## **KERN BALANCES & TEST SERVICES CATALOGUE 2019**

# KERN

## Counting scale KERN IFS



Industrial counting scale with convenient decimal keypad for easy data entry – now also with EC type approval [M], counting resolution up to 75000 points

## Features

- Tough industry standard suitable for use in harsh industrial applications
- Ergonomic display device with large keypad and high-contrast LCD display for easy entry and reading of, e.g., tare weights, reference weights, limit values etc.
- Three displays for weight display (verifiable), reference weight, total pieces
- 100 item memories for master data such as reference weight, reference quantity, container weight (PRE-TARE) etc.
- Printout of date and time for GLP and GMP compliant data logging

- **Precise counting:** The manual reference weight optimisation gradually improves the average value of the piece weight
- $\boldsymbol{\cdot}$  Totalising of pieces when counting
- Protective working cover included with delivery

## **Technical data**

- Large backlit LCD displays, digit height 16,5 mm
- Dimensions weighing surface, stainless steel
  230×230×110 mm
  - 300×240×110 mm
- 400×300×120 mm
- 500×400×140 mm
- 650×500×140 mm



## Dimensions of display device W×D×H 260×150×65 mm

- Cable length of display device approx. 3 m
- Permissible ambient temperature -10 °C/40 °C

## Accessories

- **Protective working cover**, scope of delivery: 5 items, KERN KFB-A02S05
- **Stand** to elevate display device, Height of stand approx. 330 mm, for models with weighing plate size **B**, **D**, **D**, **H**, KERN IFB-A01

Column height approx. 600 mm, for models with weighing plate size **D**, **E**, KERN IFB-A02

- Rechargeable battery pack internal, operating time up to 40 h, without backlight, charging time approx. 12 h, must be ordered at purchase, KERN KFB-A01
- Further details, plenty of further accessories and suitable printers see *Accessories*

Model	Weighing	Readability	Verification	Smallest part	Counting	Net weight	Weighing		Option			
	capacity		value	weight	resolution		plate		Verifica	tion	DAkkS Calibr. Certificate	
	[Max]	[d]	[e]	[Normal]		approx.			MIII		DAkkS	
KERN	kg	g	g	g/piece	Points	kg			KERN		KERN	
Dual-range balance switches automatically to the next largest weighing capacity [Max] and readibility [d]												
IFS 6K-4S	3   6	0,1   0,2	-	1	60.000	4,6	A		-		963-128	
IFS 10K-4	6   15	0,1   0,2	-	2	75.000	6	В		-		963-128	
IFS 30K0.2DL	12   30	0,2   0,5	-	5	60.000	11	C		-		963-128	
IFS 60K0.5D	30   60	0,5   1	-	10	60.000	10	В		-		963-129	
IFS 60K0.5DL	30   60	0,5   1	-	10	60.000	12	C		-		963-129	
IFS 100K-3	75   150	1   2	-	25	60.000	12	D		-		963-129	
IFS 100K-3L	75   150	1   2	-	25	60.000	20	E		-		963-129	
IFS 300K-3	150   300	2   5	-	50	60.000	22	E		-		963-129	1
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.												
IFS 6K-3SM	3   6	1   2	1   2	1	60.000	6	A		965-228		963-128	
IFS 6K-3M	3   6	1   2	1   2	1	60.000	6	В		965-228		963-128	
IFS 10K-3M	6   15	2   5	2   5	2	75.000	6	В		965-228		963-128	
IFS 10K-3LM	6   15	2   5	2   5	2	75.000	10	C		965-228		963-128	
IFS 30K-3M	15   30	5   10	5   10	5	60.000	10	C		965-228		963-128	
IFS 60K-2M	30   60	10   20	10   20	10	60.000	11	C		965-229		963-129	
IFS 60K-2LM	30   60	10   20	10   20	10	60.000	13	D		965-229		963-129	
IFS 100K-2M	60   150	20   50	20   50	25	60.000	12	D		965-229		963-129	
IFS 100K-2LM	60   150	20   50	20   50	25	60.000	22	E		965-229		963-129	



## **KERN BALANCES & TEST SERVICES CATALOGUE 2019**

KCP

PROTOCOL



## Pictograms

#### Internal adjusting:

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

#### Adjusting program CAL:

For quick setting up of the balance's accuracy. External adjusting weight required



CAL EXT

### Easy Touch:

Suitable for the connection, data transmission and control through PC, tablet or smartphone Memory:

#### Balance memory capacity, e.g. for article data, MEMORY

weighing data, tare weights, PLU etc. Alibi memory:

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



• 6534 •

ALIBI

## 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 RS 485 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



## WLAN 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



ANALOG

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



Network interface: For connecting the scale to an Ethernet network



#### Wireless data transfer:

between the weighing unit and the evaluation unit using an integrated radio module

\*The Bluetooth<sup>®</sup> 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.

## **KERN – Precision is our business**

To ensure the high precision of your balance KERN offers you the the appropriate test weight in the international OIML error limit classes E1-M3 from 1 mg - 2500 kg. In combination with a DAkkS calibration certificate the best pre-requisite for proper balance calibration.

The KERN DAkkS calibration laboratory today is one of the most modern and bestequipped DAkkS calibration laboratories for balances, test weights and force-measurement in Europe

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

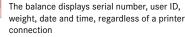
#### Range of services:

- · DAkkS calibration of balances with a maximum load of up to 50 t
- · DAkkS calibration of weights in the range of 1 mg 2500 kg · Volume determination and measuring of magnetic susceptibility (magnetic
- characteristics) for test weights · Database supported management of checking equipment and reminder service
- · Calibration of force-measuring devices
- · DAkkS calibration certificates in the following languages DE, GB, FR, IT, ES, NL, PL
- · Conformity evaluation and reverification of balances and test weights



PCS

GLP/ISO log:



**KERN Communication Protocol (KCP):** 

It is a standardized interface command set for

KERN balances and other instruments, which

parameters and functions of the device. KERN

devices featuring KCP are thus easily integrated

with computers, industrial controllers and other

allows retrieving and controlling all relevant

## GLP/ISO log:

With weight, date and time. Only with KERN PRINTER printers

## **Piece counting:**

Reference quantities selectable. Display can be switched from piece to weight

#### Recipe level A: 4

The weights of the recipe ingredients can be RECIPE 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

#### **Recipe level C: ∠**<sup>c</sup>



Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display, multiplier function, adjustment of recipe when dosages are exceeded or barcode recognition



The weights of similar items can be added SUM together and the total can be printed out

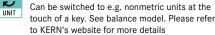


TOL

Percentage determination:

Determining the deviation in % from the target value (100 %)

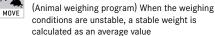
#### Weighing units: S

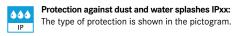


#### Weighing with tolerance range: ○ 3)

(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

#### M-Hold function:





#### Stainless steel:

The balance is protected against corrosion

### Suspended weighing:

Load support with hook on the underside of the balance

#### **Battery operation:**

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



INOX

Rechargeable battery pack: Rechargeable set



## Universal mains adapter:

with universal input and optional input socket adapters for A) EU, CH; B) EU, CH, GB, USA; C) EU, CH, GB, USA, AUS

#### Mains adapter:

230V/50Hz in standard version for EU. On 230 V request GB, USA or AUS version available

#### Power supply:



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



SC TECH

Μ

+3 DAYS

DAkkS

+3 DAYS

1 DAY

2 DAYS

Your KERN specialist dealer:

#### Weighing principle: Tuning fork: A resonating body is electromagnetically

excited, causing it to oscillate

#### s T compensation FORCE

accurate weighings

Verification possible:

Package shipment:

Pallet shipment:

DAkkS calibration possible:

shown in days in the pictogram

the pictogram

## Weighing principle: Electromagnetic force Coil inside a permanent magnet. For the most

Weighing principle: Single cell technology:

The time required for verification is specified in

Advanced version of the force compensation

principle with the highest level of precision

The time required for DAkkS calibration is

The time required for internal shipping

The time required for internal shipping

preparations is shown in days in the pictogram

preparations is shown in days in the pictogram