

# Laboratory Balances

## Serie PCE-LSM

High quality, verifiable balance for laboratory applications, three models available



You have no doubt experienced the situation that you have needed a verifiable laboratory balance on occasion. The LSM laboratory balance is suited for these occasions. It has a windshield (for the PCE LSM 200) to protect against exterior elements. The capacity indicator which is on the left side of the display, allows you visualize the available weighing range by way of a graphic band. With this precise balance you are able to weigh and value jewels and precious stones, you will also be able to use it as a classic laboratory balance in production or in research and development.

- Programme to quickly set the balance accurately using external adjusting weights
- Aluminium enclosure with levelling feet and a water level
- Stainless steel weighing plate which can be removed for cleaning
- Weight, net-total weight, doses, piece count
- 18 mm LCD with backlight
- Tare in the full range (you can use it repeatedly)
- Vibration absorption
- RS-232 interface/ Software (optional)
- Ingress protection IP 54 against dust and water jet
- 230 V serial mains adaptor
- ISO certificate (optional) (to meet with DIN ISO 9000 standard)
- Verification in place (through the official organism)



PCE-LSM 6000  
Weighing plate: 225 x 165 mm

### Technical specifications

Model	Weight range Max	Readability d	Verification value e	Minimum load Min	Reproducibility	Linearity	Piece count weight minimum	Weighing pan
	g	g	g	g	g	g	g	mm
PCE-LSM 200	200	0.001	0.01	0.02	0.001	±0.002	0.006	∅ 120
PCE-LSM 2000	2000	0.01	0.1	0.2	0.01	±0.02	0.06	∅ 150
PCE-LSM 6000	6000	0.5	0.5	25	0.1	±0.2	0.6	225 x 165
Tare range	full range							
Response time	5 sec.							
Units	g, kg, %							
Display	18 mm LCD with backlight							
Interface	RS-232							
Calibration	automatic (with external test weight)							
Operating temperature	+18 to +33 °C							
Power	230 V/ 50 Hz (12 V mains adaptor)							
Enclosure	die cast aluminium							
Windshield	included in the PCE-LSM 200 and PCE-LSM 2000 models (∅ 130 x 60 mm or ∅ 160 x 60 mm)							
Ingress protection	IP 54							
Dimensions	240 x 275 x 90 mm							
Weight	4 kg							

### Contents

PCE-LSM laboratory balance (one of our models), weighing plate, mains adaptor and user's manual; PCE-LSM 200 and PCE-LSM 2000 models with windshield (For U.K. customers: incl. U.K. AC Mains Power Adaptor)

Model No.	Description
PCE-LSM 200	PCE-LSM 200 Laboratory balance
PCE-LSM 2000	PCE-LSM 2000 Laboratory balance
PCE-LSM 6000	PCE-LSM 6000 Laboratory balance

### Optional accessories

VER-PCE-LSM	M class II Legal for trade verification
CAL-PCE-LSM	ISO certificate
PCE-LSM-TOL	Option: Balance with weight tolerance function, with acoustic signal to reset the upper or lower value limits that can be established independently (an installation of these option isn't possible later)
PCE-SOFT-LSM	Software with RS-232 cable
RS232-USB	RS-232 to USB adaptor
PCE-BP1	Thermal printer with RS-232 data cable
PCE-AB-DB	Density determination kit (only for PCE-LSM 200)
CW-F2-200	200 g calibration weight, class F2, tolerance ±3.0 mg, plastic box for the PCE-LSM 200 model
CW-F2-2000	2000 g calibration weight, class F2, tolerance ±30 mg, plastic box for the PCE-LSM 2000 and PCE-LSM 6000 models



PCE-BP1 printer  
(optional)

## Serie PCE-LS

### Verifiable laboratory balance



The LS series balance is an attractive product due to its high accuracy, its multiple functions and its low price. It is an exceptional instrument. Its well designed die cast aluminium enclosure provides durability. The graphic display with capacity indicator allows the results to be read easily. With the help of optional software you will be able to transfer data to a computer. If your computer only has a USB interface, you can request an optional RS-232 to USB adaptor. All LS models can be calibrated / adjusted automatically at the touch of a key, or can measure at a pre-set time, or triggered by temperature changes. Without the need to handle expensive external weights, these functions support integration in quality management systems. You can also verify your balance by an official authority. Other accessories like a density determination set make this balance valuable.

- Piece counting for the PCE-LS model: user can select number of reference pieces, display can be switched from piece to weight
- Programme to quickly adjust settings if there are some oscillations of  $\pm 1$  °C or after an period of time. This adjustment is made using an internal adjusting weight (motor-driven)
- Date and time adjustment (user password can be entered)
- RS-232 interface for PC. It allows you connect the balance to a PC
- Capacity indicator: the display with backlight shows available ranges
- Die cast aluminium enclosure guarantees high stability
- Water level to properly setup the balance
- IP 54 protection against dust and water jet
- Calibration certificate (optional) (e.g. to meet DIN ISO 9000 standard)
- Verifiable (through the regulating body)



PCE-LS 500  
Weighing plate: Ø 120 mm

PCE-LS 1000 & PCE-LS 3000  
Plate: 165 x 165 mm

### Technical specifications

Model	Weight range Max g	Readability d g	Verification value e g	Minimum load Min g	Repeatability g	Linearity g	Piece count weight minimum g	Weighing plate mm
PCE-LS 500	500	0.001	0.01	0.02	0.0015	$\pm 0.002$	0.006	Ø 120
PCE-LS 1000	1000	0.01	0.1	0.5	0.015	$\pm 0.03$	0.06	165 x 165
PCE-LS 3000	3000	0.01	0.1	0.5	0.015	$\pm 0.03$	0.06	165 x 165
Tare range	full range							
Response time	< 5 sec.							
Units	g, kg, lb							
Display	graphic LCD with backlight, capacity display							
Calibration	- internal calibration (with internal, motor driven, calibration weight) - external calibration (using optional external calibration weights)							
Interface	RS-232							
Piece counting	yes, selectable reference quantities							
Vibration absorption	internal vibration dampening							
Operating temperature	+18 to +30 °C							
Power	230 V / 50 Hz (12 V adaptor)							
Enclosure	die cast aluminium							
Ingress protection	IP 54							
Dimensions	210 x 320 x 90 mm							
Weight	approx. 5 kg							



### Contents

PCE-LS laboratory balance (one of our models), weighing plate, mains adaptor and user's manual (For U.K. customers: incl. U.K. AC Mains Power Adaptor)

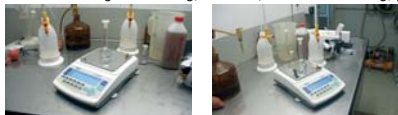
### Model No.

### Description

PCE-LS 500	PCE-LS 500 Laboratory balance
PCE-LS 1000	PCE-LS 1000 Laboratory balance
PCE-LS 3000	PCE-LS 3000 Laboratory balance

### Optional accessories

VER-PCE-LS	M class II Legal for trade verification
CAL-PCE-BS	ISO certificate
PCE-LS-TOL	Option: Balance with weight tolerance function, with acoustic signal to reset the upper or lower value limits that can be established independently (an installation of these option isn't possible later)
PCE-SOFT-LS	Software with RS-232 cable
RS232-USB	RS-232 to USB adaptor
PCE-BP1	Thermal printer with RS-232 data cable
CW-F1-500	Calibration weight of 500 g, class F1 tolerance $\pm 2.5$ mg, plastic box for PCE-LS 500 model
CW-M1-500	Calibration weight of 500 g, class M1, tolerance $\pm 25$ mg, plastic box for PCE-LS 1000 model
CW-F2-2000	Calibration weight of 2000 g, class F2, tolerance $\pm 30$ mg, plastic box for PCE-LS 3000 model



PCE-BP1 printer  
(optional)

# Laboratory Balances

## Serie PCE-ABZ C

Balance with high resolution and multiple functions



The PCE-ABZ series analytical balance is a laboratory balance that accurately determines weight in grams and in milligrams. With the windshield, which is included in the delivery, external influences such as air currents will be eliminated. The die cast aluminium enclosure is of solid design. With the help of optional software and cable, data can be transferred directly to a computer, which saves time and ensures reading accuracy.

- With windshield and two sliding doors
- PCE ABZ analytical balance piece counting: user selectable number of reference pieces, display can be switched from piece to weight
- RS-232 interface to connect the balance to a computer to further assess data
- Capacity indicator (at the right side of the display and indicates the weight range that is available)
- Tare range across the entire weight range
- Rugged die cast aluminium enclosure
- Water level to properly setup the analytical balance
- Internal vibration suppression
- ISO certificate (optional) (to meet DIN ISO 9000 standard)



### Technical specifications

Model	Weight range Max g	Readability d mg	Verification value e mg	Minimum load Min mg	Repeatability mg	Linearity mg	Piece count weight minimum mg	Weighing plate mm
PCE-ABZ 100C	100	0.1	-	-	0.15	±0.2	0.6	Ø 90
PCE-ABZ 200C	200	0.1	-	-	0.15	±0.2	0.6	Ø 90
Tare range	full range							
Response time	< 5 sec.							
Units	g, kg, oz, lb							
Display	LCD with backlight							
Calibration	external calibration (with external calibration weight)							
Interface	RS-232							
Piece counting	yes, selectable reference quantities							
Vibration dampening	internal vibration suppression							
Operating temperature	+18 to +30 °C							
Power	230 V / 50 Hz							
Enclosure	die cast aluminium							
Ingress protection	IP 54							
Weighing plate dimensions	175 x 140 x 230 mm							
Overall dimensions	235 x 345 x 350 mm							
Weight	approx. 6.0 kg							



### Contents

PCE-ABZ C analytical balance (one of our models), weighing plate, glass windshield, mains cable and user's manual (For U.K. customers: incl. U.K. AC Mains Power Adaptor)

Model No.	Description
PCE-ABZ 100C	PCE-ABZ 100C Analytical balance
PCE-ABZ 200C	PCE-ABZ 200C Analytical balance

### Optional accessories

CAL-PCE-ABZ	ISO certificate
PCE-SOFT-ABZ	Software with RS-232 cable
RS232-USB	RS-232 to USB adaptor
PCE-BP1	Thermal printer with RS-232 data cable
PCE-SJA	Antivibration table, 450 x 450 x 100 mm
CW-E2-100	Calibration weight of 100 g, class E2, tolerance ±0.15 mg, plastic box for PCE-ABZ 100 C model
CW-E2-200	Calibration weight of 200 g, class E2, tolerance ±0.30 mg, plastic box for PCE-ABZ 200C model



PCE-BP1 printer (optional)

## Serie PCE-AB

Verifiable analytical balance with internal adjustment control



This PCE AB analytical balance is a verifiable device that can determine weight in grams and milligrams. With the windshield, which is included, external influences such as air current can be decreased. We also offer an optional antivibration table that minimizes the influence of strong vibrations on the balance (e.g. if it is placed near machines in the production area). The graphic display with capacity indication facilitates the reading of results. With the help of the optional software set, you will be able to transfer data to a computer. As well as automatic internal calibration, you can do an external calibration with the optional calibration weights (only if the balance is not verified).

- With windshield and two sliding doors
- Piece counting with the PCE AB analytical balance: user selectable number of reference pieces by user, display can be switched from piece to weight
- RS-232 interface for connection to a computer
- Capacity indicator: the display with backlight indicates the weight range available
- Tare range across 100 % of weight range
- Rugged die cast aluminium enclosure
- Water level to setup the analytical balance
- Internal vibration suppression
- 230 V serial mains adaptor
- ISO certificate (e.g. to meet DIN ISO 9000 standard)
- Optional M class I verification



### Technical specifications

Model	Weight range Max g	Readability d mg	Verification value e mg	Minimum load Min mg	Repeatability mg	Linearity mg	Piece count weight minimum mg	Weighing plate mm
PCE-AB 100	100	0.1	1	10	0.15	±0.2	0.6	Ø 90
PCE-AB 200	200	0.1	1	10	0.15	±0.2	0.6	Ø 90
Tare range	full range							
Response time	< 5 sec.							
Units	g, kg, oz, lb							
Display	graphic LCD with backlight and capacity indicator							
Calibration	- internal calibration (with internal, motor driven, calibration weight) - external calibration (using optional external calibration weights)							
Interface	RS-232							
Piece counting	yes, user selectable reference quantities							
Vibration dampening	internal vibration suppression							
Operating temperature	+18 to +30 °C							
Power	230 V / 50 Hz (12 V adaptor)							
Enclosure	die cast aluminium							
Ingress protection	IP 54							
Weighing plate dimensions	175 x 140 x 230 mm							
Dimensions	235 x 345 x 350 mm							
Weight	approx. 6.5 kg							



also available as PCE-AB 100C / PCE-AB 200C without graphical display



Graphical display with load bargraph (capacity indicator)

### Contents

PCE-AB analytical balance (one of our models), weighing plate, glass wind shield, mains cable and user's manual (For U.K. customers: incl. U.K. AC Mains Power Adaptor)

Model No.	Description
PCE-AB 100	PCE-AB 100 Analytical balance
PCE-AB 200	PCE-AB 200 Analytical balance
PCE-AB 100C	PCE-AB 100C Analytical balance, same as PCE-AB 100 but without graphical LCD
PCE-AB 200C	PCE-AB 200C Analytical balance, same as PCE-AB 200 but without graphical LCD

### Optional accessories

VER-PCE-AB	M class I Legal for trade verification
CAL-PCE-AB	ISO certificate
PCE-SOFT-AB	Software with RS-232 cable
RS232-USB	RS-232 to USB adaptor
PCE-BP1	Thermal printer with RS-232 data cable
PCE-SIA	Antivibration table, 450 x 450 x 100 mm
CW-E2-100	Calibration weight of 100 g, class E2, tolerance ±0.15 mg, plastic box for PCE-AB 100 model
CW-E2-200	Calibration weight of 200 g, class E2, tolerance ±0.30 mg, plastic box for PCE-AB 200 model



PCE-BP1 printer (optional)