

IoT-Line Platform Scale KERN IFC



## The new IFC: Robust industrial scales with up to three interfaces, with optional verification

### Features

- Tough industry standard suitable for use in harsh industrial applications
- Standardised, convenient KERN concept of operation, consistency across products in terms of design, menu structure, button functions, interface connection and interface protocol
- Industry 4.0: Data and control commands can be exchanged through the KERN Universal Port 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
- Each interface can be set up separately, e.g.:
  - Interface 1 (WiFi): Continuous sending to a PC for documentation of a process
  - Interface 2 (RS-232): Print stable weight
  - Interface 3 (analogue module): Controlling a device when the target weight is reached

- With Real Time Clock as standard: Enables you to log the weighing results with accurate time information. Even if the power supply is interrupted, the balance can continue to work with the correct time
- Available as an option with alibi memory for paperless archiving of weighing results. This also means the results of weighings with mandatory verification can be electronically evaluated and processed further
- Data query and remote control of the balance using a computer or CRM/ERP systems using the KERN Communication Protocol
- Simplified battery replacement through easily-accessible housing. Particularly advantageous for models with optional verification, as the verification seal remains intact
- Platform: weighing plate of stainless steel, painted steel base, silicone-coated aluminium load cell with protection against dust and water splashes IP65 (F IP65)
- Benchtop stand incl. wall mount for display device as standard
- Protective working cover included with delivery

### Technical data

- Large backlit LCD display, digit height 48 mm
- Weighing platform dimensions
  - A** W×D×H 230×230×106 mm
  - B** W×D×H 300×240×109 mm
  - C** W×D×H 400×300×117 mm (see larger picture)
  - D** W×D×H 500×400×127 mm
  - E** W×D×H 650×500×139 mm
  - F** W×D×H 800×600×192 mm
- Dimensions of display device W×D×H 220×145×65 mm
- Cable length of display device approx. 3 m
- Permissible ambient temperature -10 °C/40 °C

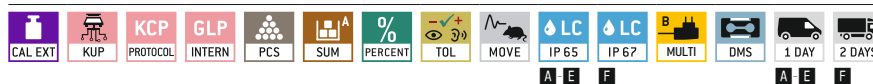
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#### Accessories

- Protective working cover, scope of delivery 5 items, KERN YBA-A18S05
- Internal rechargeable battery pack, operating time up to 48 h without backlight, charging time approx. 8 h, KERN YKR-01
- **1** Stand to elevate display device, height of stand approx. 1040 mm, KERN BFS-A07
- Column for screwing the display device to the platform, for models with weighing plate size **A** - **F** Height of stand approx. 330 mm, KERN IFB-A01
- **C**, **D**, **E**, **F** Height of stand approx. 600 mm, KERN IFB-A02
- 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
- Analogue module, KERN KUP-08
- **2** \* Extension box for connecting up to three interfaces in parallel, KERN KUP-13
- Memory module (alibi memory), KERN YMM-04
- ESD drain to protect against electrostatic discharge e.g. for electrostatically-charged weighing objects or people who work with the scale, KERN YGR-01
- Signal lamp for visual support of weighing with tolerance range, connection is only possible in combination with KUP-01 (RS-232 interface), KERN CFS-A03
- **3** Roller conveyor attachment, with smooth-running, hot-dip galvanised steel rollers with ball bearings, robust aluminium profile frame for models  $\geq 30$  kg [Max] with weighing plate size **C** KERN YRO-01
- **D** KERN YRO-02
- **E** KERN YRO-03

#### STANDARD



#### OPTION



Model	Weighing capacity [Max]	Readability	Verification value	Minimal load	Net weight approx.	Weighing plate	Verification	Options
	kg	[d]	[e]	[Min]	kg		KERN	DAkkS Calibr. Certificate
		g	g	g				DAkkS KERN
<b>IFC 3K-4</b>	3	0,1	-	-	4,6	<b>A</b>	-	963-127
<b>IFC 6K-4S</b>	6	0,2	-	-	4,6	<b>A</b>	-	963-128
<b>IFC 6K-4</b>	6	0,2	-	-	5,0	<b>B</b>	-	963-128
<b>IFC 10K-4</b>	15	0,5	-	-	5,0	<b>B</b>	-	963-128
<b>IFC 10K-4L</b>	15	0,5	-	-	8	<b>C</b>	-	963-128
<b>IFC 30K-3</b>	30	1	-	-	8	<b>C</b>	-	963-128
<b>IFC 60K-3</b>	60	2	-	-	7	<b>C</b>	-	963-129
<b>IFC 60K-3L</b>	60	2	-	-	11	<b>D</b>	-	963-129
<b>IFC 150K-3</b>	150	5	-	-	11	<b>D</b>	-	963-129
<b>IFC 150K-3L</b>	150	5	-	-	18	<b>E</b>	-	963-129
<b>IFC 300K-2</b>	300	10	-	-	20	<b>E</b>	-	963-129
<b>IFC 600K-2</b>	600	20	-	-	40	<b>F</b>	-	963-130

Multi-division balance, with increasing or decreasing load, it switches automatically to the next largest or smallest weighing range [Max] and readout [d].

<b>IFC 6K1DSM</b>	3   6	1   2	1   2	20   40	4,6	<b>A</b>	965-228	963-128
<b>IFC 6K1DM</b>	3   6	1   2	1   2	20   40	6	<b>B</b>	965-228	963-128
<b>IFC 15K2DM</b>	6   15	2   5	2   5	40   100	5,0	<b>B</b>	965-228	963-128
<b>IFC 15K2DLM</b>	6   15	2   5	2   5	40   100	7	<b>C</b>	965-228	963-128
<b>IFC 30K5DM</b>	15   30	5   10	5   10	100   200	8	<b>C</b>	965-228	963-128
<b>IFC 60K10DM</b>	30   60	10   20	10   20	200   400	8	<b>C</b>	965-229	963-129
<b>IFC 60K10DLM</b>	30   60	10   20	10   20	200   400	10	<b>D</b>	965-229	963-129
<b>IFC 150K20DM</b>	60   150	20   50	20   50	400   1000	11	<b>D</b>	965-229	963-129
<b>IFC 150K20DLM</b>	60   150	20   50	20   50	400   1000	20	<b>E</b>	965-229	963-129
<b>IFC 300K50DM</b>	150   300	50   100	50   100	1000   2000	20	<b>E</b>	965-229	963-129
<b>IFC 600K100DM</b>	300   600	100   200	100   200	2000   4000	44	<b>F</b>	965-230	963-130

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.

#### **NEW** New model

**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 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, 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

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