KERN **PLS 420-3F**

High-quality precision scale with comfortable graphic display and enormous weighing range



Date of creation: 24.10.2026

Category

Brand	KERN
Product category	Laboratory balance
Product group	Precision balance
Product family	PLS

Measuring System

Weighing system	Strain gauge
Weighing capacity [Max]	420 g
USP Minimum weight of sample (k = 2, U = 0.1%)	2 g
Readability [d]	0,001 g
Reproducibility	0,001 g
Linearity	± 0,004 g
Resolution	420.000
Adjustment options	Adjusting with external weight
Recommended adjusting weight	400 g (E2)
Possible calibration points	400 g
Stabilization time	3 s
Eccentric loading at 1/3 [Max]	0,004 g
Weighing capacity [Max] (ct)	2100 ct
Construction type of the scale	Single-range balance
Units	g mg gn dwt tl (Tw) tl (HK) ozt tl (Singap, Malays) ct mo lb oz
Maximum creep (15 minutes)	10 mg
Maximum creep (30 minutes)	20 mg
Default unit	g
Readability carat [d] (ct)	0,01 ct
Warm-up time	4 h

Display

Display type	LCD graphic
Display backlight	✓
Display screen size	132×38 mm
Display digit height - smallest digit	4 mm
Display digit height	15 mm
Languages of the user interface	English

Construction

Dimension housing (W×D×H)	210×340×120 mm
Dimensions completely mounted (W×D×H)	210×340×160 mm
Dimensions ring-shaped draught shield - inner (Ø×H)	150×60 mm
Dimensions ring-shaped draught shield - outer (Ø×H)	160×70 mm
Dimensions weighing surface (Ø)	110 mm
Dimensions weighing surface	110 mm
Material housing	plastic
Material weighing plate	stainless steel
Material platform	stainless steel
Material draught shield	glass
Level indicator	✓
Levelling feet adjustable	✓

Functions

Density determination	✓
Percentage determination	✓
Standby function	✓
Sum memory function	✓
Function for averaging under unstable weighing conditions	✓
Tolerance weighing	✓
Time display	✓
Counting function	✓

KERN **PLS 420-3F**

High-quality precision scale with comfortable graphic display and enormous weighing range

Capacity - Display	✓
Auto-off interval(s) in mains power mode	off 5 min 2 min 15 min
Tare function	manual (multi)
Underfloor weighing	Eye (included in delivery)
Counting resolution (laboratory conditions)	84.000
Counting reference weight can be entered	✓
Smallest piece weight when piece counting - laboratory conditions	5 mg
Reference quantity	10, 25, 50, 100, input
Recipe/summing level	Rez B (Net-total, memory with plain text designations + setpoint, also for printout)
Recipe weighing - number of database entries	99
Recipe weighing - number of ingredients per database entry	20
Number of keys for operation	6
Smallest piece weight when piece counting - normal conditions	50 mg
Tolerance weighing - type of signal	acoustically visual

Interface

Interfaces	RS-232 standard

Power Supply

Supplied power supply	Power supply unit
Power supply type	Power adapter
Plug-in power supply / adapter for countries - included with the delivery	EURO AUS UK US CH
Plug-in power supply / adapter for countries - optional	EURO UK US CH
Input voltage power supply / power [Max]	100 V - 240 V, 50 / 60 Hz
Power supply cable removable	removable
Input voltage device / power [Max]	9 V DC, 1000 mA
Power socket for mains adapter	Hollow plug, inside plus, Ø outside 5,5 mm, Ø inside 2,1 mm, long 10,5 mm
Battery / accumulator type	Li-Metal
Battery capacity	210 mAh
Battery voltage	3 V
Battery – Number of cells	1
Battery – Individual weight	2,9 g
Battery – Total weight	2,9 g
Battery capacity (Wh)	0,63 Wh
Battery – Lithium content	66 mg

Environmental conditions

Ambient temperature [Min]	15 °C
Ambient temperature [Max]	35 °C
Humity of environment [Max]	80 %
Storage temperature [Max]	40 °C

Services (optional)

Article number for DAkkS calibration	963-127
Article number for certificate of conformity	969-517

Packing & Shipping

Delivery time	1 d
Dimensions packaging (W×D×H)	500×360×420 mm
Shipping method	Parcel service
Net weight approx.	3,2 kg
Gross weight approx.	4,4 kg
Shipping weight	15,1 kg
Shipping volume weight	15,1 kg

Product information

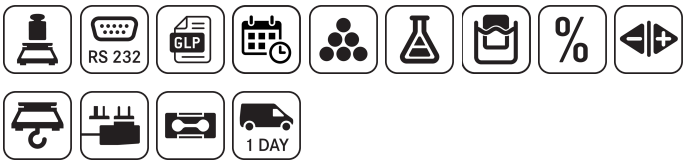
GTIN/EAN number	4045761243309
Trade number	90160010
Warranty Time	36 mon
REACH classification	no prohibited substances

KERN **PLS 420-3F**

High-quality precision scale with comfortable graphic display and enormous weighing range

Pictograms

STANDARD



OPTION

