# **KERN BALANCES & TEST SERVICES CATALOGUE 2020**

A/D converter box KERN YKV-01

Modern A/D converter for the rapid recording of weighing data and forwarding it to the most varied output channels such as tablets, networks, SPS controllers, etc. - ideal for operating balances in systems or conveyors

# Features

- With this A/D converter box your weighing processes are ready for the requirements of Industry 4.0. Simply connect a weighing platform or measuring cell, integrate the A/D converter box into the network and start weighing
- · For rapid transfer of weighing data to connected networks, computers, etc.
- · USB and RS-232 data interface standard, Power supply via USB interface
- Transfer formats are freely configurable
- · Functions: Weighing, taring
- · Internal resolution 16 million divisions
- Measuring frequency 10 Hz
- · Easy configuration using the software supplied
- Robust plastic die-cast housing
- I Suitable for wall mounting and DIN track
- mount · Compatible with all KERN weighing platforms

- · Included with delivery:
  - Industrial platform KERN KFP
  - USB cable incl. mains plug
  - DIN rail mounting bracket
  - A/D converter box KERN YKV-01
  - 2 Configuration software for adjusting and managing the KERN KDP, for large-format display of the values collected on the PC as well as transfer of this data to other Apps and programs. The displayed result can therefore be converted to any format for communication with the different user programs, such as, for example, e.g. SAP, Oracle etc.

# **Technical Data**

- Overall dimensions W×D×H 100×127×28 mm
- Net weight approx. 1,2 kg
- Permissible ambient temperature -10 °C/40 °C

# Accessories

- Bluetooth data interface, KERN YKV-A02
- WiFi data interface, KERN YKV-A01
- · DIN rail mounting bracket for KERN YKV, **KERN YKV-A03**
- Software BalanceConnection, flexible recording or transfer of measurements, particularly to Microsoft® Excel or Access as well as transfer of this data to other Apps and programs. The displayed result can therefore be converted to any format for communication with the different user programs, such as, for example, e.g. SAP, for details see page 175, KERN SCD-4.0

CAL EXT RS 232 USB	LAN PROTOCOL PRINTER UNIT 1 DAY YKV-02	BT 4.0 WLAN
Model		Standard interfaces

FACTORY

KERN YKV-01 RS-232, USB YKV-02 RS-232, USB, Ethernet

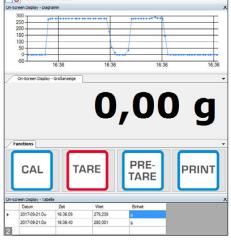
Datasheet\_YKV\_V1

STANDARD

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# **KERN BALANCES & TEST SERVICES CATALOGUE 2020**



# 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,

ALIBI complying with the 2014/31/EU standard.

# Data interface RS-232:

• 6550 • To connect the balance to a printer, PC or RS 232 network

# RS-485 data interface:

• 6534 • 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:

Bluetooth\* data interface:

To connect the balance to a printer, PC or other peripherals

## ₿ BT

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.

to connect a suitable peripheral device for ANALOG

analogue processing of the measurements Interface for second balance:

For direct connection of a second balance



# Network interface:

Analogue interface:

For connecting the scale to an Ethernet network



LAN

## 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

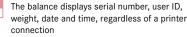


PCS

PROTOCOL

GLP/ISO log:

digital systems



**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

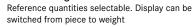
with computers, industrial controllers and other

allows retrieving and controlling all relevant

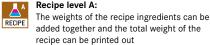
# GLP/ISO log:

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

# **Piece counting:**



## Recipe level A:



# 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

#### Totalising level A:

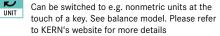
The weights of similar items can be added SUM together and the total can be printed out



Percentage determination:

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

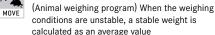
#### Weighing units: C

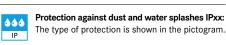


#### Weighing with tolerance range: ○ 3)

(Checkweighing) Upper and lower limiting can TOL 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:





KERN

#### 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, GB; B) EU, CH, GB, USA; C) EU, CH, GB, USA, AUS

## Mains adapter:

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

(((1))) T-FORK

s T

Weighing principle: Tuning fork A resonating body is electromagnetically

excited, causing it to oscillate

# Weighing principle: Electromagnetic force

compensation FORCE Coil inside a permanent magnet. For the most accurate weighings

SC TECH

#### Weighing principle: Single cell technology: Advanced version of the force compensation principle with the highest level of precision

Μ

#### Verification possible: The time required for verification is specified in

Package shipment:

Pallet shipment:

DAkkS calibration possible:

is shown in days in the pictogram

The time required for DAkkS calibration

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

the pictogram

+3 DAYS

DAkkS

+3 DAYS

1 DAY

2 DAYS

Your KERN specialist dealer: