# **KERN BALANCES & TEST SERVICES CATALOGUE 2021**

#### 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, 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
- 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
- C 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
- II Stand to elevate display device Height of stand approx. 330 mm, KERN IFB-A01

Height of stand approx. 600 mm, for models with weighing plate size **D**, **E**, KERN IFB-A02

- Internal rechargable battery pack, operating time up to 40 h, without backlight, charging time approx. 12 h, must be ordered at purchase, KERN KFB-A01
- ESD drain to protect against electrostatic discharge e.g. for electrostatically-charged weighing objects or people who work with the scale, KERN YGR-01
- Further details, plenty of further accessories and suitable printers see *Accessories*



								IFS-M				
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	T
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	C		-		963-129	
IFS 60K0.5DL	30   60	0,5   1	-	10	60.000	12	D		-		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	
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	
IFS 300K-2M	150   300	50   100	50   100	50	60.000	22	E		965-229		963-129	

#### KERN & SOHN GmbH · Ziegelei 1 · 72336 Balingen · Germany · Tel. +49 7433 9933-0 · www.kern-sohn.com · info@kern-sohn.com

# **KERN BALANCES & TEST SERVICES CATALOGUE 2021**

KCP

PROTOCOL

GLP

INTERN

PRINTER

PCS

RECIPE

RECIPE

- 88'

SUM

PERCENT

C

UNIT

- → +<

TOL

^-

digital systems GLP/ISO log:

connection GLP/ISO log:

printers

**Piece counting:** 

Recipe level A:

Recipe level B:

**Totalising level A:** 

value (100 %)

Weighing units:

Hold function:

**KERN Communication Protocol (KCP):** 

It is a standardized interface command set for

KERN balances and other instruments, which

devices featuring KCP are thus easily integrated

with computers, industrial controllers and other

The balance displays serial number, user ID,

With weight, date and time. Only with KERN

Reference quantities selectable. Display can

The weights of the recipe ingredients can

be added together and the total weight of

Internal memory for complete recipes with

The weights of similar items can be added

Determining the deviation in % from the target

Can be switched to e.g. nonmetric units at the

(Checkweighing) Upper and lower limiting can

be programmed individually, e.g. for sorting and

dosing. The process is supported by an audible

(Animal weighing program) When the weighing

conditions are unstable, a stable weight is calculated as an average value

or visual signal, see the relevant model

touch of a key. See balance model. Please refer

together and the total can be printed out

name and target value of the recipe ingredients.

be switched from piece to weight

the recipe can be printed out

User guidance through display

Percentage determination:

to KERN's website for more details

Weighing with tolerance range:

weight, date and time, regardless of a printer

allows retrieving and controlling all relevant parameters and functions of the device. KERN



#### Pictograms



#### Internal adjusting: Quick setting up of the balance's accuracy with



### Adjusting program CAL:

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

internal adjusting weight (motordriven)



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



## 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

#### Data interface RS-232:

• 6558.• To connect the balance to a printer, PC or RS 232 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





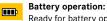
water splashes IPxx: The type of protection is shown in the pictogram

Protection against dust and

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#### UNDER the balance

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#### Ready for battery operation. The battery type

Suspended weighing:



is specified for each device

Load support with hook on the underside of



#### Rechargeable battery pack: Rechargeable set

#### Universal mains adapter:

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



#### Mains adapter:

230V/50Hz in standard version for EU, CH. On 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



#### 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



#### The time required for verification is specified +3 DAYS in the pictogram

DAkkS calibration possible (DKD): DAkkS The time required for DAkkS calibration is +3 DAYS 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:



Your KERN specialist dealer:

The time required for internal shipping preparations is shown in days in the pictogram

#### **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, EN, FR, IT, ES, NL, PL
- · Conformity evaluation and reverification of balances and test weights