

Standard

CAL EXT **Adjusting program (CAL):** for quick setting of the balance's accuracy. External adjusting weight required.

PCS **Piece counting:** reference quantities selectable. Display can be switched from piece to weight.

RS 232 **Data interface:** RS 232 C, bidirectional, for connection of printer or PC.

REZ **Net-total weighing:** weight of tare-cup and weight of components memorized in two separate stores.

% **Percentage determination:** Displays the deviation from the reference weight (100%) in % instead of grammes.

GLP **GLP/ISO record keeping** of weighing data with date, time and ident.-no. Only with printers from KERN.

UNIT **UNIT:** Weighing units can be switched to e.g. non-metric units at the touch of a key. See balance model.

230 V **Mains adapter:** 230 V / 50 Hz. Standard type D, if requested also available in standard GB, AUS or USA.

Option (addit. price)

AKU **Accu-supply:** rechargeable set.

KERN - Your DKD Calibration Partner

issues DKD calibration certificates for balances and test weights in its own accredited laboratories. It is internationally valid.

KERN is manufacturer of test weights in the international classes of accuracy E1, E2, F1, F2, M1, M2, M3, from 1 mg up to 2000 kg



DKD = German Calibration Service

KERN 440 Precision balance

The economical solution for the intelligent smart-shopper

Order Hotline: Go to back page of catalogue

STANDARD



OPTION



Delivery 1 day

2 years Warranty

OPTION DKD Certificate +5 days

Price reduction

Stainless steel weighing plate 150 x 170 mm



Large LCD display digit height 15 mm

Data transfer e.g. to a printer or PC

Protective working cover over keyboard and housing standard. Can be reordered at any time, for weighing plates with size:

- Ø 65 mm
KERN 440-210-002
- Ø 105 mm
KERN 440-330-002
- 130x130 mm
KERN 440-450-002
- 150x170 mm
KERN 440-530-002



Test weight included
Option: DKD certificate for the test weight, s. p. 75, KERN 960-477
Balance test software "Balance Cal Light" (SBD-1.0L) free of charge on KERN website, see p. 73



Battery operation possible
Monobloc battery (9 V). AUTO-OFF function after 3 min without a change of load to preserve the batteries

Rechargeable battery pack external, approx. 230 h, KERN KS-A01

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Your specialist dealer

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Accessories

KERN 440 Precision balance

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Weighing plate 65 mm with KERN 440-21 N, draft shield standard, Ø 90 mm, height 53 mm



Weighing plate Ø 105 mm with KERN 440-33 N and KERN 440-35 N



Weighing plate 130x130 mm with KERN 440-43 N, 440-45 N and 440-47 N



The different components of a mixture can be weighed in with the formula function. The total weight of all the components can be called up for control purposes. Documentation of the mixture is possible with the KERN printers ① + ②.



① **Statistics printer,**
KERN YKT-01
see page 73



② **Standard printer,**
KERN YKB-01
see page 73

Model	Read-out d g	Weighing-range Max g	Repro-ducibility g	Linearity g	Min. piece weight at piece count. g/piece	Weighing plate stainl. steel mm	OPTION Certificate DKD for balances, see p. 75 KERN
440-21 N	0,001	40	0,001	± 0,003	0,002	Ø 65	963-127
440-33 N	0,01	200	0,01	± 0,02	0,02	Ø 105	963-127
440-35 N	0,01	400	0,01	± 0,03	0,02	Ø 105	963-127
440-43 N	0,1	400	0,1	± 0,2	0,2	130x130	963-127
440-45 N	0,1	1000	0,1	± 0,2	0,2	130x130	963-127
440-47 N	0,1	2000	0,1	± 0,2	0,2	130x130	963-127
440-49 N	0,1	4000	0,1	± 0,3	0,2	170x150	963-127
440-51 N	1	4000	1	± 2	2	170x150	963-127
440-53 N	1	6000	1	± 2	2	170x150	963-128
440-55 N	0,2	6000	0,2	± 0,6	0,4	170x150	963-128

Overall dimensions WxDxH 165x230x80 mm.
Net weight approx. 1 kg.

PCS parts counting with reference 5, 10, 25, 50 pieces.
UNITS further weighing units: dwt, mom, tol.

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GB

Measurement data	440-21 N	440-33 N	440-35 N	440-43 N
Reproducibility	0,001g	0,01g	0,01g	0,1g
Linearity	+/-0,003g	+/-0,02g	+/-0,03g	+/-0,2g
Stabilisation time (s)	3	3	3	3
Sensity drift (°C)	66*10 ⁻⁶	66*10 ⁻⁶	66*10 ⁻⁶	66*10 ⁻⁶
Verification data				
Verification class	-	-	-	-
Verification value	-	-	-	-
Minimum load	-	-	-	-
Verification in the factory possible	-	-	-	-
Ambient conditions				
Permissible temperature	+10... +40°C	+10... +40°C	+10... +40°C	+10... +40°C
Permissible humidity	max. 80% (not condensating)	max. 80% (not condensating)	max. 80% (not condensating)	max. 80% (not condensating)
Piece counting				
Minimum weight	0,002g	0,02g	0,02g	0,2g
Reference quantity	5, 10, 25, 50	5, 10, 25, 50	5, 10, 25, 50	5, 10, 25, 50
Basic equipment				
Protective working cover	Yes	Yes	Yes	Yes
Accumulator	Option: external, 230h operation time without back-lit, 9h charging time	Option: external, 230h operation time without back-lit, 9h charging time	Option: external, 230h operation time without back-lit, 9h charging time	Option: external, 230h operation time without back-lit, 9h charging time
Battery-supply	9V, 12h operation time	9V, 12h operation time	9V, 12h operation time	9V, 12h operation time
Auto-Off	In battery mode after 3min	In battery mode after 3min	In battery mode after 3min	In battery mode after 3min
Stand-by	-	-	-	-
Mains adapter	EURO, UK, US, AUS, (DC 9V/300mA, minus inside)	EURO, UK, US, AUS, (DC 9V/300mA, minus inside)	EURO, UK, US, AUS, (DC 9V/300mA, minus inside)	EURO, UK, US, AUS, (DC 9V/300mA, minus inside)
Filter steps	-	-	-	-
Type of balance display	LCD	LCD	LCD	LCD
Digit height of balance display	15mm	15mm	15mm	15mm
Levelling feet, level indicator	-	-	-	-
Weighing units	g, oz, ozt, ct, tH, tlt, gn, dwt, mo, tol	g, kg, oz, ozt, lb, ct, tH, tlt, gn, dwt, mo, tol	g, oz, ozt, lb, ct, tH, tlt, gn, dwt, mo, tol	g, kg, lb, oz, ozt, tH, tlt, dwt, mo, tol
Freely programmable weighing units	-	-	-	-
Internal adjusting weight	-	-	-	-
External test weight, included	20g (F2)	100g (M1)	200g (F2)	200g (M3)
Recommended adjusting weight	-	-	-	-
Explosion protection	-	-	-	-
Dimensions / materials / weights				
Dim. of weighing plate (WxDxH / Ø, mm)	65	105	105	130x130
Dimensions of terminal (WxDxH, mm)	-	-	-	-
Dimensions of casing (WxDxH, mm)	165x230x80	165x230x80	165x230x80	165x230x80
Material of casing	Plastic	Plastic	Plastic	Plastic
Dim. of draught guard (WxDxH / ØxH, mm)	90x53	-	-	-
Material of draught guard	Plastic	-	-	-
Dimensions of packaging (WxDxH, mm)	340x200x140	340x200x140	340x200x140	340x200x140
Gross weight (kg)	1,6	1,6	1,6	1,7
Net weight (kg)	1	1	1	1

Important notes:

- Our balances are **not suitable** for use in areas of high humidity or where there is a danger of explosion for models with protection class < IP 65.
- All relevant electrical regulations must be observed.

Measurement data	440-45 N	440-47 N	440-49 N	440-51 N
Reproducibility	0,1g	0,1g	0,1g	1g
Linearity	+/-0,2g	+/-0,2g	+/-0,3g	+/-2g
Stabilisation time (s)	3	3	3	2
Sensity drift (°C)	66*10 ⁻⁶	66*10 ⁻⁶	66*10 ⁻⁶	66*10 ⁻⁶
Verification data				
Verification class	-	-	-	-
Verification value	-	-	-	-
Minimum load	-	-	-	-
Verification in the factory possible	-	-	-	-
Ambient conditions				
Permissible temperature	+10... +40°C	+10... +40°C	+10... +40°C	+10... +40°C
Permissible humidity	max. 80% (not condensating)	max. 80% (not condensating)	max. 80% (not condensating)	max. 80% (not condensating)
Piece counting				
Minimum weight	0,2g	0,2g	0,2 g	2g
Reference quantity	5, 10, 25, 50	5, 10, 25, 50	5, 10, 25, 50	5, 10, 25, 50
Basic equipment				
Protective working cover	Yes	Yes	Yes	Yes
Accumulator	Option: external, 230h operation time without back-lit, 9h charging time	Option: external, 230h operation time without back-lit, 9h charging time	Option: external, 230h operation time without back-lit, 9h charging time	Option: external, 230h operation time without back-lit, 9h charging time
Battery-supply	9V, 12h operation time	9V, 12h operation time	9V, 12h operation time	9V, 12h operation time
Auto-Off	In battery mode after 3min	In battery mode after 3min	In battery mode after 3min	In battery mode after 3min
Stand-by	-	-	-	-
Mains adapter	EURO, UK, US, AUS, (DC 9V/300mA, minus inside)	EURO, UK, US, AUS, (DC 9V/300mA, minus inside)	EURO, UK, US, AUS, (DC 9V/300mA, minus inside)	EURO, UK, US, AUS, (DC 9V/300mA, minus inside)
Filter steps	-	-	-	-
Type of balance display	LCD	LCD	LCD	LCD
Digit height of balance display	15mm	15mm	15mm	15mm
Levelling feet, level indicator	-	-	-	-
Weighing units	g, kg, lb, oz, ozt, tH, tlt, dwt, mo, tol	g, kg, oz, ozt, lb, tH, tlt, dwt, mo, tol	g, kg, lb, oz, ozt, tH, tlt, dwt, mo, tol	g, kg, oz, ozt, lb, tH, tlt, dwt, mo, tol
Freely programmable weighing units	-	-	-	-
Internal adjusting weight	-	-	-	-
External test weight, included	500g (M2)	1000g (M1)	2000g (M1)	1000g (M3)
Recommended adjusting weight	-	-	-	-
Explosion protection	-	-	-	-
Dimensions / materials / weights				
Dim. of weighing plate (WxDxH / Ø, mm)	130x130	130x130	150x170	150x170
Dimensions of terminal (WxDxH, mm)	-	-	-	-
Dimensions of casing (WxDxH, mm)	165x230x80	165x230x80	165x230x80	165x230x80
Material of casing	Plastic	Plastic	Plastic	Plastic
Dim. of draught guard (WxDxH / ØxH, mm)	-	-	-	-
Material of draught guard	-	-	-	-
Dimensions of packaging (WxDxH, mm)	340x200x140	340x200x140	340x200x140	340x200x140
Gross weight (kg)	2	2,5	3,5	3,5
Net weight (kg)	1	1	1	1

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Measurement data	440-53 N	440-55 N
Reproducibility	1g	0,2g
Linearity	+/-2g	+/-0,6g
Stabilisation time (s)	2	3
Sensity drift (°C)	66*10 ⁻⁶	66*10 ⁻⁶
Verification data		
Verification class	-	-
Verification value	-	-
Minimum load	-	-
Verification in the factory possible	-	-
Ambient conditions		
Permissible temperature	+10... +40°C	+10... +40°C
Permissible humidity	max. 80% (not condensating)	max. 80% (not condensating)
Piece counting		
Minimum weight	2g	0,4g
Reference quantity	5, 10, 25, 50	5, 10, 25, 50
Basic equipment		
Protective working cover	Yes	Yes
Accumulator	Option: external, 230h operation time without back-lit, 9h charging time	Option: external, 230h operation time without back-lit, 9h charging time
Battery-supply	9V, 12h operation time	9V, 12h operation time
Auto-Off	In battery mode after 3min	In battery mode after 3min
Stand-by	-	-
Mains adapter	EURO, UK, US, AUS, (DC 9V/300mA, minus inside)	EURO, UK, US, AUS, (DC 9V/300mA, minus inside)
Filter steps	-	-
Type of balance display	LCD	LCD
Digit height of balance display	15mm	15mm
Levelling feet, level indicator	-	-
Weighing units	g, kg, oz, ozt, lb, tlH, tlt, dwt, mo, tol	g, oz, ozt, lb, tlH, tlt, dwt, mo, tol
Freely programmable weighing units	-	-
Internal adjusting weight	-	-
External test weight, included	1000g (M3)	1000g (M1)
Recommended adjusting weight	-	-
Explosion protection	-	-
Dimensions / materials / weights		
Dim. of weighing plate (WxDxH / Ø, mm)	150x170	150x170
Dimensions of terminal (WxDxH, mm)	-	-
Dimensions of casing (WxDxH, mm)	165x230x80	165x230x80
Material of casing	Plastic	Plastic
Dim. of draught guard (WxDxH / ØxH, mm)	-	-
Material of draught guard	-	-
Dimensions of packaging (WxDxH, mm)	340x200x140	340x200x140
Gross weight (kg)	3,5	4
Net weight (kg)	1	1

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