\*

- · Data guery and remote control of the balance using a computer or CRM/ERP systems using the KERN Communication ProtocolHigh mobility: Thanks to battery operation/rechargeable battery operation (optional), compact, lightweight construction, it is suitable for the use in several locations (production, warehouse, dispatch department, etc.)
- · Weighing with tolerance range (checkweighing): Input of two upper and two lower limit values through four arrow keys. An audible and visual signal assists with the portioning, dispensing or grading
- · Summation of weight values
- Protective working cover included with delivery





+3 DAYS

■+

Model		Weighing	Readability	Verification	Minimal load	Smallest part		Options	
		capacity		value		weight	Verification	DAkkS Calibr. Certificate	
		[Max]	[d]	[e]	[Min]	(Normal)	MIII	DAkkS	
KERN		kg	g	g	g	g/piece	KERN	KERN	
FCB 6K-5	NEW	6	0,05	-	-	0,5	-	963-128	
FCB 8K0.1	NEW	8	0,1	-	-	1	-	963-128	
FCB 12K-4	NEW	12	0,1	-	-	1	-	963-128	
FCB 12K1	NEW	12	1	-	-	10	-	963-128	
FCB 30K-4	NEW	30	0,2	-	-	2	=	963-128	
FCB 30K1	NEW	30	1	-	-	10	-	963-128	
Multi-division balance, with increasing or decreasing load, it switches automatically									

to the next largest or smallest weighing range [Max] and readout [d] 965-228 FCB 6K-3DM 3 | 6 1 | 2 1 | 2 20 963-128 FCB 15K-3DM 6 | 15 2 | 5 2 | 5 40 965-228 963-128 5 | 10 5 | 10 965-228 15 | 30 100 10 963-128 FCB 30K-3DM

Note: For devices that require verification (conformity assessment according to NAWI 2014/31/EU), please include the verification when placing your order. The initial verification is not possible after delivery. Please inform the full address of the location of use for the initial verification.

### **BALANCES & TEST SERVICE 2024**

KERN PICTOGRAMS





#### 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



#### **EasyTouch**

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, WIFI, Analogue, Ethernet etc. for the exchange of data and control commands, without installation effort



## **RS-232 Data interface**

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 intern The balance displays

weight, date and time, independent of a printer connection



#### **GLP/ISO log Printer**

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



#### 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



BATT

### 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, US C) EU, CH, GB, US, 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



### **Conformity Assessment**

The time required for conformity assessment 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



The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by KERN & SOHN GmbH is under license. Other trademarks and trade names are those of their respective owners.