IoT-Line Industrial Platform Scale KERN IFC

IoT ready

NEW

Easy Touch

The new IFC: Robust industrial scales with up to three interfaces, also 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
- For further information on KUP and KCP see page 20/21
- 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
- **1** Platform: weighing plate of stainless steel, painted steel base, silicone-coated aluminium load cell with protection against dust and water splashes IP65
- Benchtop stand incl. wall mount for display device as standard
- Protective working cover included with delivery
- 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

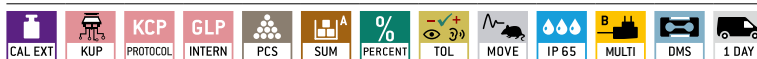## IoT-Line Industrial Platform Scale KERN IFC

Technical Data

- Large backlit LCD display, digit height 50 mm
- Weighing plate dimensions, stainless steel
  - **A** W×D×H 400×300×114 mm
  - **B** W×D×H 500×400×124 mm
  - **C** W×D×H 650×500×136 mm
  - **D** W×D×H 800×600×189 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

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
- **2** Stand to elevate display device, height of stand
  approx. 1040 mm, KERN BFS-A07
- Column to screw on to the platform,
  for models with weighing plate size
  A, **B**, **C** Height of stand approx. 330 mm,
  KERN IFB-A01
  B, **C** 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
- External data interface Ethernet,
  KERN KUP-04
- External data interface WiFi, interface
  cable included, KERN KUP-05

- Bluetooth interface adapter,
  KERN KUP-06
- Analogue module, KERN KUP-08
- **3** 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
- **4** Roller conveyor attachment, with smooth-
  running, hot-dip galvanised steel rollers with
  ball bearings, robust aluminium profile frame,
  for models ≥ 30 kg [Max] with weighing plate size
  A KERN YRO-01
  B KERN YRO-02
  C KERN YRO-03

STANDARD

| CAL EXT | KUP | KCP PROTOCOL | GLP INTERN | PCS | SUM | PERCENT | TOL | MOVE | IP 65 | MULTI | DMS | 1 DAY |

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OPTION

| ET | RS 232 | USB | BT 4.0 | WIFI | ANALOG | LAN | ACCU | DAkkS +3 DAYS |

FACTORY

| ALIBI | M +3 DAYS |
IFC-M

*Note: In addition to the RS-232 data interface,
which is integrated as standard, only one other
data interface can be installed and operated

Model	Weighing capacity [Max]	Readability [d]	Verification value [e]	Minimal load [Min]	Net weight approx.	Weighing plate	Verification	Options
							M⬛	DAkkS Calibr. Certificate
KERN	kg	g	g	g	kg		KERN	DAkkS KERN
IFC 10K-4L NEW	15	0,5	–	–	8	**A**	–	963–128
IFC 30K-3 NEW	30	1	–	–	8	**A**	–	963–128
IFC 60K-3 NEW	60	2	–	–	8	**A**	–	963–129
IFC 60K-3L NEW	60	2	–	–	11	**B**	–	963–129
IFC 600K-2 NEW	600	20	–	–	44	**D**	–	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].

Model	Weighing capacity [Max]	Readability [d]	Verification value [e]	Minimal load [Min]	Net weight approx.	Weighing plate	Verification	DAkkS Calibr. Certificate
IFC 30K5DM NEW	15 | 30	5 | 10	5 | 10	100 | 200	8	**A**	965–228	963–128
IFC 60K10DM NEW	30 | 60	10 | 20	10 | 20	200 | 400	8	**A**	965–229	963–129
IFC 60K10DLM NEW	30 | 60	10 | 20	10 | 20	200 | 400	11	**B**	965–229	963–129
IFC 150K20DM NEW	60 | 150	20 | 50	20 | 50	400 | 1000	11	**B**	965–229	963–129
IFC 150K20DLM NEW	60 | 150	20 | 50	20 | 50	400 | 1000	20	**C**	965–229	963–129

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