

# Operating instructions platform

## KERN IOC

Version 1.1  
2021-06  
GB



IOC-BA-e-2111



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Version 1.1 2021-6

## Operating manual Platform

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### Contents

<b>1</b>	<b>General hints</b> .....	<b>3</b>
<b>2</b>	<b>Declaration of conformity</b> .....	<b>3</b>
<b>3</b>	<b>Appliance overview</b> .....	<b>4</b>
<b>4</b>	<b>Safety instructions</b> .....	<b>5</b>
<b>5</b>	<b>Assembly of the platform</b> .....	<b>6</b>
<b>5.1</b>	<b>Levelling</b> .....	<b>6</b>
<b>6</b>	<b>Cleaning</b> .....	<b>7</b>
<b>6.1</b>	<b>Packaging / return transport</b> .....	<b>7</b>
<b>7</b>	<b>Operation</b> .....	<b>7</b>
<b>8</b>	<b>Cleaning</b> .....	<b>7</b>
<b>9</b>	<b>Technical data</b> .....	<b>8</b>
<b>9.1</b>	<b>Dimensions (Measurements in mm)</b> .....	<b>11</b>

## 1 General hints

These operating instructions contain all data necessary for placing and commissioning the platform:

The display unit for the platform balance KERN IOC is the model KERN KIB-TM.

Information about

- **Mains connection**  
(power is supplied via the connecting cable of the display unit)
- **Initial Commissioning**
- **Connection of peripheral devices**
- **Adjustment and Verification**  
(only the complete balance can be verified, i.e. the platform in connection with the display unit KERN KIB-TM).

and the correct operation you will find in the operating instructions included in the scope of delivery of the display unit.

## 2 Declaration of conformity

The current EC/EU Conformity declaration can be found online in:

[www.kern-sohn.com/ce](http://www.kern-sohn.com/ce)

### 3 Appliance overview



1. Platform
2. Footscrews
3. Display unit KIB-TM

## 4 Safety instructions

The product safety has a high ranking at KERN & Sohn.

Non-compliance with the following instructions will result in damage on the platform and / or cause injuries.

- ⇒ Before working on the platform read these instructions.  
Keep these instructions for a later use.
- ⇒ Be careful when transporting or lifting heavy devices.
- ⇒ Only qualified personnel may install and care of the platform.
- ⇒ Before cleaning, installation and maintenance, disconnect the platform from the power supply.
- ⇒ The platform must have been stabilized to room temperature, before power supply is switched on.
- ⇒ Do not use the platform in an explosive environment.

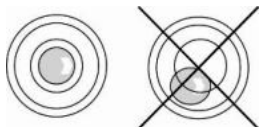
## 5 Assembly of the platform

On the installation site observe the following:

- Place the platform on a firm, level surface.  
The floor at the installation site must be able to carry safely the weight of the maximally loaded platform at the resting points. At the same time it should be sufficiently stable, that no vibrations may occur during weighing work.
- In the installation site possibly no vibrations, e.g. by neighbouring machines should occur.
- Do not use the platform in an explosive environment.
- Avoid extreme heat as well as temperature fluctuation caused by installing next to a radiator or in the direct sunlight.
- Protect the platform against direct draughts e.g. due to open windows and doors.
- Use the platform only in dry environment, protect it against high humidity, vapours and dust.
- Do not expose the device to extreme dampness for longer periods of time. Non-permitted condensation (condensation of air humidity on the appliance) may occur if a cold appliance is taken to a considerably warmer environment. In this case, acclimatize the disconnected appliance for ca. 2 hours at room temperature.
- Avoid jarring during weighing.
- Avoid static charge of goods to be weighed or weighing container.
- Keep away chemicals (such as liquids or gasses), which could attack and damage the balance inside or from outside.
- Keep IP protection of the device.
- Major display deviations (incorrect weighing results) may be experienced should electromagnetic fields (e.g. due to mobile phones or radio equipment), static electricity accumulations or instable power supply occur. Change location or remove source of interference.

### 5.1 Levelling

Accurate weighing results require a platform with perfect horizontal alignment. During initial installation and after each change of work area it is necessary to level the platform.



⇒ As the air bubble is located under the weighing plate, remove it.

⇒ Level balance with foot screws until the air bubble of the water balance is in the prescribed circle.

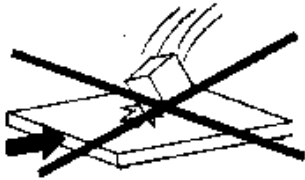
## 6 Cleaning

### 6.1 Packaging / return transport



- ⇒ Keep all parts of the original packaging for a possibly required return.
- ⇒ Only use original packaging for returning.
- ⇒ Secure all parts against shifting and damage.

## 7 Operation



By this way a continuous optimal performance is guaranteed:

- Avoid falling load, shock loads and impacts from the side!
- For weighing operation, all objects must be placed centrally of the weighing bridge and may not hang over the edges.
- Check adjustment at regular intervals.

## 8 Cleaning

- ⇒ Clean the platform with a soft cloth soaked with a mild cleaning agent.
- ⇒ Take away the weighing plate and remove dirt and foreign matters, which have been accumulated below. Do not use hard or sharp objects for this. Do not open the platform.

## 9 Technical data

KERN	IOC 6K-3M	IOC 10K-3M	IOC 10K-3LM	IOC 30K-3M	IOC 60K-2M
Readability (d)	1 g / 2 g	2 g / 5 g	2 g / 5 g	5 g / 10 g	10 g / 20 g
Weighing range (max)	3 kg / 6 kg	6 kg / 15 kg	6 kg / 15 kg	15 kg / 30 kg	30 kg / 60 kg
Verification value (e)	1 g / 2 g	2 g / 5 g	2 g / 5 g	5 g / 10 g	10 g / 20 g
Minimum load	0.02 kg / 0,04 kg	0.04 kg / 0.1 kg	0.04 kg / 0.1 kg	0.1 kg / 0.2 kg	0.2 kg / 0.4 kg
Reproducibility	1 g / 2 g	2 g / 5 g	2 g / 5 g	5 g / 10 g	10 g / 20 g
Linearity	± 3 g / 6 g	± 6 g / 15 g	± 6 g / 15 g	± 15 g / 30 g	± 30 g / 60 g
Eccentric load	0.005 kg/0.01 kg	0.01 kg / 0.25 kg	0.01 kg / 0.25 kg	0.025 kg/0.05 kg	0.05 kg / 0.1 kg
Stabilization time (typical)	2 sec.				
Admissible ambient temperature	- 10° C .... + 40° C				



<b>KERN</b>	<b>IOC 60K-2LM</b>	<b>IOC 100K-2M</b>	<b>IOC 100K-2LM</b>	<b>IOC 300K-2M</b>	<b>IOC 600K-1M</b>
Readability (d)	10 g / 20 g	20 g / 50 g	20 g / 50 g	50 g / 100 g	100 g / 200 g
Weighing range (max)	30 kg / 60 kg	60 kg / 150 kg	60 kg / 150 kg	150 kg / 300 kg	300 kg / 600 kg
Verification value (e)	10 g / 20 g	20 g / 50 g	20 g / 50 g	50 g / 100 g	100 g / 200 g
Minimum load	0.2 kg / 0,4 kg	0.4 kg / 1 kg	0.4 kg / 1 kg	1 kg / 2 kg	2 kg / 4 kg
Reproducibility	10 g / 20 g	20 g / 50 g	20 g / 50 g	50 g / 100 g	100 g / 200 g
Linearity	± 30 g / 60 g	±60 / 150 g	±60 / 150 g	± 150 g / 300 g	±300 / 600 g
Eccentric load	0.05 kg / 0.1 kg	0.1 kg / 0.25 kg	0.1 kg / 0.25 kg	0.25 kg / 0.5 kg	0.5 kg / 1 kg
Stabilization time (typical)	2 sec.				
Admissible ambient temperature	- 10° C .... + 40° C				

<b>KERN (Type)</b>	<b>TIOC 6K-4-A</b>	<b>TIOC 10K-4-A</b>	<b>TIOC 10K-4L-A</b>	<b>TIOC 30K-4-A</b>	<b>TIOC 60K-3-A</b>
Model	IOC 6K-4-A	IOC 10K-4	IOC 10K-4L	IOC 30K-4	IOC 60K-3
Readability (d)	0,1 g / 0,2 g	0,2 g / 0,5 g	0,2 g / 0,5 g	0,5 g / 0,1 g	1 g / 0 g
Weighing range (max)	3 kg / 6 kg	6 kg / 15 kg	6 kg / 15 kg	15 kg / 30 kg	30 kg / 60 kg
Reproducibility	1 g / 2 g	2 g / 5 g	2 g / 5 g	5 g / 10 g	10 g / 20 g
Linearity	± 3 g / 6 g	± 6 g / 15 g	± 6 g / 15 g	± 15 g / 30 g	± 30 g / 60 g
Eccentric load	0,005 kg/0,01 kg	0,01 kg / 0,25 kg	0,01 kg / 0,025 kg	0,025 kg/0,05 kg	0,05 kg / 0,1 kg
Stabilization time (typical)	2 sec.				
Admissible ambient temperature	- 10° C .... + 40° C				

<b>KERN (Type)</b>	<b>TIOC 60K-3L-A</b>	<b>TIOC 100K-3-A</b>	<b>TIOC 100K-3L-A</b>	<b>TIOC 300K-3-A</b>	<b>TIOC 600K-2-A</b>
Model	IOC 60K-3L	IOC 100K-3	IOC 100K-3L	IOC 300K-3	IOC 600K-2
Readability (d)	1 g / 2 g	2 g / 5 g	2 g / 5 g	5 g / 10 g	1 g / 2 g
Weighing range (max)	30 kg / 60 kg	60 kg / 150 kg	60 kg / 150 kg	150 kg / 300 kg	300 kg / 600 kg
Reproducibility	10 g / 20 g	20 g / 50 g	20 g / 50 g	50 g / 100 g	100 g / 200 g
Linearity	± 30 g / 60 g	± 60 / 150 g	± 60 / 150 g	± 150 g / 300 g	± 300 / 600 g
Eccentric load	0,05 kg / 0,1 kg	0,1 kg / 0,25 kg	0,1 kg / 0,25 kg	0,25 kg / 0,5 kg	0,5 kg / 1 kg
Stabilization time (typical)	2 sec.				
Admissible ambient temperature	- 10° C .... + 40° C				

## 9.1 Dimensions (Measurements in mm)

Model		a	b	c	d	e	f
IOC 6K-3M TIOC 6K-4-A		300	300	247	104	50	237
IOC 10K-3M TIOC 10K-4-A		300	240	234	98	60	192
Weighing cell L6D	IOC 10K-3LM TIOC 10K-3L-A TIOC 10K-4L-A IOC 30K-3M TIOC 30K-4-A IOC 60K-2M TIOC 60K-3-A	400	300	337	106.5	70	247
	IOC 10K-3LM IOC 60K-2M	400	300	337	110.5	74	247
	IOC 60K-2LM IOC 60K-3L-A IOC 100K-2M TIOC 100K-3-A	500	400	432	120	83.5	342
	IOC 100K-2LM IOC 300K-2M TIOC 100K-3L-A	650	500	580	140.5	104	432
	IOC 600K-1M TIOC 600K-2-A	800	600	730	150.5	114.5	532

