

QUALITY THAT WEIGHS



Symbols



Electromagnetic Force Restoration: coil in a permanent magnet for the most accurate weighings



High Resolution Load Cell: strain gauge measure the deformation as change in electrical resistance



LCD Display: standard 8 digit LCD display with backlight



Graphic Display: text/graphical LCD dot matrix display with backlight



Touch Screen Display: 5" inch resistive user friendly, easy to use, intuitive display



Rs232 Data Interface: to connect the balance to printer, PC, peripheral devices.



Measuring Units: Select the measuring unit that balance will use to display weight



Piececounting: function to count identical items, reference quantities are selectable.



Checkweighing: upper and lower limits can be set individually, for dosing and portioning.



Percentual Weighing: calculates the weight of a sample as a percentage from a reference weight (100%)



Totalization: measure cumulative weight of multiple items. Shows total and current weight



Animal Weighing: accurate readings under unstable conditions such moving laboratory animals.



Density Determination: accurately determines density of a solid object or a liquid



Max Load (Peak hold): retains the peak value in a series of consecutive weights



GLP Setup: allows storing identification data of balance, project and user. Date and Time



Date & Time: balance shows current date and time



Multi Language: several languages can be selected from the menu of the balance



Formulation: allows setting recipes with name and tolerances for each ingredient. Automatic reportioning



Suspended Weighing: a support with hook can be loaded on the underside of the balance



Accumulator: balance has internal accumulator or can be used with optional external accumulator



Battery Operating: balance can work using AA batteries



Statistics: shows Min, Max, Sum, Average, Standard deviation



Gross-Net-Tare: shows simultaneously gross, net weight and tare.



Database: internal database to store data and drying methods



Textile: determines the title of a thread, measuring units: Tex, Td, Nm, Nc.



Drying Modes: different temperature profiles are available for drying process



Infrared Sensors: touchless, to call TARE or PRINT functions without touching the balance



Bluetooth: possibility to connect bluetooth devices



USB : possibility to connect a usb pendrive



Graph: real time drying process graph visualization



Password: user profile can be password protected



Memory: it is possible to store up to 5 different drying programs



Ioniser: integrated ioniser on the back of the balance



Initial Verification: according to 2014/31/EU available for balance with EC (/OIML) Type approval

NEW	SemiMicro M5 balances 0,01mg	6-7	NEW	High Capacity KG balances 0,01g	40
NEW	Analytical M5 balances 0,1g	8-9		High Capacity KL balances 0,1g-0,2g-0,5g-1g	41
NEW	Precision M5 balances 0,001g-0,01g-0,1g	10-11		Bel Tablet system for precision balances	42-43
	SemiMicro HPB high performance balances 0,01mg	12-13		BEL Tablet system for moisture analyzers	44-45
	SemiMicro HPBG high performance balances 0,01mg	14-15		Accessories	46-47 48-49
	Analytical M and MG balances 0,1g	16-17			
	Precision M and MW balances 0,001g	18-19			
	Precision MG and MGW balances 0,001g	20-21			
	Precision M and MG balances 0,01g	22-23			
	Precision L and LG balances 0,001g	24-25			
	Precision LW and LGW balances 0,001g	26-27			
	Precision L and LG balances 0,01g	28-29			
	Precision L and LG balances 0,1g	30-31			
	Precision S portable balances 0,001g-0,01g-0,1g	32-33-34			
	Precision ES portable balances 0,01g-0,1g	35			
NEW	M5-Thermo moisture analyzers	36-37			
	i-Thermo moisture analyzers	38			
	Jewelry MJ balances	39			

Quick Finder

Resolution	Weighing Range	Family Name	Page	M Verification	Tablet System	Internal Calibration	External Calibration	Windshield
0,01mg	42g...220g	M5	6			■	■	■
0,01mg	42g...220g	HPB	12		□	■		■
0,01mg	42g...220g	HPBG	14			■		■
0,1mg	220g...610g	M5	8			■	■	■
0,1mg	410g...610g	HPB	12		□	■		■
0,1mg	410g...610g	HPBG	14		□	■		■
0,1mg	120g...310g	M	16	□	□	■	■	■
0,1mg	120g...310g	MG	17	□		■	■	■
0,001g	310g...1000g	M5	10			■	■	■
0,001g	220g...2100g	M	18	□	□	■	■	■
0,001g	220g...2100g	MW	19	□	□	■	■	■
0,001g	220g...2100g	MG	20	□		■	■	■
0,001g	220g...2100g	MGW	21	□		■	■	■
0,001g	160g...520g	L	24		□	■	■	■
0,001g	160g...520g	LG	25			■	■	■
0,001g	160g...520g	LW	26		□	■	■	■
0,001g	160g...520g	LGW	27			■	■	■
0,001g	120g...420g	S	32		□		■	■
0,01g	8200g...12100g	KG	40	□		■	■	
0,01g	3100g...6200g	M5	10			■	■	■
0,01g	2200g...8200g	M	22	□	□	■	■	
0,01g	2200g...8200g	MG	23	□		■	■	
0,01g	1000g...5200g	L	28	□	□	■	■	
0,01g	1000g...5200g	LG	29	□		■	■	
0,01g	620g...4200g	S	33		□		■	
0,01g	200g...420g	ES	29				■	
0,1g	10kg...20kg	M5	10			■	■	■
0,1g	4500g...20kg	L	30		□	■	■	
0,1g	4500g...20kg	LG	31			■	■	
0,1g	3200g...6500g	S	34		□		■	
0,1g	1000g...2200g	ES	35				■	
0,1g-1g	8000g...32kg	KL	41		□		■	

Moisture Balances

Resolution	Weighing Range	Family Name	Page	Thermometer Calibration	Tablet System	Halogen Infrared Lamp	External Calibration	Database
0,1mg	60g	M5-Thermo	36	□		■	■	■
0,1mg	60g	i-Thermo	38	□	□	■	■	
0,001g	160g	M5-Thermo	36	□		■	■	■
0,001g	160g	i-Thermo	38	□	□	■	■	
0,01g	60g	M5-Thermo	30	□		■	■	■
0,01g	60g	i-Thermo	38	□	□	■	■	

(■ = Standard □ = Optional ▲ = Only For Some Models)

Lcd Display	Graphic Display	Touch Screen Display	Integrated Ioniser	Rs2332	Units	Glp	Multi-Language	Hook	Internal Accumulator	Battery / Battery Pack
■		■	▲	■	■	■	■			
■			▲	■	■					
	■		▲	■	■	■	■			
■		■	▲	■	■					
■			▲	■	■					
■			▲	■	■					
■			▲	■	■					
	■		▲	■	■	■	■			
■		■		■	■			■		
■				■	■			■		
■				■	■			■		
	■			■	■	■	■	■		
	■			■	■	■	■	■		
■				■	■			▲		□
	■			■	■	■	■	▲		□
■				■	■			▲		□
	■			■	■	■	■	▲		□
■				■	■				■	
	■			■	■	■	■	■		
■		■		■	■			■		
■				■	■			■		
■				■	■	■	■	■		
■				■	■			▲		□
	■			■	■	■	■	▲		□
■				■	■			■	■	
■				■	■					□
■		■		■	■			■		
■				■	■			■		□
■				■	■			■	■	
■				■	■					□
■				■	■			■		□

Lcd Display	Touch Screen Display	Rs2332	Units	Glp	Multi-Language	Internal Database, Save results	Real time Graph View	Password protection
	■	■	■	■	■	■	■	■
■		■	■					
	■	■	■	■	■	■	■	■
■		■	■					
	■	■	■	■	■	■	■	■
■		■	■					

M5 - Resolution 0,01mg

M5 semi-micro balances are the top level, most innovative and advanced series made by BEL Engineering. Equipped with large 5" color touch screen display, it gives an user-friendly access to all the balance's advanced applications and internal databases. The user has easy and intuitive access to all the functions thanks to the icon-driven menus. This means more efficiency, productivity and interactivity. The -ION models are equipped with an integrated ioniser on the back of the balance with the purpose to neutralize static electricity on charged samples like plastic parts, containers or films for acquiring the most accurate results. A double case structure protects the heart of the balance: an aluminum inner case and a composite plastic external case. The many on-board functions already included, up to 6 operating languages, the large 5" inch display and the RS232 serial output close the circle of a complete product, reliable and truly convenient.

Features

- Electromagnetic force restoration weighing system
- Highly integrated weighing cell
- Automatic internal calibration
- 5" Touch-screen Display 800x480
- RS232 serial interface
- Selectable Measuring units
- Internal Database
- GLP
- Multi Languages (EN-DE-FR-IT-SP-PT)
- Multi-user with password protection
- USB port for import/export database data
- Advanced piececounting function with Statistics report
- Textile function to measure fibers with Statistics report
- Advanced Density function, with density index (DI) calculation
- Formulation (Recipe)
- Checkweighing
- Percentual weighing
- Weights adding
- Animal weighing
- Max load determination (Peak hold)
- Large glass draught shield with 3 sliding doors for easy access to the items being weighed



Model	Capacity (g)	Resolution (mg)	Pan (mm)	Repeatability (mg)	Linearity (mg)	Response time (sec.)
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Automatic internal calibration

M5-HPB-425i	42	0,01	Ø 80	0,05	± 0,05	≤ 6
M5-HPB-425i-ION	42	0,01	Ø 80	0,05	± 0,08	≤ 6
M5-HPB-105i	102	0,01	Ø 80	0,05	± 0,08	≤ 6
M5-HPB-105i-ION	102	0,01	Ø 80	0,05	± 0,08	≤ 6
M5-HPB-1265Di	62/120	0,01/0,1	Ø 80	0,02 / 0,1	± 0,05 / ± 0,2	≤ 6
M5-HPB-1265Di-ION	62/120	0,01/0,1	Ø 80	0,02 / 0,1	± 0,05 / ± 0,2	≤ 6
M5-HPB-2285Di	82/220	0,01/0,1	Ø 80	0,02 / 0,1	± 0,1 / ± 0,2	≤ 6
M5-HPB-2285Di-ION	82/220	0,01/0,1	Ø 80	0,02 / 0,1	± 0,1 / ± 0,2	≤ 6
M5-HPB-22105Di	102/220	0,01/0,1	Ø 80	0,05 / 0,1	± 0,1 / ± 0,2	≤ 6
M5-HPB-22105Di-ION	102/220	0,01/0,1	Ø 80	0,05 / 0,1	± 0,1 / ± 0,2	≤ 6



A -ION models equipped with integrated Ioniser on the back of the balance. The ioniser has two way of operating: 2 minutes or continuously for max 8 hours

Accessories

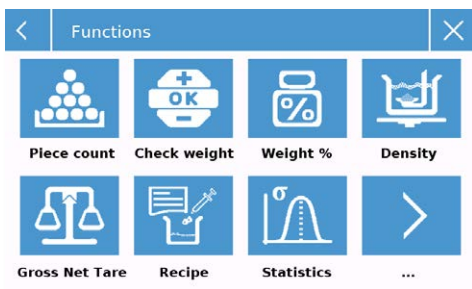
- Portable ioniser Ion-A15 (BL0371)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Density KIT for solids and liquids (AC002)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- USB pendrive 8 Gigabyte
- Stylus pen for touchscreen
- Factory Calibration certificate (BL0333)

Balance technical data

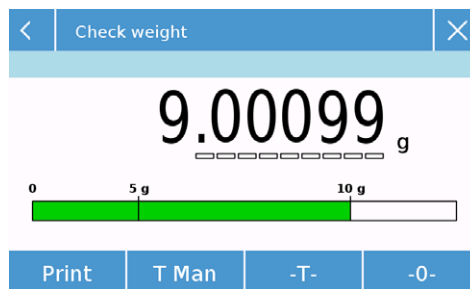
- Span drift (+ 10...+ 30 °C): +/- 2ppm/°C
- Dimensions LxWxH (mm): 345x215x345
- Weighing chamber dimensions LxWxH (mm): 162x171x225
- Power supply 110-230Vac, 50/60Hz; output 24V 500mA 13VA
- Net Weight: 6,7 Kg
- Net Weight -ION models: 7,2 Kg

Ioniser technical data

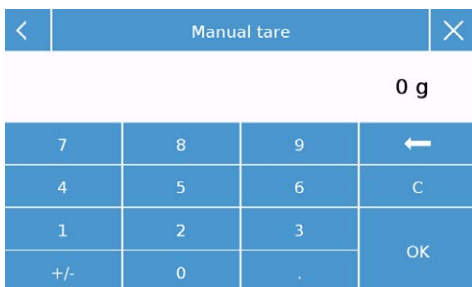
- Operation modes: 2 minutes or continuously for max 8 hours
- Ozone concentration: 0-0.05 ppm (2cm from ion source)
- Distance sample-ion source: about 5-40 cm
- Discharge time: 9s/5cm, 13s/10cm
- Ambient conditions: 0-50°C, 20-80% air humidity (non-condensing)
- Ioniser Power supply: IN AC 100-240V 50/60Hz, OUT DC 12V, 500mA



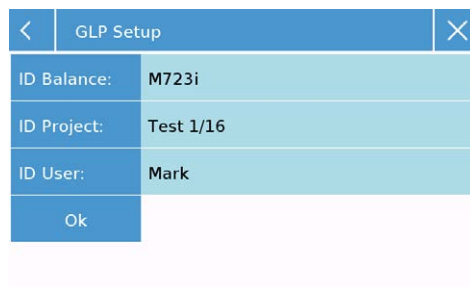
Main functions page for easy working



Live color indication for check weighing



Manual tare input



Clear and easy input for GLP function

M5 analytical balances are the most innovative and advanced series made by BEL Engineering. Equipped with large 5" color touch screen display, it gives an user-friendly access to all the balance's advanced applications and internal databases. The user has easy and intuitive access to all the functions thanks to the icon-driven menus. This means more efficiency, productivity and interactivity. The -ION models are equipped with an integrated ioniser on the back of the balance with the purpose to neutralize static electricity on charged samples like plastic parts, containers or films for acquiring the most accurate results. A double case structure protects the heart of the balance: an aluminum inner case and a composite plastic external case. The many on-board functions already included, up to 6 operating languages, the large 5" inch display and the RS232 serial output close the circle of a complete product, reliable and truly convenient.



Features

- Electromagnetic force restoration weighing system
- Highly integrated weighing cell
- Automatic internal calibration
- 5" Touch-screen Display 800x480
- RS232 serial interface
- Selectable Measuring units
- Internal Database
- GLP
- Multi Languages (EN-DE-FR-IT-SP-PT)
- Multi-user with password protection
- USB port for import/export database data
- Advanced piececounting function with Statistics report
- Textile function to measure fibers with Statistics report
- Advanced Density function, with density index (DI) calculation
- Formulation (Recipe)
- Checkweighing
- Percentual weighing
- Weights adding
- Animal weighing
- Max load determination (Peak hold)
- Large glass draught shield with 3 sliding doors for easy access to the items being weighed



Model	Capacity (g)	Resolution (mg)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)
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Automatic internal calibration

M5-M214Ai	220	0,1	Ø 80	0,1	± 0,0003	≤ 4
M5-M214Ai-ION	220	0,1	Ø 80	0,1	± 0,0003	≤ 4
M5-M254Ai	250	0,1	Ø 80	0,1	± 0,0003	≤ 4
M5-M254Ai-ION	250	0,1	Ø 80	0,1	± 0,0003	≤ 4
M5-M314Ai	310	0,1	Ø 80	0,1	± 0,0003	≤ 4
M5-M314Ai-ION	310	0,1	Ø 80	0,1	± 0,0003	≤ 4
M5-HPB 414i	410	0,1	Ø 80	0,1mg if weight ≤ 220g 0,3mg from 220g to 310g 0,35mg from 310g to 410g	± 0,0005	≤ 4
M5-HPB 414i-ION	410	0,1	Ø 80		± 0,0005	≤ 4
M5-HPB 514i	510	0,1	Ø 80	0,1mg if weight ≤ 220g 0,3mg from 220g to 310g 0,35mg from 310g to 510g	± 0,0005	≤ 4
M5-HPB 514i-ION	510	0,1	Ø 80		± 0,0005	≤ 4
M5-HPB 614i	610	0,1	Ø 80	0,1mg if weight ≤ 220g 0,3mg from 220g to 310g 0,35mg from 310g to 610g	± 0,0005	≤ 4
M5-HPB 614i-ION	610	0,1	Ø 80		± 0,0005	≤ 4



A -ION models equipped with integrated Ioniser on the back of the balance. The ioniser has two way of operating: 2 minutes or continuously for max 8 hours.

Accessories

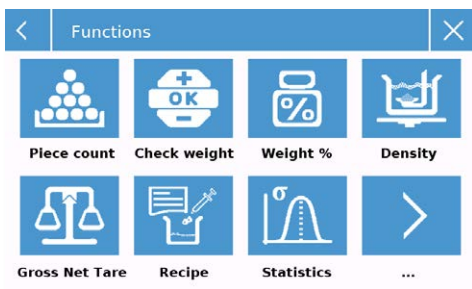
- Portable ioniser Ion-A15 (BL0371)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Density KIT for solids and liquids (AC002)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- USB pendrive 8 Gigabyte
- Stylus pen for touchscreen
- Factory Calibration certificate (BL0333)

Balance technical data

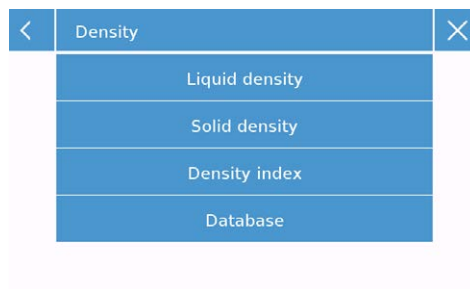
- Span drift (+ 10...+ 30 °C): +/- 2ppm/°C
- Dimensions LxWxH (mm): 345x215x345
- Weighing chamber dimensions LxWxH (mm): 162x171x225
- Power supply 110-230Vac, 50/60Hz; output 24V 500mA 13VA
- Net Weight: 6,7 Kg
- Net Weight -ION models: 7,2 Kg

Ioniser technical data

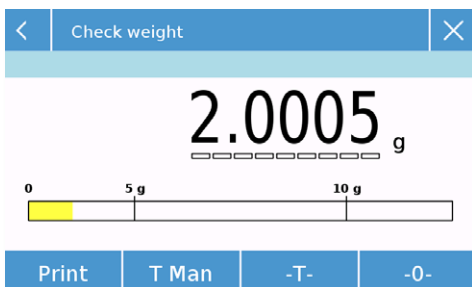
- Operation modes: 2 minutes or continuously for max 8 hours
- Ozone concentration: 0-0.05 ppm (2cm from ion source)
- Distance sample-ion source: about 5-40 cm
- Discharge time: 9s/5cm, 13s/10cm
- Ambient conditions: 0-50°C, 20-80% air humidity (non-condensing)
- Ioniser Power supply: IN AC 100-240V 50/60Hz, OUT DC 12V, 500mA



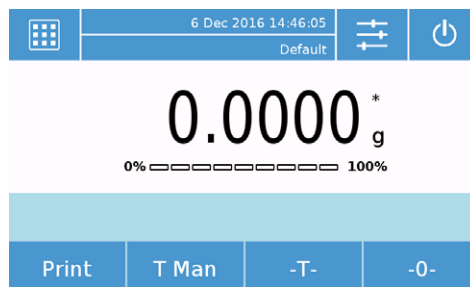
Main functions page for easy working



Easy selection for density function



Live color indication for check weighing



Main page with easy access to the menus

M5 precision balances are the most innovative and advanced series made by BEL Engineering. Equipped with large 5" color touch screen display, it gives an user-friendly access to all the balance's advanced applications and internal databases. The user has easy and intuitive access to all the functions thanks to the icon-driven menus. This means more efficiency, productivity and interactivity. A double case structure protects the heart of the balance: an aluminum inner case and a composite plastic external case. With resolution from 0,001g to 0,1g this serie offers a wide choice of models for many application with the simplicity of a touch screen interface. The many on-board functions already included, up to 6 operating languages, the large 5" inch display and the RS232 serial output close the circle of a complete product, reliable and truly convenient.

Features

- Electromagnetic force restoration weighing system
- Highly integrated weighing cell
- Automatic internal calibration
- 5" Touch-screen Display 800x480
- RS232 serial interface
- Selectable Measuring units
- Internal Database
- GLP
- Multi Languages (EN-DE-FR-IT-SP-PT)
- Multi-user with password protection
- USB port for import/export database data
- Advanced piececounting function with Statistics report
- Textile function to measure fibers with Statistics report
- Advanced Density function, with density index (DI) calculation
- Formulation (Recipe)
- Checkweighing
- Percentual weighing
- Weights adding
- Animal weighing
- Max load determination (Peak hold)
- Hook for below weighing
- Large glass draught shield with 3 sliding doors for easy access to the items being weighed



Model	Capacity (g)	Resolution (g)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)
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Automatic internal calibration

M5-L303i	310	0,001	Ø 110	0,0006	± 0,003	≤ 3
M5-L423i	420	0,001	Ø 110	0,0006	± 0,003	≤ 3
M5-M523i	520	0,001	Ø 110	0,001	± 0,002	≤ 2
M5-M723i	720	0,001	Ø 110	0,001	± 0,002	≤ 2
M5-M1003i	1000	0,001	Ø 110	0,001	± 0,003	≤ 3
M5-L3102i	3100	0,01	Ø 160	0,01	± 0,03	≤ 3
M5-L4202i	4200	0,01	Ø 160	0,01	± 0,04	≤ 4
M5-M5202i	5200	0,01	Ø 160	0,01	± 0,03	≤ 3
M5-M6202i	6200	0,01	Ø 160	0,01	± 0,03	≤ 3

External calibration

M5-L10001	10000	0,1	175x195	0,05	± 0,2	≤ 2
M5-L20001	20000	0,1	175x195	0,1	± 0,4	≤ 4

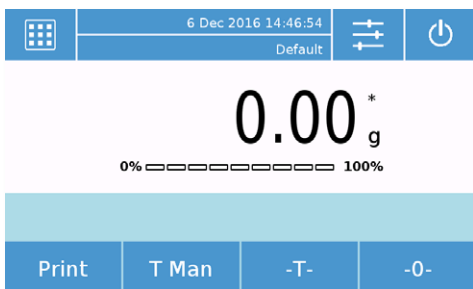


Accessories

- Portable ioniser Ion-A15 (BL0371)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Density KIT for solids and liquids (AC002-AC004)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- USB pendrive 8 Gigabyte
- Stylus pen for touchscreen
- Factory Calibration certificate (BL0333)

Technical data

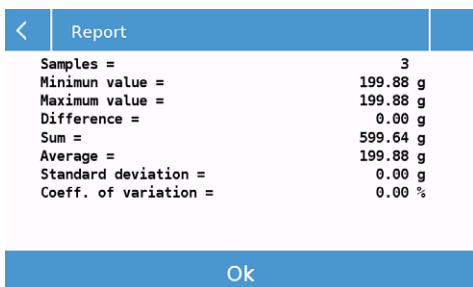
- Span drift (+ 10...+ 30 °C): +/- 2ppm/°C
- Dimensions LxWxH (mm): 345x215x345
- Weighing chamber dimensions LxWxH (mm): 162x171x225
- Power supply M models 110-230Vac, 50/60Hz; output 24V 500mA 13VA
- Power supply L models 110-230Vac, 50/60Hz; output 9V 1,2A 10VA
- Ioniser Power supply: IN AC 100-240V 50/60Hz, OUT DC 12V, 500mA
- Net Weight: 6,7 Kg



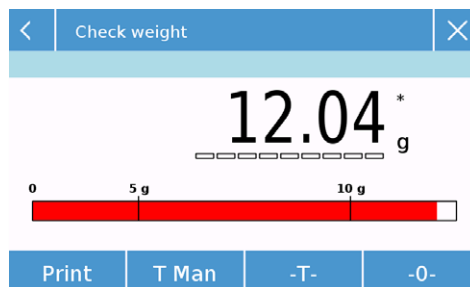
Main page with easy access to the menus



Qwerty touch keypad for easy input



Easy reading reports



Live color indication for check weighing

BEL Engineering introduces the new series of semiMicro HPB balances with a resolution of 0.01 mg. Equipped with the new highly integrated electromagnetic cell, with automatic internal calibration on all models, they are characterized by a high level of precision and repeatability.

The -ION models are equipped with an integrated ioniser on the back of the balance with the purpose to neutralize static electricity on charged samples like plastic parts, containers or films for acquiring the most accurate results. As in the tradition of BEL products, new semiMicro HPB balances deliver an excellent performance / price ratio, thanks to the continuous research and study of Bel Engineering in the high resolution and precision weighing field

Features

- Electromagnetic force restoration weighing system
- Highly integrated weighing cell
- Automatic internal calibration
- Efficient filtering to deliver quick and accurate results
- LCD with backlight with adjustable contrast
- Large glass draught shield with 3 sliding doors for easy access to the items being weighed
- Plastic protection cover for keypad

Accessories

- Portable ioniser Ion-A15 (BL0371)
- BEL Tablet System for balances. USB version (BL0329) or BLUETOOTH version (BL0330).
- Bluetooth printer DPP-250-BT for BEL Tablet system (AC013)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Density KIT for solids and liquids (AC002)
- Serial Printer STAT, with Statistics functions (AC022)
- Communication KIT for balances, only for 0,1mg res. (BL0476)
- Alphanumeric external keyboard (AC005)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- Factory Calibration certificate (BL0333)



Model	Capacity (g)	Resolution (mg)	Pan (mm)	Repeatability (mg)	Linearity (mg)	Response time (sec.)
Automatic internal calibration						
HPB-425i	42	0,01	Ø 80	0,05	± 0,05	≤ 6
HPB-625i	62	0,01	Ø 80	0,05	± 0,08	≤ 6
HPB-105i	102	0,01	Ø 80	0,05	± 0,08	≤ 6
HPB-1245Di	42/120	0,01/0,1	Ø 80	0,02 / 0,1	± 0,05 / ± 0,2	≤ 6
HPB-1265Di	62/120	0,01/0,1	Ø 80	0,03 / 0,1	± 0,08 / ± 0,2	≤ 6
HPB-2245Di	42/220	0,01/0,1	Ø 80	0,02 / 0,1	± 0,1 / ± 0,2	≤ 6
HPB-2265Di	62/220	0,01/0,1	Ø 80	0,03 / 0,1	± 0,1 / ± 0,2	≤ 6
HPB-2285Di	82/220	0,01/0,1	Ø 80	0,05 / 0,1	± 0,1 / ± 0,2	≤ 6
HPB-22105Di	102/220	0,01/0,1	Ø 80	0,05 / 0,1	± 0,1 / ± 0,2	≤ 6
HPB 414Ai	410	0,1	Ø 80	0,1mg if weight ≤ 220g 0,3mg from 220g to 310g 0,35mg from 310g to 410g	± 0,0005	≤ 4
HPB 514Ai	510	0,1	Ø 80	0,1mg if weight ≤ 220g 0,3mg from 220g to 310g 0,35mg from 310g to 510g	± 0,0005	≤ 4
HPB 614Ai	610	0,1	Ø 80	0,1mg if weight ≤ 220g 0,3mg from 220g to 310g 0,35mg from 310g to 610g	± 0,0005	≤ 4

(1) If connected to optional STAT printer (AC022)



A-ION models equipped with integrated Ioniser on the back of the balance. The ioniser has two way of operating: 2 minutes or continuously for max 8 hours.

Balance technical data

Common features

- Span drift (+ 10...+ 30 °C): +/- 2ppm/°C
- Dimensions LxWxH (mm): 345x215x345
- Weighing chamber dimensions LxWxH (mm): 162x171x225
- Dimensions of external electronics box LxWxH: 175x105x50 (mm), weight 500g
- Power supply 110-230Vac, 50/60Hz; output 24V 500mA 13VA
- Net Weight: 7Kg
- Net Weight -ION models: 7,4 Kg

Ioniser technical data

- Operation modes: 2 minutes or continuously for max 8 hours
- Ozone concentration: 0-0.05 ppm (2cm from ion source)
- Distance sample-ion source: about 5-40 cm
- Discharge time: 9s/5cm, 13s/10cm
- Ambient conditions: 0-50°C, 20-80% air humidity (non-condensing)
- Ioniser Power supply: IN AC 100-240V 50/60Hz, OUT DC 12V, 500mA



Model	Capacity (g)	Resolution (mg)	Pan (mm)	Repeatability (mg)	Linearity (mg)	Response time (sec.)
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Automatic internal calibration

HPB-425i-ION	42	0,01	Ø 80	0,05	± 0,05	≤ 6
HPB-625i-ION	62	0,01	Ø 80	0,05	± 0,08	≤ 6
HPB-105i-ION	102	0,01	Ø 80	0,05	± 0,08	≤ 6
HPB-1245Di-ION	42/120	0,01/0,1	Ø 80	0,02 / 0,1	± 0,05 / ± 0,2	≤ 6
HPB-1265Di-ION	62/120	0,01/0,1	Ø 80	0,03 / 0,1	± 0,08 / ± 0,2	≤ 6
HPB-2245Di-ION	42/220	0,01/0,1	Ø 80	0,02 / 0,1	± 0,1 / ± 0,2	≤ 6
HPB-2265Di-ION	62/220	0,01/0,1	Ø 80	0,03 / 0,1	± 0,1 / ± 0,2	≤ 6
HPB-2285Di-ION	82/220	0,01/0,1	Ø 80	0,05 / 0,1	± 0,1 / ± 0,2	≤ 6
HPB-22105Di-ION	102/220	0,01/0,1	Ø 80	0,05 / 0,1	± 0,1 / ± 0,2	≤ 6
HPB 414Ai-ION	410	0,1	Ø 80	0,1mg if weight ≤ 220g 0,3mg from 220g to 310g 0,35mg from 310g to 410g	± 0,0005	≤ 4
HPB 514Ai-ION	510	0,1	Ø 80	0,1mg if weight ≤ 220g 0,3mg from 220g to 310g 0,35mg from 310g to 510g	± 0,0005	≤ 4
HPB 614Ai-ION	610	0,1	Ø 80	0,1mg if weight ≤ 220g 0,3mg from 220g to 310g 0,35mg from 310g to 610g	± 0,0005	≤ 4

Bel Engineering introduces the new series of semiMicro HPB balances with a resolution of 0.01 mg. Equipped with the new highly integrated electromagnetic cell, with automatic internal calibration on all models, they are characterized by a high level of precision and repeatability. All models are equipped with a large graphic display for easy reading and user friendly operations with many functions. HPBG balances have an extensive recipe database, GLP and many embedded advanced features that make them perfect for use in laboratory, research departments, compounds formulation and quality control applications. The -ION models are equipped with an integrated ioniser on the back of the balance with the purpose to neutralize static electricity on charged samples like plastic parts, containers or films for acquiring the most accurate results. As in the tradition of BEL products, new semiMicro HPB balances deliver an excellent performance / price ratio, thanks to the continuous research and study of Bel Engineering in the high resolution and precision weighing field

Features

- Electromagnetic force restoration weighing system
- Highly integrated weighing cell
- Automatic internal calibration
- Efficient filtering to deliver quick and accurate results
- LCD with backlight with adjustable contrast
- Large glass draught shield with 3 sliding doors for easy access to the items being weighed
- Plastic protection cover for keypad

Accessories

- Portable ioniser Ion-A15 (BL0371)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Density KIT for solids and liquids (AC002)
- Alphanumeric external keyboard (AC005)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- Factory Calibration certificate (BL0333)



Model	Capacity (g)	Resolution (mg)	Pan (mm)	Repeatability (mg)	Linearity (mg)	Response time (sec.)
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Automatic internal calibration

HPBG-425i	42	0,01	Ø 80	0,05	± 0,05	≤ 6
HPBG-625i	62	0,01	Ø 80	0,05	± 0,08	≤ 6
HPBG-105i	102	0,01	Ø 80	0,05	± 0,08	≤ 6
HPBG-1245Di	42/120	0,01/0,1	Ø 80	0,02 / 0,1	± 0,05 / ± 0,2	≤ 6
HPBG-1265Di	62/120	0,01/0,1	Ø 80	0,03 / 0,1	± 0,08 / ± 0,2	≤ 6
HPBG-2245Di	42/220	0,01/0,1	Ø 80	0,02 / 0,1	± 0,1 / ± 0,2	≤ 6
HPBG-2265Di	62/220	0,01/0,1	Ø 80	0,03 / 0,1	± 0,1 / ± 0,2	≤ 6
HPBG-2285Di	82/220	0,01/0,1	Ø 80	0,05 / 0,1	± 0,1 / ± 0,2	≤ 6
HPBG-22105Di	102/220	0,01/0,1	Ø 80	0,05 / 0,1	± 0,1 / ± 0,2	≤ 6
HPBG 414Ai	410	0,1	Ø 80	0,1mg if weight ≤ 220g 0,3mg from 220g to 310g 0,35mg from 310g to 410g	± 0,0005	≤ 4
HPBG 514Ai	510	0,1	Ø 80	0,1mg if weight ≤ 220g 0,3mg from 220g to 310g 0,35mg from 310g to 510g	± 0,0005	≤ 4
HPBG 614Ai	610	0,1	Ø 80	0,1mg if weight ≤ 220g 0,3mg from 220g to 310g 0,35mg from 310g to 610g	± 0,0005	≤ 4



- GRAPHIC
- GLP
- ION

A-ION models equipped with integrated Ioniser on the back of the balance. The ioniser has two way of operating: 2 minutes or continuously for max 8 hours.

Balance technical data

Common features

- Span drift (+ 10...+ 30 °C): +/- 2ppm/°C
- Dimensions LxWxH (mm): 345x215x345
- Weighing chamber dimensions LxWxH (mm): 162x171x225
- Dimensions of external electronics box LxWxH: 175x105x50 (mm), weight 500g
- Power supply 110-230Vac, 50/60Hz; output 24V 500mA 13VA
- Net Weight: 7Kg
- Net Weight -ION models: 7,4 Kg

Ioniser technical data

- Operation modes: 2 minutes or continuously for max 8 hours
- Ozone concentration: 0-0.05 ppm (2cm from ion source)
- Distance sample-ion source: about 5-40 cm
- Discharge time: 9s/5cm, 13s/10cm
- Ambient conditions: 0-50°C, 20-80% air humidity (non-condensing)
- Ioniser Power supply: IN AC 100-240V 50/60Hz, OUT DC 12V, 500mA

- EM-FR
- PCS
- LIMITS
- %WEIGH icon"/> %WEIGH
- ADD
- ANIMAL
- DENSITY
- PEAK
- RS 232
- UNITS
- CLOCK
- LANG
- RECIPE

Model	Capacity (g)	Resolution (mg)	Pan (mm)	Repeatability (mg)	Linearity (mg)	Response time (sec.)
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Automatic internal calibration

HPBG-425i-ION	42	0,01	Ø 80	0,05	± 0,05	≤ 6
HPBG-625i-ION	62	0,01	Ø 80	0,05	± 0,08	≤ 6
HPBG-105i-ION	102	0,01	Ø 80	0,05	± 0,08	≤ 6
HPBG-1245Di-ION	42/120	0,01/0,1	Ø 80	0,02 / 0,1	± 0,05 / ± 0,2	≤ 6
HPBG-1265Di-ION	62/120	0,01/0,1	Ø 80	0,03 / 0,1	± 0,08 / ± 0,2	≤ 6
HPBG-2245Di-ION	42/220	0,01/0,1	Ø 80	0,02 / 0,1	± 0,1 / ± 0,2	≤ 6
HPBG-2265Di-ION	62/220	0,01/0,1	Ø 80	0,03 / 0,1	± 0,1 / ± 0,2	≤ 6
HPBG-2285Di-ION	82/220	0,01/0,1	Ø 80	0,05 / 0,1	± 0,1 / ± 0,2	≤ 6
HPBG-22105Di-ION	102/220	0,01/0,1	Ø 80	0,05 / 0,1	± 0,1 / ± 0,2	≤ 6
HPBG 414Ai-ION	410	0,1	Ø 80	0,1mg if weight ≤ 220g 0,3mg from 220g to 310g 0,35mg from 310g to 410g	± 0,0005	≤ 4
HPBG 514Ai-ION	510	0,1	Ø 80	0,1mg if weight ≤ 220g 0,3mg from 220g to 310g 0,35mg from 310g to 510g	± 0,0005	≤ 4
HPBG 614Ai-ION	610	0,1	Ø 80	0,1mg if weight ≤ 220g 0,3mg from 220g to 310g 0,35mg from 310g to 610g	± 0,0005	≤ 4

M - Resolution 0,1mg

A Top Quality series of Analytical Balances that combine elegance with highly reliable measuring performance. Double case structure, ergonomic keypad, external or internal calibration. Many embedded advanced features make them perfect for use in laboratory, research departments, formulation and quality control applications. The -ION models are equipped with an integrated ioniser on the back of the balance with the purpose to neutralize static electricity on charged samples like plastic parts, containers or films.

Features

- Electromagnetic force restoration weighing system
- External or automatic internal calibration
- LCD with backlight with adjustable contrast
- Integrated ioniser on back of balance for -ION models
- Large glass draught shield with 3 sliding doors for easy access to the items being weighed
- Plastic protection cover

Accessories

- Portable ioniser Ion-A15 (BL0371)
- BEL Tablet System for balances. USB version (BL0329) or BLUETOOTH version (BL0330).⁽¹⁾
- Bluetooth printer DPP-250-BT for BEL Tablet system (AC013)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer STAT, with Statistics functions (AC022)
- Serial Printer DPP-250 (AC007)
- Density KIT for solids and liquids (AC002)
- Communication KIT for balances (BL0476)
- Serial to USB converter (E1002)
- Factory Calibration certificate (BL0333)
- Conformity Declaration (Verification)⁽²⁾

Technical data

Common features

- Span drift (+ 10...+ 30 °C): +/- 3ppm/°C
- Dimensions LxWxH (mm): 345x215x345
- Weighing chamber dimensions LxWxH (mm): 162x171x225
- Power supply 110-230Vac, 50/60Hz; output 24V 500mA 13VA

External calibration models

- Net Weight: 6,3Kg

Internal calibration models

- Net Weight: 6,6Kg



Optional portable ioniser model ION-A15



Model	Capacity (g)	Resolution (mg)	Pan (mm)	Repeatability (mg)	Linearity (g)	Response time (sec.)	Verification (optional?) M
External calibration							
M124A	120	0,1	Ø 80	0,1	± 0,0003	≤ 4	–
M164A	160	0,1	Ø 80	0,1	± 0,0003	≤ 4	–
M214A	220	0,1	Ø 80	0,1	± 0,0003	≤ 4	–
M254A	250	0,1	Ø 80	0,1	± 0,0003	≤ 4	–

Model	Capacity (g)	Resolution (mg)	Pan (mm)	Repeatability (mg)	Linearity (g)	Response time (sec.)	Verification (optional?) M
Automatic internal calibration							
M124Ai	120	0,1	Ø 80	0,1	± 0,0003	≤ 4	M
M164Ai	160	0,1	Ø 80	0,1	± 0,0003	≤ 4	M
M214Ai	220	0,1	Ø 80	0,1	± 0,0003	≤ 4	M
M214Ai-ION	220	0,1	Ø 80	0,1	± 0,0003	≤ 4	–
M254Ai	250	0,1	Ø 80	0,1	± 0,0003	≤ 4	M
M254Ai-ION	250	0,1	Ø 80	0,1	± 0,0003	≤ 4	–
M314Ai	310	0,1	Ø 80	0,1	± 0,0004	≤ 4	–
M314Ai-ION	310	0,1	Ø 80	0,1	± 0,0004	≤ 4	–

⁽¹⁾ Not available for verified models

⁽²⁾ To order Verification please add -M to name, e.g. M214Ai-M

⁽³⁾ If connected to optional STAT printer (AC022)



Optional bench Ioniser model ION-A15



Model	Capacity (g)	Resolution (mg)	Pan (mm)	Repeatability (mg)	Linearity (g)	Response time (sec.)	Verification (optional?)
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External calibration

MG124A	120	0,1	Ø 80	0,1	± 0,0003	≤ 4	-
MG164A	160	0,1	Ø 80	0,1	± 0,0003	≤ 4	-
MG214A	220	0,1	Ø 80	0,1	± 0,0003	≤ 4	-
MG254A	250	0,1	Ø 80	0,1	± 0,0003	≤ 4	-

Automatic internal calibration

MG124Ai	120	0,1	Ø 80	0,1	± 0,0003	≤ 4	M
MG164Ai	160	0,1	Ø 80	0,1	± 0,0003	≤ 4	M
MG214Ai	220	0,1	Ø 80	0,1	± 0,0003	≤ 4	M
MG214Ai-ION	220	0,1	Ø 80	0,1	± 0,0003	≤ 4	-
M254Ai	250	0,1	Ø 80	0,1	± 0,0003	≤ 4	M
MG254Ai-ION	250	0,1	Ø 80	0,1	± 0,0003	≤ 4	-
MG314Ai	310	0,1	Ø 80	0,1	± 0,0004	≤ 4	-
MG3 14Ai-ION	310	0,1	Ø 80	0,1	± 0,0004	≤ 4	-

All MG models are equipped with a large graphic display for easy reading and user friendly operations with many functions. Double case structure, ergonomic keypad. MG balances have an extensive recipe database, GLP and many embedded advanced features that make them perfect for use in laboratory, research departments, compounds formulation and quality control applications. The -ION models are equipped with an integrated ioniser on the back of the balance with the purpose to neutralize static electricity on charged samples like plastic parts, containers or films for acquiring the most accurate results.

Features

- Electromagnetic force restoration weighing system
- External or automatic internal calibration
- Recipe database: 99 recipes can be stored, each with up to 20 ingredients
- Large Graphic display allows efficient and easy operations
- Multilanguage: EN-DE-FR-IT-ES-PT
- GLP/ISO record keeping of weight values with date, time and serial number
- Integrated ioniser on back of balance for -ION models
- Large glass draught shield with 3 sliding doors for easy access to the items being weighed
- Plastic protection cover

Accessories

- Portable ioniser Ion-A15 (BL0371)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Density KIT for solids and liquids (AC002)
- Alphanumeric external keyboard (AC005)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- Factory Calibration certificate (BL0333)
- Conformity Declaration (Verification)

Technical data

Common features

- Span drift (+ 10...+ 30 °C): +/- 3ppm/°C
- Dimensions LxWxH (mm): 345x215x345
- Weighing chamber dimensions LxWxH (mm): 162x171x225
- Power supply 110-230Vac, 50/60Hz; output 24V 500mA 13VA

External calibration models

- Net Weight: 6,3Kg

Internal calibration models

- Net Weight: 6,6Kg

⁽²⁾ To order Verification please add -M to name, eg. MG214Ai-M

A Top Quality series of Precision Balances that combine elegance with highly reliable measuring performance. Double case structure, ergonomic keypad, external or internal calibration. Many embedded advanced features make them perfect for use in laboratory, research departments, formulation and quality control applications.

Features

- Electromagnetic force restoration weighing system
- External or automatic internal calibration
- LCD with backlight with adjustable contrast
- Round glass windshield
- Plastic protection cover
- Under hook weighing ⁽¹⁾

Optional functions

- Paper Grammage Function (T219)

Accessories

- Portable ioniser Ion-A15 (BL0371)
- BEL Tablet System for balances. USB version (BL0329) or BLUETOOTH version (BL0330). ⁽¹⁾
- Bluetooth printer DPP-250-BT for BEL Tablet system (AC013)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Serial Printer STAT, with Statistics functions (AC022)
- Density KIT for solids and liquids (AC002)
- Communication KIT for balances (BL0476)
- Density KIT for solids (AC001)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- Factory Calibration certificate (BL0333)
- Conformity Declaration (Verification)

Technical data

Common features

- Span drift (+ 10...+ 30 °C): +/- 4ppm/°C
- Dimensions LxWxH (mm): 345x215x155
- Weighing chamber dimensions diameter-Height (mm): 150x70
- Power supply 110-230Vac, 50/60Hz; output 24V 500mA 13VA

External calibration models

- Net Weight: 4,6Kg

Internal calibration models

- Net Weight: 4,9Kg

⁽¹⁾ Not available for verified models

⁽²⁾ To order Verification please add -M to name, e.g. M523i-M

⁽³⁾ If connected to optional STAT printer (AC022)



Model	Capacity (g)	Resolution (g)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)	Verification (optional?)
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External calibration

M223	220	0,001	Ø 110	0,0005	± 0,002	≤ 2	-
M333	330	0,001	Ø 110	0,0005	± 0,002	≤ 2	-
M523	520	0,001	Ø 110	0,001	± 0,002	≤ 2	-
M723	720	0,001	Ø 110	0,001	± 0,002	≤ 2	-
M1003	1000	0,001	Ø 110	0,001	± 0,003	≤ 3	-
M1203	1200	0,001	Ø 110	0,001	± 0,003	≤ 3	-

Internal Automatic Calibration

M223i	220	0,001	Ø 110	0,0005	± 0,002	≤ 2	M
M333i	330	0,001	Ø 110	0,0005	± 0,002	≤ 2	M
M523i	520	0,001	Ø 110	0,001	± 0,002	≤ 2	M
M723i	720	0,001	Ø 110	0,001	± 0,002	≤ 2	M
M1003i	1000	0,001	Ø 110	0,001	± 0,003	≤ 3	-
M1203i	1200	0,001	Ø 110	0,001	± 0,003	≤ 3	-
M1003Di	500/1000	0,001/0,01	Ø 110	0,001/0,005	± 0,001/± 0,01	≤ 2	M
M1203Di	720/1200	0,001/0,01	Ø 110	0,001/0,005	± 0,002/± 0,01	≤ 2	M



Model	Capacity (g)	Resolution (g)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)	Verification (optional) ²
External calibration							
MW223	220	0,001	Ø 110	0,0005	± 0,002	≤ 2	-
MW333	330	0,001	Ø 110	0,0005	± 0,002	≤ 2	-
MW523	520	0,001	Ø 110	0,001	± 0,002	≤ 2	-
MW723	720	0,001	Ø 110	0,001	± 0,002	≤ 2	-
MW1003	1000	0,001	Ø 110	0,001	± 0,003	≤ 3	-
MW1203	1200	0,001	Ø 110	0,001	± 0,003	≤ 3	-

Internal Automatic Calibration

MW223i	220	0,001	Ø 110	0,0005	± 0,002	≤ 2	M
MW333i	330	0,001	Ø 110	0,0005	± 0,002	≤ 2	M
MW523i	520	0,001	Ø 110	0,001	± 0,002	≤ 2	M
MW723i	720	0,001	Ø 110	0,001	± 0,002	≤ 2	M
MW1003i	1000	0,001	Ø 110	0,001	± 0,003	≤ 3	-
MW1203i	1200	0,001	Ø 110	0,001	± 0,003	≤ 3	-
MW2103i	2100	0,001	Ø 110	0,001	± 0,005	≤ 3	-
MW1003Di	500/1000	0,001/0,01	Ø 110	0,001/0,005	± 0,001/± 0,01	≤ 2	M
MW1203Di	720/1200	0,001/0,01	Ø 110	0,001/0,005	± 0,002/± 0,01	≤ 2	M

A Top Quality series of Precision Balances that combine elegance with highly reliable measuring performance. Double case structure, ergonomic keypad, external or internal calibration. Many embedded advanced features make them perfect for use in laboratory, research departments and quality control applications.

Features

- Electromagnetic force restoration weighing system
- External or automatic internal calibration
- LCD with backlight with adjustable contrast
- Large glass draught shield with 3 sliding doors for easy access to the items being weighed
- Plastic protection cover
- Under hook weighing⁽¹⁾

Optional functions

- Paper Gammage Function (T219)

Accessories

- Portable ioniser Ion-A15 (BL0371)
- BEL Tablet System for balances. USB version (BL0329) or BLUETOOTH version (BL0330).⁽¹⁾
- Bluetooth printer DPP-250-BT for BEL Tablet system (AC013)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Serial Printer STAT, with Statistics functions (AC022)
- Density KIT for solids and liquids (AC002)
- Communication KIT for balances (BL0476)
- Serial to USB converter (E1002)
- Serial cable for output to printer/PC (E743)
- Factory Calibration certificate (BL0333)
- Conformity Declaration (Verification)

Technical data

Common features

- Span drift (+ 10...+ 30 °C): +/- 4ppm/°C
- Dimensions LxWxH (mm): 345x215x345
- Weighing chamber dimensions LxWxH (mm): 162x171x225
- Power supply 110-230Vac, 50/60Hz; output 24V 500mA 13VA

External calibration models

- Net Weight: 6,1Kg

Internal calibration models

- Net Weight: 6,3Kg

⁽¹⁾ Not available for verified models

⁽²⁾ To order Verification please add -M to name, e.g. MG214Ai-M

⁽³⁾ If connected to optional STAT printer (AC022)

Double case structure, ergonomic keypad. MG balances have an extensive recipe database and many embedded advanced features make them perfect for use in laboratory, research departments, formulation and quality control applications.

Features

- Electromagnetic force restoration weighing system
- External or automatic internal calibration
- Recipe database: 99 recipes can be stored, each with up to 20 ingredients
- Large Graphic display allows efficient and easy operations
- Multilanguage: EN-DE-FR-IT-ES-PT
- GLP/ISO record keeping of weight values with date, time and serial number
- Round glass windshield
- Plastic protection cover
- Under hook weighing ⁽¹⁾

Accessories

- Portable ioniser Ion-A15 (BL0371)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Density KIT for solids and liquids (AC002)
- Density KIT for solids (AC001)
- Alphanumeric external keyboard (AC005)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- Factory Factory Calibration certificate (BL0333)
- Conformity Declaration (Verification)

Technical data

Common features

- Span drift (+ 10...+ 30 °C): +/- 4ppm/°C
- Dimensions LxWxH (mm): 345x215x155
- Weighing chamber dimensions diameter-Height (mm): 150x70
- Power supply 110-230Vac, 50/60Hz; output 24V 500mA 13VA

External calibration models

- Net Weight: 4,6Kg

Internal calibration models

- Net Weight: 4,9Kg



Model	Capacity (g)	Resolution (g)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)	Verification (optional?)
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External calibration

MG223	220	0,001	Ø 110	0,0005	± 0,002	≤ 2	-
MG333	330	0,001	Ø 110	0,0005	± 0,002	≤ 2	-
MG523	520	0,001	Ø 110	0,001	± 0,002	≤ 2	-
MG723	720	0,001	Ø 110	0,001	± 0,002	≤ 2	-
MG1003	1000	0,001	Ø 110	0,001	± 0,003	≤ 3	-
MG1203	1200	0,001	Ø 110	0,001	± 0,003	≤ 3	-

Internal Automatic Calibration

MG223i	220	0,001	Ø 110	0,0005	± 0,002	≤ 2	M
MG333i	330	0,001	Ø 110	0,0005	± 0,002	≤ 2	M
MG523i	520	0,001	Ø 110	0,001	± 0,002	≤ 2	M
MG723i	720	0,001	Ø 110	0,001	± 0,002	≤ 2	M
MG1003i	1000	0,001	Ø 110	0,001	± 0,003	≤ 3	-
MG1203i	1200	0,001	Ø 110	0,001	± 0,003	≤ 3	-
MG1003Di	500/1000	0,001/0,01	Ø 110	0,001/0,005	± 0,001/± 0,01	≤ 2	M
MG1203Di	720/1200	0,001/0,01	Ø 110	0,001/0,005	± 0,001/± 0,01	≤ 2	M

⁽¹⁾ Not available for verified models

⁽²⁾ To order Verification please add -M to name, e.g. M214Ai-M



Model	Capacity (g)	Resolution (g)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)	Verification (optional?)
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External calibration

MGW223	220	0,001	Ø 110	0,0005	± 0,002	≤ 2	-
MGW333	330	0,001	Ø 110	0,0005	± 0,002	≤ 2	-
MGW523	520	0,001	Ø 110	0,001	± 0,002	≤ 2	-
MGW723	720	0,001	Ø 110	0,001	± 0,002	≤ 2	-
MGW1003	1000	0,001	Ø 110	0,001	± 0,003	≤ 3	-
MGW1203	1200	0,001	Ø 110	0,001	± 0,003	≤ 3	-

Internal Automatic Calibration

MGW223i	220	0,001	Ø 110	0,0005	± 0,002	≤ 2	M
MGW333i	330	0,001	Ø 110	0,0005	± 0,002	≤ 2	M
MGW523i	520	0,001	Ø 110	0,001	± 0,002	≤ 2	M
MGW723i	720	0,001	Ø 110	0,001	± 0,002	≤ 2	M
MGW1003i	1000	0,001	Ø 110	0,001	± 0,003	≤ 3	-
MGW1203i	1200	0,001	Ø 110	0,001	± 0,003	≤ 3	-
MGW2103i	2100	0,001	Ø 110	0,001	± 0,005	≤ 3	-
MGW1003Di	500/1000	0,001/0,01	Ø 110	0,001/0,005	± 0,001/± 0,01	≤ 2	M
MGW1203Di	720/1200	0,001/0,01	Ø 110	0,001/0,005	± 0,001/± 0,01	≤ 2	M

A Top Quality series of Precision Balances that combine elegance with highly reliable measuring performance. All models are equipped with a large graphic display for easy reading and user friendly operations with many functions. Double case structure, ergonomic keypad. MGW balances have an extensive recipe database, GLP and many embedded advanced features that make them perfect for use in laboratory, research departments, compounds formulation and quality control applications.

Features

- Electromagnetic force restoration weighing system
- External or automatic internal calibration
- Recipe database: 99 recipes can be stored, each with up to 20 ingredients
- Large Graphic display allows efficient and easy operations
- Multilanguage: EN-DE-FR-IT-ES-PT
- GLP/ISO record keeping of weight values with date, time and serial number
- Large glass draught shield with 3 sliding doors for easy access to the items
- Plastic protection cover
- Under hook weighing⁽¹⁾

Accessories

- Portable ioniser Ion-A15 (BL0371)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Density KIT for solids and liquids (AC002)
- Density KIT for solids (AC001)
- Alphanumeric external keyboard (AC005)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- Factory Calibration certificate (BL0333)
- Conformity Declaration (Verification)

Technical data

Common features

- Span drift (+ 10...+ 30 °C): +/- 4ppm/°C
- Dimensions LxWxH (mm): 345x215x345
- Weighing chamber dimensions LxWxH (mm): 162x171x225
- Power supply 110-230Vac, 50/60Hz; output 24V 500mA 13VA

External calibration models

- Net Weight: 6,1Kg

Internal calibration models

- Net Weight: 6,3Kg

⁽¹⁾ Not available for verified models

⁽²⁾ To order Verification please add -M to name, e.g. MGW223i-M

Balances M series combine the nice BEL design with high level performance, guaranteed by the electromagnetic force restoration weighing cell. Double case structure, ergonomic keypad, external or internal calibration. Many embedded advanced features make them ideal instruments for your work in laboratory, research and quality control applications.

Features

- Electromagnetic force restoration weighing system
- External or automatic internal calibration
- LCD with backlight with adjustable contrast
- Plastic protection cover
- Under hook weighing ⁽¹⁾

Optional functions

- Paper Grammage Function (T219)

Accessories

- BEL Tablet System for balances. USB version (BL0329) or BLUETOOTH version (BL0330). (1)
- Bluetooth printer DPP-250-BT for BEL Tablet system (AC013)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Serial Printer STAT, with Statistics functions (AC022)
- Density KIT for solids and liquids (AC002)
- Density KIT for solids (AC001)
- Comunication KIT for balances (BL0476)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- Factory Calibration certificate (BL0333)
- Conformity Declaration (Verification)

Technical data

Common features

- Span drift (+ 10...+ 30 °C): +/- 4ppm/°C
- Dimensions LxWxH (mm): 345x215x100
- Power supply 110-230Vac, 50/60Hz; output 24V 500mA 13VA

External calibration models

- Net Weight: 4,6Kg

Internal calibration models

- Net Weight: 5,1Kg

⁽¹⁾ Not available for verified models

⁽²⁾ To order Verification please add -M to name, e.g. M2202i-M

⁽³⁾ If connected to optional STAT printer (AC022)



Model	Capacity (g)	Resolution (g)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)	Verification (optional?)
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External calibration

M2202	2200	0,01	Ø 160	0,005	± 0,02	≤ 2	-
M3102	3100	0,01	Ø 160	0,01	± 0,02	≤ 2	-
M4202	4200	0,01	Ø 160	0,01	± 0,03	≤ 2	-
M5202	5200	0,01	Ø 160	0,01	± 0,03	≤ 3	-
M6202	6200	0,01	Ø 160	0,01	± 0,03	≤ 3	-
M8202	8200	0,01	Ø 160	0,01	± 0,04	≤ 3	-
M5502D	800/5500	0,01/0,1	Ø 160	0,005/0,03	± 0,01/± 0,1	≤ 2	-
M5502D-PQ	800/5500	0,01/0,1	175x195	0,005/0,03	± 0,01/± 0,1	≤ 2	-

Automatic internal calibration

M2202i	2200	0,01	Ø 160	0,01	± 0,02	≤ 2	M
M3102i	3100	0,01	Ø 160	0,01	± 0,02	≤ 2	M
M4202i	4200	0,01	Ø 160	0,01	± 0,03	≤ 2	M
M5202i	5200	0,01	Ø 160	0,01	± 0,03	≤ 3	M
M6202i	6200	0,01	Ø 160	0,01	± 0,03	≤ 3	M
M5502Di	800/5500	0,01/0,1	Ø 160	0,005/0,03	± 0,01/± 0,1	≤ 2	M
M5502Di-PQ	800/5500	0,01/0,1	175x195	0,005/0,03	± 0,01/± 0,1	≤ 2	-
M5202Di	3000/5200	0,01/0,1	Ø 160	0,01/0,03	± 0,02/± 0,1	≤ 2	M
M6202Di	4000/6200	0,01/0,1	Ø 160	0,01/0,03	± 0,03/± 0,1	≤ 3	M



Model	Capacity (g)	Resolution (g)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)	Verification (optional?)
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External calibration

MG2202	2200	0,01	Ø 160	0,005	± 0,02	≤ 2	-
MG3102	3100	0,01	Ø 160	0,01	± 0,02	≤ 2	-
MG4202	4200	0,01	Ø 160	0,01	± 0,03	≤ 2	-
MG5202	5200	0,01	Ø 160	0,01	± 0,03	≤ 3	-
MG6202	6200	0,01	Ø 160	0,01	± 0,03	≤ 3	-
MG8202	8200	0,01	Ø 160	0,01	± 0,04	≤ 3	-
MG5502D	800/5500	0,01/0,1	Ø 160	0,005/0,03	± 0,01/± 0,1	≤ 2	-
MG5502D-PQ	800/5500	0,01/0,1	175x195	0,005/0,03	± 0,01/± 0,1	≤ 2	-

Automatic internal calibration

MG2202i	2200	0,01	Ø 160	0,01	± 0,02	≤ 2	M
MG3102i	3100	0,01	Ø 160	0,01	± 0,02	≤ 2	M
MG4202i	4200	0,01	Ø 160	0,01	± 0,03	≤ 2	M
MG5202i	5200	0,01	Ø 160	0,01	± 0,03	≤ 3	M
MG6202i	6200	0,01	Ø 160	0,01	± 0,03	≤ 3	M
MG5502Di	800/5500	0,01/0,1	Ø 160	0,005/0,03	± 0,01/± 0,1	≤ 2	M
MG5502Di-PQ	800/5500	0,01/0,1	175x195	0,005/0,03	± 0,01/± 0,1	≤ 2	-
MG5202Di	3000/5200	0,01/0,1	Ø 160	0,01/0,03	± 0,02/± 0,1	≤ 2	M
MG6202Di	4000/6200	0,01/0,1	Ø 160	0,01/0,03	± 0,03/± 0,1	≤ 3	M

Balances MG series combine the nice BEL design with high level performance, guaranteed by the electromagnetic force restoration weighing cell. All models are equipped with a large graphic display for easy reading and user friendly operations with many functions. Double case structure, ergonomic keypad. MG balances have an extensive recipe database, GLP and many embedded advanced features that make them perfect for use in laboratory, research departments, compounds formulation and quality control applications.

Features

- Electromagnetic force restoration weighing system
- External or automatic internal calibration
- Recipe database: 99 recipes can be stored, each with up to 20 ingredients
- Large Graphic display allows efficient and easy operations
- Multilanguage: EN-DE-FR-IT-ES-PT
- GLP/ISO record keeping of weight values with date, time and serial number
- Plastic protection cover
- Under hook weighing⁽¹⁾

Accessories

- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Serial Printer STAT, with Statistics functions (AC022)
- Density KIT for solids and liquids (AC002)
- Density KIT for solids (AC001)
- Alphanumeric external keyboard (AC005)
- Serial to USB converter (E1002)
- Factory Calibration certificate (BL0333)
- Conformity Declaration (Verification)

Technical data

Common features

- Span drift (+ 10...+ 30 °C): +/- 4ppm/°C
- Dimensions LxWxH (mm): 345x215x100
- Power supply 110-230Vac, 50/60Hz; output 24V 500mA 13VA

External calibration models

- Net Weight: 4,6Kg

Internal calibration models

- Net Weight: 5,1Kg

⁽¹⁾ Not available for verified models

⁽²⁾ To order Verification please add -M to name, e.g. MG2202i-M

L - Resolution 0,001g

Balances L series are a synthesis of design, performance and convenience. Thanks to a sophisticated software and to a high-performance load cell, these balances deliver top performance at competitive prices. Double case structure, ergonomic keypad, external or internal calibration. Many embedded advanced features make them perfect for your work.

Features

- High resolution load cell weighing system
- External or automatic internal calibration
- LCD with backlight with adjustable contrast
- Round glass windshield
- Plastic protection cover
- Under hook weighing ⁽¹⁾

Optional functions

- Paper Grammage Function (T219)

Accessories

- Portable ioniser Ion-A15 (BL0371)
- BEL Tablet System for balances. USB version (BL0329) or BLUETOOTH version (BL0330). (1)
- Bluetooth printer DPP-250-BT for BEL Tablet system (AC013)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Serial Printer STAT, with Statistics functions (AC022)
- Portable rechargeable battery pack (AC015)
- Density KIT for solids and liquids (AC002)
- Density KIT for solids (AC001)
- Communication KIT for balances (BL0476)
- Alphanumeric external keyboard (AC005)
- Serial to USB converter (E1002)
- Factory Calibration certificate (BL0333)

Technical data

Common features

- Span drift (+ 10...+ 30 °C): +/- 4ppm/°C
- Dimensions LxWxH (mm): 345x215x155
- Weighing chamber dimensions diameter-Height (mm): 150x70
- Power supply 110-230Vac, 50/60Hz; output 9V 1,2A 10VA

External calibration models

- Net Weight: 3,3Kg

Internal calibration models

- Net Weight: 3,6Kg



Optional STAT printer



Model	Capacity (g)	Resolution (g)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)
External calibration						
L163	160	0,001	Ø 110	0,0006	± 0,003	≤ 3
L203	210	0,001	Ø 110	0,0006	± 0,003	≤ 3
L303	310	0,001	Ø 110	0,0006	± 0,003	≤ 3
L303D	150/310	0,001/0,01	Ø 110	0,0006/0,005	± 0,003/± 0,02	≤ 3
L423	420	0,001	Ø 110	0,001	± 0,004	≤ 4
L523	520	0,001	Ø 110	0,001	± 0,004	≤ 4

Automatic internal calibration						
L163i	160	0,001	Ø 110	0,0006	± 0,003	≤ 3
L203i	210	0,001	Ø 110	0,0006	± 0,003	≤ 3
L303i	310	0,001	Ø 110	0,0006	± 0,003	≤ 3
L303Di	150/310	0,001/0,01	Ø 110	0,0006/0,005	± 0,003/± 0,02	≤ 3
L423i	420	0,001	Ø 110	0,001	± 0,004	≤ 4
L523i	520	0,001	Ø 110	0,001	± 0,004	≤ 4

⁽¹⁾ Only for external calibration model

⁽²⁾ Optional external battery pack (AC015)

⁽³⁾ If connected to optional STAT printer (AC022)



A Top Quality series of Precision Balances that combine elegance with highly reliable measuring performance. All models are equipped with a large graphic display for easy reading and user friendly operations with many functions. Double case structure, ergonomic keypad. LG balances have an extensive recipe database, GLP and many embedded advanced features that make them perfect for use in laboratory, research departments, compounds formulation and quality control applications.

Features

- High resolution load cell weighing system
- External or automatic internal calibration
- Recipe database: 99 recipes can be stored, each with up to 20 ingredients
- Large Graphic display allows efficient and easy operations
- Multilanguage: EN-DE-FR-IT-ES-PT
- GLP/ISO record keeping of weight values with date, time and serial number
- Round glass windshield
- Plastic protection cover
- Under hook weighing ⁽¹⁾

Accessories

- Portable ioniser Ion-A15 (BL0371)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Density KIT for solids and liquids (AC002)
- Density KIT for solids (AC001)
- Portable rechargeable battery pack (AC015)
- Alphanumeric external keyboard (AC005)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- Factory Calibration certificate (BL0333)

Technical data

Common features

- Span drift (+ 10...+ 30 °C): +/- 4ppm/°C
- Dimensions LxWxH (mm): 345x215x155
- Weighing chamber dimensions diameter-Height (mm): 150x70
- Power supply 110-230Vac, 50/60Hz; output 9V 1,2A 10VA

External calibration models

- Net Weight: 3,3Kg

Internal calibration models

- Net Weight: 3,6Kg

⁽¹⁾ Only for external calibration model

⁽²⁾ Optional external battery pack (AC015)



Model	Capacity (g)	Resolution (g)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)
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External calibration

LG163	160	0,001	Ø 110	0,0006	± 0,003	≤ 3
LG203	210	0,001	Ø 110	0,0006	± 0,003	≤ 3
LG303	310	0,001	Ø 110	0,0006	± 0,003	≤ 3
LG303D	150/310	0,001/0,01	Ø 110	0,0006/0,005	± 0,003/±0,02	≤ 3
LG423	420	0,001	Ø 110	0,001	± 0,004	≤ 4
LG523	520	0,001	Ø 110	0,001	± 0,004	≤ 4

Automatic internal calibration

LG163i	160	0,001	Ø 110	0,0006	± 0,003	≤ 3
LG203i	210	0,001	Ø 110	0,0006	± 0,003	≤ 3
LG303i	310	0,001	Ø 110	0,0006	± 0,003	≤ 3
LG303Di	150/310	0,001/0,01	Ø 110	0,0006/0,005	± 0,003/±0,02	≤ 3
LG423i	420	0,001	Ø 110	0,001	± 0,004	≤ 4
LG523i	520	0,001	Ø 110	0,001	± 0,004	≤ 4

LW - Resolution 0,001g

Balances LW series are a synthesis of design, performance and convenience. Thanks to a sophisticated software and to a high-performance load cell, these balances deliver top performance at competitive prices. Double case structure, ergonomic keypad, external or internal calibration. Many embedded advanced features make them perfect for your work.

Features

- High resolution load cell weighing system
- External or automatic internal calibration
- LCD with backlight with adjustable contrast
- Large glass draught shield with 3 sliding doors for easy access to the items
- Plastic protection cover
- Under hook weighing ⁽¹⁾

Optional functions

- Paper Grammage Function (T219)

Accessories

- Portable ioniser Ion-A15 (BL0371)
- BEL Tablet System for balances. USB version (BL0329) or BLUETOOTH version (BL0330).
- Bluetooth printer DPP-250-BT for BEL Tablet system (AC013)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Serial Printer STAT, with Statistics functions (AC022)
- Communication KIT for balances (BL0476)
- Portable rechargeable battery pack (AC015)
- Density KIT for solids and liquids (AC002)
- Density KIT for solids (AC001)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- Factory Calibration certificate (BL0333)

Technical data

Common features

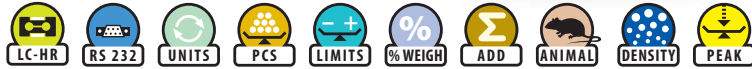
- Span drift (+ 10...+ 30 °C): +/- 4ppm/°C
- Dimensions LxWxH (mm): 345x215x345
- Weighing chamber dimensions LxWxH (mm): 162x171x225
- Power supply 110-230Vac, 50/60Hz; output 9V 1,2A 10VA

External calibration models

- Net Weight: 4,3Kg

Internal calibration models

- Net Weight: 4,6Kg



Model	Capacity (g)	Resolution (g)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)
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External calibration

LW163	160	0,001	Ø 110	0,0006	± 0,003	≤ 3
LW203	210	0,001	Ø 110	0,0006	± 0,003	≤ 3
LW303	310	0,001	Ø 110	0,0006	± 0,003	≤ 3
LW303D	150/310	0,001/0,01	Ø 110	0,0006/0,005	± 0,003/± 0,02	≤ 3
LW423	420	0,001	Ø 110	0,001	± 0,004	≤ 4
LW523	520	0,001	Ø 110	0,001	± 0,004	≤ 4

Automatic internal calibration

LW163i	160	0,001	Ø 110	0,0006	± 0,003	≤ 3
LW203i	210	0,001	Ø 110	0,0006	± 0,003	≤ 3
LW303i	310	0,001	Ø 110	0,0006	± 0,003	≤ 3
LW303Di	150/310	0,001/0,01	Ø 110	0,0006/0,005	± 0,003/± 0,02	≤ 3
LW423i	420	0,001	Ø 110	0,001	± 0,004	≤ 4
LW523i	520	0,001	Ø 110	0,001	± 0,004	≤ 4

⁽¹⁾ Only for external calibration model

⁽²⁾ Optional external battery pack (AC015)

⁽³⁾ If connected to optional STAT printer (AC022)



Model	Capacity (g)	Resolution (g)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)
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External calibration

LGW163	160	0,001	Ø 110	0,0006	± 0,003	≤ 3
LGW203	210	0,001	Ø 110	0,0006	± 0,003	≤ 3
LGW303	310	0,001	Ø 110	0,0006	± 0,003	≤ 3
LGW303D	150/310	0,001/0,01	Ø 110	0,0006/0,005	± 0,003/± 0,02	≤ 3
LGW423	420	0,001	Ø 110	0,001	± 0,004	≤ 4
LGW523	520	0,001	Ø 110	0,001	± 0,004	≤ 4

Automatic internal calibration

LGW163i	160	0,001	Ø 110	0,0006	± 0,003	≤ 3
LGW203i	210	0,001	Ø 110	0,0006	± 0,003	≤ 3
LGW303i	310	0,001	Ø 110	0,0006	± 0,003	≤ 3
LGW303Di	150/310	0,001/0,01	Ø 110	0,0006/0,005	± 0,003/± 0,02	≤ 3
LGW423i	420	0,001	Ø 110	0,001	± 0,004	≤ 4
LGW523i	520	0,001	Ø 110	0,001	± 0,004	≤ 4

A Top Quality series of Precision Balances that combine elegance with highly reliable measuring performance. All models are equipped with a large graphic display for easy reading and user friendly operations with many functions. Double case structure, ergonomic keypad. LGW balances have an extensive recipe database, GLP and many embedded advanced features that make them perfect for use in laboratory, research departments, compounds formulation and quality control applications.

Features

- High resolution load cell weighing system
- External or automatic internal calibration
- Recipe database: 99 recipes can be stored, each with up to 20 ingredients
- Large Graphic display allows efficient and easy operations
- Multilanguage: EN-DE-FR-IT-ES-PT
- GLP/ISO record keeping of weight values with date, time and serial number
- Round glass windshield
- Plastic protection cover
- Under hook weighing

Accessories

- Portable ioniser Ion-A15 (BL0371)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Density KIT for solids and liquids (AC002)
- Density KIT for solids (AC001)
- Portable rechargeable battery pack (AC015)
- Alphanumeric external keyboard (AC005)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- Factory Calibration certificate (BL0333)
- Conformity Declaration (Verification)

Technical data

Common features

- Span drift (+ 10...+ 30 °C): +/- 4ppm/°C
- Dimensions LxWxH (mm): 345x215x345
- Weighing chamber dimensions LxWxH (mm): 162x171x225
- Power supply 110-230Vac, 50/60Hz; output 9V 1,2A 10VA

External calibration models

- Net Weight: 4,3Kg

Internal calibration models

- Net Weight: 4,6Kg

(1) Only for external calibration model

(2) Optional external battery pack (AC015)

L - Resolution 0,01g

Balances L series are a synthesis of design, performance and convenience. Thanks to a sophisticated software and to a high-performance load cell, these balances deliver top performance at competitive prices. Double case structure, ergonomic keypad, external or internal calibration. Many embedded advanced features make them perfect for your work.

Features

- High resolution load cell weighing system
- External or automatic internal calibration
- LCD with backlight with adjustable contrast
- Plastic protection cover
- Under hook weighing ⁽¹⁾

Optional functions

- Paper Grammage Function (T219)

Accessories

- Portable ioniser Ion-A15 (BL0371)
- BEL Tablet System for balances. USB version (BL0329) or BLUETOOTH version (BL0330).
- Bluetooth printer DPP-250-BT for BEL Tablet system (AC013)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Serial Printer STAT, with Statistics functions (AC022)
- Communication KIT for balances (BL0476)
- Portable rechargeable battery pack (AC015)
- Density KIT for solids and liquids (AC002)
- Density KIT for solids (AC001)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- Factory Calibration certificate (BL0333)
- Conformity Declaration (Verification)

Technical data

Common features

- Span drift (+ 10...+ 30 °C): +/- 5ppm/°C
- Dimensions LxWxH (mm): 345x215x100
- Power supply 110-230Vac, 50/60Hz; output 9V 1,2A 10VA

External calibration models

- Net Weight: 3,3Kg

Internal calibration models

- Net Weight: 3,6Kg

⁽¹⁾ Not available for verified models

⁽²⁾ To order Verification please add -M to name, e.g. L1002i-M

⁽³⁾ Only for external calibration model

⁽⁴⁾ Optional external battery pack (AC015)

⁽⁵⁾ If connected to optional STAT printer (AC022)



Optional Tablet system to expand balance functions



Model	Capacity (g)	Resolution (g)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)	Verification (optional?)
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External calibration

L1002	1000	0,01	Ø 160	0,01	± 0,02	≤ 3	–
L1502	1500	0,01	Ø 160	0,01	± 0,02	≤ 3	–
L2202	2200	0,01	Ø 160	0,01	± 0,03	≤ 3	–
L3102	3100	0,01	Ø 160	0,01	± 0,03	≤ 3	–
L4202	4200	0,01	Ø 160	0,01	± 0,04	≤ 4	–
L5202	5200	0,01	Ø 160	0,01	± 0,04	≤ 4	–

Automatic internal calibration

L1002i	1000	0,01	Ø 160	0,01	± 0,02	≤ 3	M
L1502i	1500	0,01	Ø 160	0,01	± 0,02	≤ 3	M
L2202i	2200	0,01	Ø 160	0,01	± 0,03	≤ 3	M
L3102i	3100	0,01	Ø 160	0,01	± 0,03	≤ 3	M
L4202i	4200	0,01	Ø 160	0,01	± 0,04	≤ 4	–



Model	Capacity (g)	Resolution (g)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)	Verification (optional ²)
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External calibration

LG1002	1000	0,01	Ø 160	0,01	± 0,02	≤ 3	–
LG1502	1500	0,01	Ø 160	0,01	± 0,02	≤ 3	–
LG2202	2200	0,01	Ø 160	0,01	± 0,03	≤ 3	–
LG3102	3100	0,01	Ø 160	0,01	± 0,03	≤ 3	–
LG4202	4200	0,01	Ø 160	0,01	± 0,04	≤ 4	–
LG5202	5200	0,01	Ø 160	0,01	± 0,04	≤ 4	–

Automatic internal calibration

LG1002i	1000	0,01	Ø 160	0,01	± 0,02	≤ 3	M
LG1502i	1500	0,01	Ø 160	0,01	± 0,02	≤ 3	M
LG2202i	2200	0,01	Ø 160	0,01	± 0,03	≤ 3	M
LG3102i	3100	0,01	Ø 160	0,01	± 0,03	≤ 3	M
LG4202i	4200	0,01	Ø 160	0,01	± 0,04	≤ 4	–

A Top Quality series of Precision Balances that combine elegance with highly reliable measuring performance. All models are equipped with a large graphic display for easy reading and user friendly operations with many functions. Double case structure, ergonomic keypad. LG balances have an extensive recipe database, GLP and many embedded advanced features make them perfect for use in laboratory, research departments, compounds formulation and quality control applications.

Features

- High resolution load cell weighing system
- External or automatic internal calibration
- Recipe database: 99 recipes can be stored, each with up to 20 ingredients
- Large Graphic display allows efficient and easy operations
- Multilanguage: EN-DE-FR-IT-ES-PT
- GLP/ISO record keeping of weight values with date, time and serial number
- Plastic protection cover
- Under hook weighing ⁽¹⁾

Accessories

- Portable ioniser Ion-A15 (BL0371)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Density KIT for solids and liquids (AC002)
- Density KIT for solids (AC001)
- Portable rechargeable battery pack (AC015)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- Factory Calibration certificate (BL0333)
- Conformity Declaration (Verification)

Technical data

Common features

- Span drift (+ 10...+ 30 °C): +/- 5ppm/°C
- Dimensions LxWxH (mm): 345x215x100
- Power supply 110-230Vac, 50/60Hz; output 9V 1,2A 10VA

External calibration models

- Net Weight: 3,3Kg

Internal calibration models

- Net Weight: 3,6kg

⁽¹⁾ Not available for verified models

⁽²⁾ To order Verification please add -M to name, e.g. L1002i-M

⁽³⁾ Only for external calibration model

⁽⁴⁾ Optional external battery pack (AC015)

L - Resolution 0,1g

Balances Series L are a synthesis of design, performance and convenience. Thanks to a sophisticated software and to a high-performance load cell, these balances deliver top performance at competitive prices. Double case structure, ergonomic keypad, maximum capacity 20Kg. Many embedded advanced features make them perfect for your work.

Features

- High resolution load cell weighing system
- External calibration
- LCD with backlight with adjustable contrast
- Plastic protection cover
- Under hook weighing

Accessories

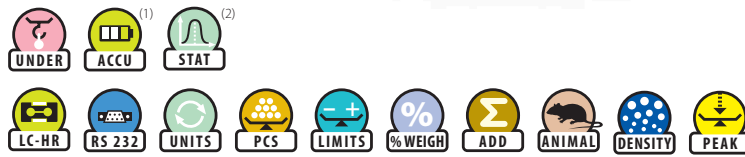
- BEL Tablet System for balances. USB version (BL0329) or BLUETOOTH version (BL0330).
- Bluetooth printer DPP-250-BT for BEL Tablet system (AC013)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Serial Printer STAT, with Statistics functions (AC022)
- Communication KIT for balances (BL0476)
- Portable rechargeable battery pack (AC015)
- Alphanumeric external keyboard (AC005)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- Factory Calibration certificate (BL0333)

Technical data

- Span drift (+ 10...+ 30 °C): +/- 6ppm/°C
- Dimensions LxWxH (mm): 345x215x100
- Power supply 110-230Vac, 50/60Hz; output 9V 1,2A 10VA
- Net Weight: 3,5Kg



Portable rechargeable battery pack



Model	Capacity (g)	Resolution (g)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)
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External calibration

L4501	4500	0,1	175x195	0,05	± 0,1	≤ 2
L5201	5200	0,1	175x195	0,05	± 0,1	≤ 2
L6501	6500	0,1	175x195	0,05	± 0,1	≤ 2
L8001	8000	0,1	175x195	0,05	± 0,2	≤ 2
L10001	10000	0,1	175x195	0,05	± 0,2	≤ 2
L12001	12000	0,1	175x195	0,05	± 0,2	≤ 3
L16001	16000	0,1	175x195	0,08	± 0,3	≤ 3
L20001	20000	0,1	175x195	0,1	± 0,4	≤ 4

⁽¹⁾ Optional external battery pack (AC015)

⁽²⁾ If connected to optional STAT printer (AC022)



Model	Capacity (g)	Resolution (g)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)
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External calibration

LG4501	4500	0,1	175x195	0,05	± 0,1	≤ 2
LG5201	5200	0,1	175x195	0,05	± 0,1	≤ 2
LG6501	6500	0,1	175x195	0,05	± 0,1	≤ 2
LG8001	8000	0,1	175x195	0,05	± 0,2	≤ 2
LG10001	10000	0,1	175x195	0,05	± 0,2	≤ 2
LG12001	12000	0,1	175x195	0,05	± 0,2	≤ 3
LG16001	16000	0,1	175x195	0,08	± 0,3	≤ 3
LG20001	20000	0,1	175x195	0,1	± 0,4	≤ 4

A Top Quality series of Precision Balances that combine elegance with highly reliable measuring performance. precision and repeatability. All models are equipped with a large graphic display for easy reading and user friendly operations with many functions. Double case structure, ergonomic keypad. LG balances have an extensive recipe database, GLP and many embedded advanced features that make them perfect for use in laboratory, research departments, compounds formulation and quality control applications.

Features

- High resolution load cell weighing system
- External calibration
- Recipe database: 99 recipes can be stored, each with up to 20 ingredients
- Large Graphic display allows efficient and easy operations
- Multilanguage: EN-DE-FR-IT-ES-PT
- GLP/ISO record keeping of weight values with date, time and serial number
- Plastic protection cover
- Under hook weighing

Accessories

- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Portable rechargeable battery pack (AC015)
- Alphanumeric external keyboard (AC005)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- Factory Calibration certificate (BL0333)

Technical data

- Span drift (+ 10...+ 30 °C): +/- 6ppm/°C
- Dimensions LxWxH (mm): 345x215x100
- Power supply 110-230Vac, 50/60Hz; output 9V 1,2A 10VA
- Net Weight: 3,5Kg

⁽¹⁾ Optional external battery pack (AC015)

S - Resolution 0,001g

A fusion of design and quality, balances S series enclose all the experience of higher class models in a small footprint portable balance. Thanks to the sophisticated software and to a high-performance load cell, these balances reach maximum capacity of 420 grams. Solid structure, ergonomic keypad and the many embedded software functions make this balance a complete product at a very competitive price.

Features

- High resolution load cell weighing system
- Small footprint, portable
- External calibration
- LCD with backlight with adjustable contrast
- Round glass windshield
- Plastic protection cover
- Operating with internal accumulator (included)

Optional functions

- Paper Grammage Function (T219)

Accessories

- Portable ioniser Ion-A15 (BL0371)
- BEL Tablet System for balances. USB version (BL0329) or BLUETOOTH version (BL0330)
- Bluetooth printer DPP-250-BT for BEL Tablet system (AC013)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Serial Printer STAT, with Statistics functions (AC022)
- Communication KIT for balances (BL0476)
- Density KIT for solids and liquids (AC002)
- Density KIT for solids (AC001)
- Alphanumeric external keyboard (AC005)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- Factory Calibration certificate (BL0333)

Technical data

- Span drift (+ 10...+ 30 °C): +/- 5ppm/°C
- Dimensions LxWxH (mm): 190x255x130
- Weighing chamber dimensions diameter-Height (mm): 133x70
- Power supply 110-230Vac, 50/60Hz; output 9V 1,2A 10VA
- Net Weight: 1,6Kg



Optional Tablet system to expand balance functions



Model	Capacity (g)	Resolution (g)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)
External calibration						
S123	120	0,001	Ø 80	0.0008	± 0,003	≤ 3
S203	210	0,001	Ø 80	0,001	± 0,003	≤ 3
S303	310	0,001	Ø 80	0,001	± 0,003	≤ 3
S303D	150/310	0,001/0,01	Ø 80	0,001/0,008	± 0,003/± 0,02	≤ 3
S423	420	0,001	Ø 80	0,001	± 0,004	≤ 3
S523	520	0,001	Ø 80	0,001	± 0,004	≤ 3

⁽¹⁾ If connected to optional STAT printer (AC022)



Optional TLP-50 label printer



Features

- High resolution load cell weighing system
- Small footprint, portable
- External calibration
- LCD with backlight with adjustable contrast
- Under hook weighing
- Plastic protection cover
- Operating with internal accumulator (included)

Optional functions

- Paper Grammage Function (T219)

Accessories

- Portable ioniser Ion-A15 (BL0371)
- BEL Tablet System for balances. USB version (BL0329) or BLUETOOTH version (BL0330)
- Bluetooth printer DPP-250-BT for BEL Tablet system (AC013)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Serial Printer STAT, with Statistics functions (AC022)
- Density KIT for solids and liquids (AC002)
- Density KIT for solids (AC001)
- Communication KIT for balances (BL0476)
- Alphanumeric external keyboard (AC005)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- Factory Calibration certificate (BL0333)



Model	Capacity (g)	Resolution (g)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)
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External calibration

S622	620	0,01	Ø 130	0,01	± 0,02	≤ 2
S1002	1000	0,01	Ø 130	0,01	± 0,02	≤ 2
S1202	1200	0,01	Ø 130	0,01	± 0,02	≤ 2
S1502	1500	0,01	Ø 130	0,01	± 0,02	≤ 2
S2202	2200	0,01	Ø 130	0,01	± 0,03	≤ 3
S3102	3100	0,01	Ø 130	0,01	± 0,03	≤ 3
S4202	4200	0,01	Ø 130	0,01	± 0,04	≤ 3
S5202	5200	0,01	150X140	0,01	± 0,04	≤ 4

Technical data

- Span drift (+ 10...+ 30 °C): +/- 6ppm/°C
- Dimensions LxWxH (mm): 190x255x80
- Power supply 110-230Vac, 50/60Hz; output 9V 1,2A 10VA
- Net Weight: 1,4Kg

⁽¹⁾ If connected to optional STAT printer (AC022)

S - Resolution 0,1g

A fusion of design and quality, balances S series enclose all the experience of higher class models in a small footprint portable balance. A sophisticated software and a high-performance load cell allow always reliable weighings and fast response. Solid structure, ergonomic keypad and the many embedded software functions make this balance a complete product at a very competitive price.

Features

- High resolution load cell weighing system
- Small footprint, portable
- External calibration
- LCD with backlight with adjustable contrast
- Operating with internal accumulator (included)
- Under hook weighing
- Plastic protection cover

Accessories

- BEL Tablet System for balances. USB version (BL0329) or BLUETOOTH version (BL0330)
- Bluetooth printer DPP-250-BT for BEL Tablet system (AC013)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Serial Printer STAT, with Statistics functions (AC022)
- Communication KIT for balances (BL0476)
- Alphanumeric external keyboard (AC005)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- Factory Calibration certificate (BL0333)

Technical data

- Span drift (+ 10...+ 30 °C): +/- 6ppm/°C
- Dimensions LxWxH (mm): 190x255x80
- Power supply 110-230Vac, 50/60Hz; output 9V 1,2A 10VA
- Net Weight: 1,4Kg



Optional Tablet system to expand balance functions



Model	Capacity (g)	Resolution (g)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)
External calibration						
S3201	3200	0,1	150x140	0,05	± 0,2	≤ 2
S5201	5200	0,1	150x140	0,05	± 0,2	≤ 2
S6501	6500	0,1	150x140	0,05	± 0,2	≤ 2

⁽¹⁾ If connected to optional STAT printer (AC022)



The entry level of balances keeping all the quality of higher level balances. Is the essential for having always precise and reliable results with the minimum investment. The refined design, the small dimensions, the backlit LCD display, the possibility of operating also with AA type batteries and the many on-board software functions already included make this balance a product with the best quality over price.

Features

- High resolution load cell weighing system
- Small footprint, portable
- External calibration
- LCD with backlight
- Operates also with AA batteries (not included)
- Plastic protection cover

Accessories

- Rechargeable battery, type AA (E803) (balances ES require five)
- Factory Calibration certificate (BL0333)

Technical data

- Span drift (+ 10...+ 30 °C): +/- 6ppm/°C
- Dimensions LxWxH (mm): 190x255x80
- Power supply 110-230Vac, 50/60Hz; output 9V 1,2A 10VA
- Net Weight: 1 Kg



Model	Capacity (g)	Resolution (g)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)
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External calibration

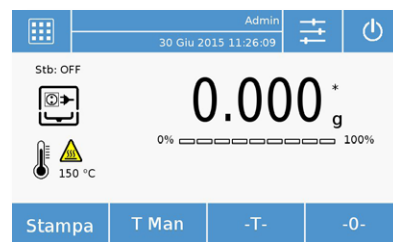
ES202	200	0,01	Ø 110	0,01	± 0,02	≤ 2
ES422	420	0,01	Ø 110	0,01	± 0,02	≤ 2
ES1001	1000	0,1	150x140	0,1	± 0,2	≤ 2
ES1501	1500	0,1	150x140	0,1	± 0,2	≤ 2
ES2201	2200	0,1	150x140	0,1	± 0,3	≤ 2

⁽¹⁾ Optional external battery pack (AC015)

M5-iThermo balances are moisture analyzers with large 5" color touch screen display that gives a user-friendly access to all the balance advanced applications and internal databases. The user has easy and intuitive access with fast programming of drying cycles, thanks to icon-driven menus. This means more efficiency, productivity and interactivity. A double case structure protects the heart of the balance: an aluminum inner case and a composite plastic external case. The many on-board functions already included, the possibility of calibrating the internal thermometer using the optional KIT, up to 6 operating languages, the large 5" inch display and the RS232 serial output close the circle of a complete product, reliable and truly convenient. The models in the family allow reaching up to 0,001% drying resolution.

Features

- Electromagnetic force restoration weighing system (A64M and 163M)
- High resolution load cell weighing system (163L and 62L)
- Halogen-infrared lamp
- External calibration
- Large 5" color touchscreen 800x480 display
- RS232 serial interface
- Drying resolution 0,001% (-A64M), 0,01% (-163M and -163L), 0,1% (-62L)
- Drying modes: Time mode (1-99 min.), Autostop % or absolute autostop in grams, Manual
- Live Graph of humidity content changing
- Temperature range: 35-160°C, step of 1°C
- Temperature Profiles: Standard, fast, mild, steps
- Results in: Humidity%, Dry residue%, ATRO%, Weight
- Test results complete of full drying cycle Graph
- Up to 10 hot keys for fast recall of drying cycles from internal database
- Default database stored already with more than 30 products
- Saving results with test reports and drying graphic up to 300 records, for each user.
- Customizable settings for up to 10 users with the possibility of password protection.
- Serial output for connection to printer, USB port for export or import database, test results, etc.



Model	Capacity (g)	Resolution (g)	Moisture Resolution	Pan (mm)	Repeatability (g)	Linearity (g)	Precision (2g)	Response time (sec.)
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External calibration

M5-Thermo A64M	60	0,0001	0,001%	100mm Samples Pan	0,1	± 0,0003	0,18%	≤ 3
M5-Thermo 163M	160	0,001	0,01%	100mm Samples Pan	0,001	± 0,003	0,18%	≤ 3
M5-Thermo 163L	160	0,001	0,01%	100mm Samples Pan	0,001	± 0,003	0,20%	≤ 4
M5-Thermo 62L	60	0,01	0,1%	100mm Samples Pan	0,01	± 0,03	0,50%	≤ 3

(1) only A64M, 163M

(2) only 163L, 62L



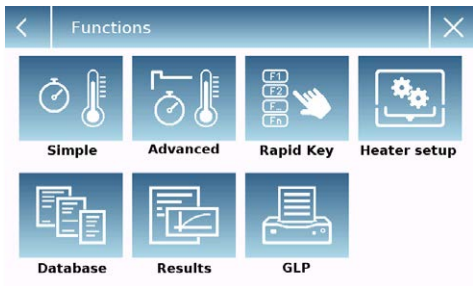
Export/import results and database to USB

Accessories

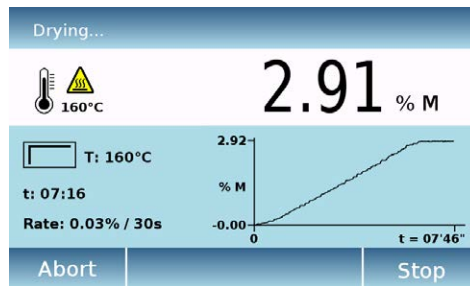
- Thermometer calibration KIT (STCi-02)
- Serial Printer TLP-50, with date/time (C054)
- TEST pans (Ø 100mm x 0,5mm) (A753)
- Portable ioniser Ion-A15 (BL0371)
- Factory Calibration certificate (BL0333)
- Usb pendrive 8Gbyte (AC020)
- Touchscreen Stylus pen (AC021)

Technical data

- Span drift (+ 10...+ 30 °C): +/- 3ppm/°C [i-Thermo A64M]; +/- 4ppm/°C [other models]
- Dimensions LxWxH (mm): 345x215x235
- Maximum dimension of container on the pan: 100mm (Ø) x 25mm (height)
- Power supply: AC 220-240 V (at request AC 110 Volt) 50/60Hz; plugs EU,UK
- Power consumption: rating 430 VA; Heat source lamp: 400Watt
- Net Weight: 6,1Kg (A64M and 163M)
- Net Weight: 4,7Kg (163L and 62L)



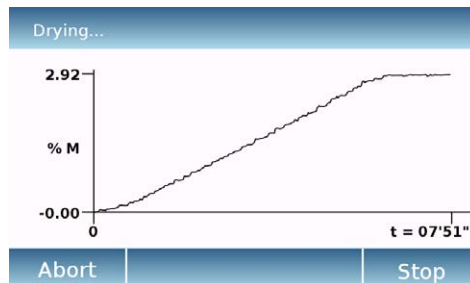
Main functions page for easy working



Drying cycle page with graph, with parameters



Internal database of products/processes



Real time Live Graph View, full screen

i-Thermo are rugged instruments for moisture determination of raw materials and finished samples in the food, cosmetics, ceramics, agriculture and construction industry. Backlit LCD display, drying resolution 0,001%, 0,01% and 0,1%. Possibility of calibrating the internal thermometer (w/ optional KIT).

Features

- Electromagnetic force restoration weighing system (A64M and 163M)
- High resolution load cell weighing system (163L and 62L)
- Halogen-infrared lamp
- External calibration
- LCD with backlight with adjustable contrast
- Time (1-99 min) and Autostop operating modes
- 5 drying programs can be stored
- Temperature range: 35-160°C/1°C
- Moisture, dry residue in percentage and ATRO indications
- Drying resolution 0,001% - 0,01% - 0,1%
- Plastic protection cover

Accessories

- Portable ioniser Ion-A15 (BL0371)
- Thermometer calibration KIT (STCi-02)
- BEL Tablet System for balances. USB version (BL0329) or BLUETOOTH version (BL0330).
- Bluetooth printer DPP-250-BT for BEL Tablet system (AC013)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Alphanumeric external keyboard (AC005)
- Serial to USB converter (E1002)
- Serial cable for output to printer/PC (E743)
- Test pans (Ø 100mm x 0,5mm) (A753)
- Fiber glass test pans Ø 90mm (AC026)
- Factory Calibration certificate (BL0333)

Technical data

- Span drift (+ 10...+ 30 °C): +/- 3ppm/°C [i-Thermo A64M]; +/- 4ppm/°C [other models]
- Dimensions LxWxH (mm): 345x215x235
- Maximum dimension of container on the pan: 100mm (Ø) x 25mm (height)
- Power supply 110-230Vac, 50/60Hz; output 24V 500mA 13VA [i-Thermo A64M]; output 9V 1,2A 10VA [other models]
- Heater: 230V AC 50/60Hz, 400Watt
- Net Weight: 6,1Kg (A64M and 163M)
- Net Weight: 4,7Kg (163L and 62L)

i-Thermo - Res. 0,1mg-0,001g-0,01g



Model	Capacity (g)	Resolution (g)	Moisture Resolution	Pan (mm)	Repeatability (g)	Linearity (g)	Precision (2g)	Response time (sec.)
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External calibration

i-Thermo A64M	60	0,0001	0,001%	100mm Samples Pan	0,1	± 0,0003	0,18%	≤ 3
i-Thermo 163M	160	0,001	0,01%	100mm Samples Pan	0,001	± 0,003	0,18%	≤ 3
i-Thermo 163L	160	0,001	0,01%	100mm Samples Pan	0,001	± 0,003	0,20%	≤ 4
i-Thermo 62L	60	0,01	0,1%	100mm Samples Pan	0,01	± 0,03	0,50%	≤ 3

⁽¹⁾ only A64M, 163M

⁽²⁾ only 163L, 62L



The MJ family of balances was designed for use in jewelry applications. This family includes the Carat Series with high precision and the Gold Series for higher capacity weighing of precious metals. MJ balances are all provided with RS232 connectivity; 0.1mg and 1mg models are equipped with a large protection draftshield.

Features

- Electromagnetic force restoration weighing system
- External or automatic internal calibration
- g/ct swapping button on keypad
- Glass draught shield with 3 sliding doors for easy access to the items being weighed
- 0,01 resolution models are not provided with glass draught shield
- Plastic protection cover

Accessories

- Portable ioniser Ion-A15 (BL0371)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Serial Printer STAT, with Statistics functions (AC022)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- Factory Calibration certificate (BL0333)

Technical data

Common features

- Dimensions LxWxH (mm): 345x215x290 (models 0,1mg and 1mg)
- Weighing chamber LxWxH (mm): 162x171x170 (models 0,1mg and 1mg)
- Dimensions LxWxH (mm): 345x215x100 (models 0,01g)
- Power supply 110-230Vac, 50/60Hz; output 24V 500mA 13VA

External calibration models

- Net Weight 0,1mg: 6,2Kg
- Net Weight 0,001g: 6,2Kg
- Net Weight 0,01g: 4,6Kg

Internal calibration models

- Net Weight 0,1mg: 6,5Kg
- Net Weight 0,001g: 6,5Kg
- Net Weight 0,01g: 5,1Kg



Model	Capacity	Resolution	Pan (mm)	Repeatability	Linearity	Response time (sec.)
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Carat series - Automatic internal calibration

MJ124Ai	600g/120ct	0,001ct	Ø 80	0,001ct	± 0,003ct	≤ 4
MJ214Ai	1050g/220ct	0,001ct	Ø 80	0,001ct	± 0,003ct	≤ 4

Gold series - Automatic internal calibration

MJ723i	720g	0,001g	Ø 110	0,001g	± 0,002g	≤ 2
MJ4202i	4200g	0,01g	Ø 160	0,01g	± 0,04g	≤ 2

Gold series - External calibration

MJ333	330g	0,001g	Ø 110	0,0005g	± 0,002g	≤ 2
MJ2202	2200g	0,01g	Ø 160	0,01g	± 0,02g	≤ 2

Robustness, reliability and a high level of performance are enclosed inside KG series balances. This new series can reach a maximum capacity of 12,1 kg with 0,01g resolution. Equipped with the brand new highly integrated electromagnetic cell by BEL, this balance can provide an high level of precision and repeatability. All KG models are equipped with a large graphic display for easy reading and user friendly operations with many functions. KG balances have an extensive recipe database, GLP and many embedded advanced features that make them perfect for use in laboratory, research departments, compounds formulation and quality control applications. The rugged metal case assures robustness and stability also in the tougher environment.

Features

- Electromagnetic force restoration weighing system
- External calibration
- Recipe database: 99 recipes can be stored, each with up to 20 ingredients
- Large Graphic display allows efficient and easy operations
- Multilanguage: EN-DE-FR-IT-ES-PT
- GLP/ISO record keeping of weight values with date, time and serial number
- Plastic protection cover
- Under hook weighing

Accessories

- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Alphanumeric external keyboard (AC005)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- Factory Factory Calibration certificate (BL0333)
- Conformity Declaration (Verification)

Technical data

- Span drift (+ 10...+ 30 °C): +/- 4ppm/°C
- Dimensions LxWxH (mm): 330x325x110
- Power supply 110-230Vac, 50/60Hz; output 24V 500mA 13VA
- Net Weight: 9,5 kg



Model	Capacity (g)	Resolution (g)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)
External calibration						
KG8202	8200	0,01	175x195	0,01	± 0,03	≤ 4
KG10102	10100	0,01	175x195	0,01	± 0,03	≤ 4
KG12102	12100	0,01	175x195	0,01	± 0,03	≤ 4

Robustness, reliability and a high level of performance are enclosed inside KL series balances, that can reach a maximum capacity of 32Kg with 0,1g resolution. The many embedded functions make these balances an ideal instrument of work for many applications inside and outside the laboratory.



Optional Tablet system to expand balance functions



Model	Capacity (g)	Resolution (g)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)
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External calibration

KL8001	8000	0,1	210x320	0,05	± 0,2	≤ 3
KL10001	10000	0,1	210x320	0,05	± 0,3	≤ 3
KL12001	12000	0,1	210x320	0,05	± 0,3	≤ 3
KL16001	16000	0,1	210x320	0,05	± 0,3	≤ 3
KL20001	20000	0,1	210x320	0,1	± 0,3	≤ 4
KL32001	32000	0,1	210x320	0,1	± 0,4	≤ 4
KL32001.2	32000	0,2	210x320	0,1	± 0,4	≤ 3
KL32001.5	32000	0,5	210x320	0,5	± 0,5	≤ 3
KL15000	15000	1	210x320	0,1	± 1	≤ 3
KL20000	20000	1	210x320	0,1	± 1	≤ 3
KL32000	32000	1	210x320	0,1	± 1	≤ 3
KL16001D	4500/16000	0,1/1	210x320	0,05/0,5	±0,2/± 1	≤ 3
KL20001D	4500/20000	0,1/1	210x320	0,05/0,5	±0,2/± 1	≤ 3
KL32001D	4500/32000	0,1/1	210x320	0,05/0,5	±0,2/± 1	≤ 3

Features

- High resolution load cell weighing system
- External calibration
- Metal case
- LCD with backlight with adjustable contrast
- Plastic protection cover
- Under hook weighing

Accessories

- Ioniser Ion-A15 (BL0371)
- BEL Tablet System for balances. USB version (BL0329) or BLUETOOTH version (BL0330).
- Bluetooth printer DPP-250-BT for BEL Tablet system (AC013)
- Serial Printer TLP-50, with date/time (C054)
- Serial Printer DPP-250 (AC007)
- Serial Printer STAT, with Statistics functions (AC022)
- Communication KIT for balances (BL0476)
- Portable rechargeable battery pack (AC015)
- Alphanumeric external keyboard (AC005)
- Serial to USB converter (E1002)
- Serial cable for serial output to printer or PC (E743)
- Factory Calibration certificate (BL0333)

Technical data

- Span drift (+ 10...+ 30 °C): +/- 6ppm/°C
- Dimensions LxWxH (mm): 330x325x105
- Power supply 110-230Vac, 50/60Hz; output 9V 1,2A 10VA
- Net Weight: 6,2Kg

(1) Optional external battery pack (AC015)

(2) If connected to optional STAT printer (AC022)

BEL Tablet system is an accessory that can be connected to balances, achieving in this way a consistent upgrade.

Expand

The innovative BEL Tablet System expands the capability of your BEL precision balance by increasing the functionality and applications available using the now familiar Tablet technology and App philosophy.

The Tablet system expands the possibility of the balance, introducing weighing functions that are usually handled connecting the balance to a computer or by balances of higher class.

Connect

The tablet has a Bluetooth connection, just switch on the balance and the Tablet automatically recognizes it: no need to configure. That also means that the same tablet can be used with different balances in your lab.

The tablet has also a Wi-fi connection so it can connect to your local area network.

System can be easily updated and Tablet applications can be upgraded via the internet, without the sometimes necessary purchase of a new balance.

Save

Save space: no need to connect the balance to a desktop computer. Centralize your weighing actions in one place.

Save time: easy to use and intuitive touch screen technology - you see what you need and you touch to choose. The tablet can retrieve data and information relevant to measurements/ongoing studies via internet, no need to move from another working location. A context sensitive help shows you how to use the function you're using.

It has never been so intuitive and quick to work with a precision balance!

App

The system takes advantages from the APP philosophy: your balance becomes a weighing system depending on the Application you choose.

You can buy new Applications as they are released without need of buying a new balance or system. The balance can always work independently: disconnect the Tablet system and the balance returns to work as a stand-alone equipment as before.

Update

The 7-inch Tablet provides an economical, powerful and space saving alternative to use of more elaborate balances or external computer control. The Tablet can update your balance even if you buy it separately in a different moment, so your investment is preserved.

As new Applications are developed during time you can choose if upgrading the system in fact expanding weighing possibilities or... let us know your application needs you would like to be developed!



The BEL Tablet System consists of:

7" tablet	Multi-touch, 1280x800 screen resolution, Android OS.
Tab-Box	Connecting interface complete of cables to connect the Balance to the Tablet.
APP	Application software for all weighing functions management, already installed on the Tablet.
Support	Inclinable support for Tablet.

Compatible Balances (need firmware R6.xx):

M family	LCD display, from 0,1g to 0,01g resolution
MW family	LCD display, 0,001g resolution
L family	LCD display, from 0,001g to 0,1g resolution
LW family	LCD display, 0,001g resolution
KL family	LCD display, from 0,1g to 1g resolution
S	LCD display, from 0,001g to 0,1g resolution

Code Description

BL0329	BEL Tablet System for balances. Includes Tablet, Tab-box, support, Application. USB version.
BL0330	BEL Tablet System for balances. Includes Tablet, Tab-box, support, Application. BLUETOOTH version.

Accessories:

AC013	Bluetooth wireless printer (works also with batteries). Model DPP-250-BT, code AC013.
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Functions included in the APP:

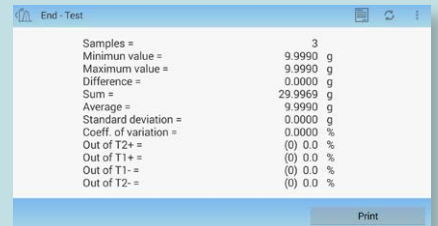
Simple Weighing	Basic weighing operations with multiple measuring units, three custom defined measuring units, calibration, preTare and zero/Tare commands.
Piece Counting	Piece counting function with 10,25 or customizable quantity of samples, mean sample weight or from database entry.
Check Weight	Set lower and upper limit value of weight, values can be stored.
Weight %	Percentage measurement among weights.
Density	Density measurements, also from database stored values.
Statistics	Maximum, Minimum, Average, Sum, Standard deviation
Gross Net Tare	Display simultaneously gross weight, net weight, net tare.
Recipe	Dosing multiple components together, with automatic recalculations of a component in case of dosing error, recipes can be stored and recalled.
Max Load	Holds the Peak value of weighing.
Animal Weighing	Used when weighing small animals in movement.
Textile	Determines the title of a thread through weight of a skein of known length, measuring units: Tex, Td, Nm, Nc.
GLP	Allows to store identification data of balance, project and user.

Additional APP features:

Profiles	It is possible to create up to 10 different profile. Each profile has his own preferences and database management.
Database Management	Each profile can store 300 database entries for each of the above listed functions.
Backup/Restore	Database can be backed up and restored in case of necessity.
Printers	Printers management, configure of the header to be printed.
Bluetooth	The Tablet bluetooth can send data to the DPP-250-BT (code AC013) printer so that weighing data can be printed easily without connection cables.



Recipe function



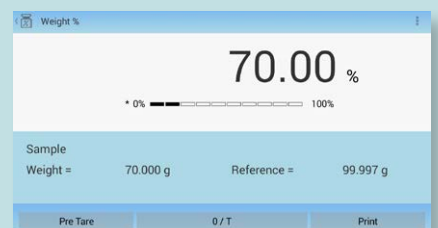
Statistics



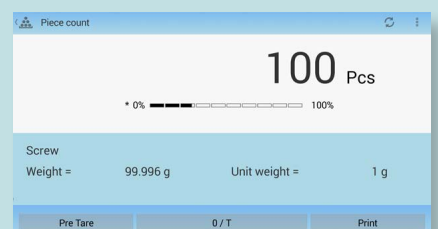
Density function.



Check Weight function.



Weight % function.



Piece Count function.

i-Thermo balances can be connected to BEL tablet system to become the first moisture analyzer connected to a tablet via Bluetooth/USB.

The result is an intuitive and interactive instrument which increases productivity using the now familiar tablet technology and app philosophy. BEL Tablet system expands the possibility of BEL moisture analyzers, so that your work becomes more efficient.

The special developed APPLICATION allows you to:

- Select temperature profile (standard, ramp, fast, steps)
- Store data and drying methods in database
- See the real-time graph of ongoing drying process of the sample
- Send information through local area network or internet

Also:

- Multi-language (EN-DE-FR-IT-ES-PT)
- Customizable settings
- Internet upgradable
- Intuitive context-sensitive help

Thanks to the large display all informations are displayed at the same time, that is preferable for moisture determination analysis.

Customer Benefits

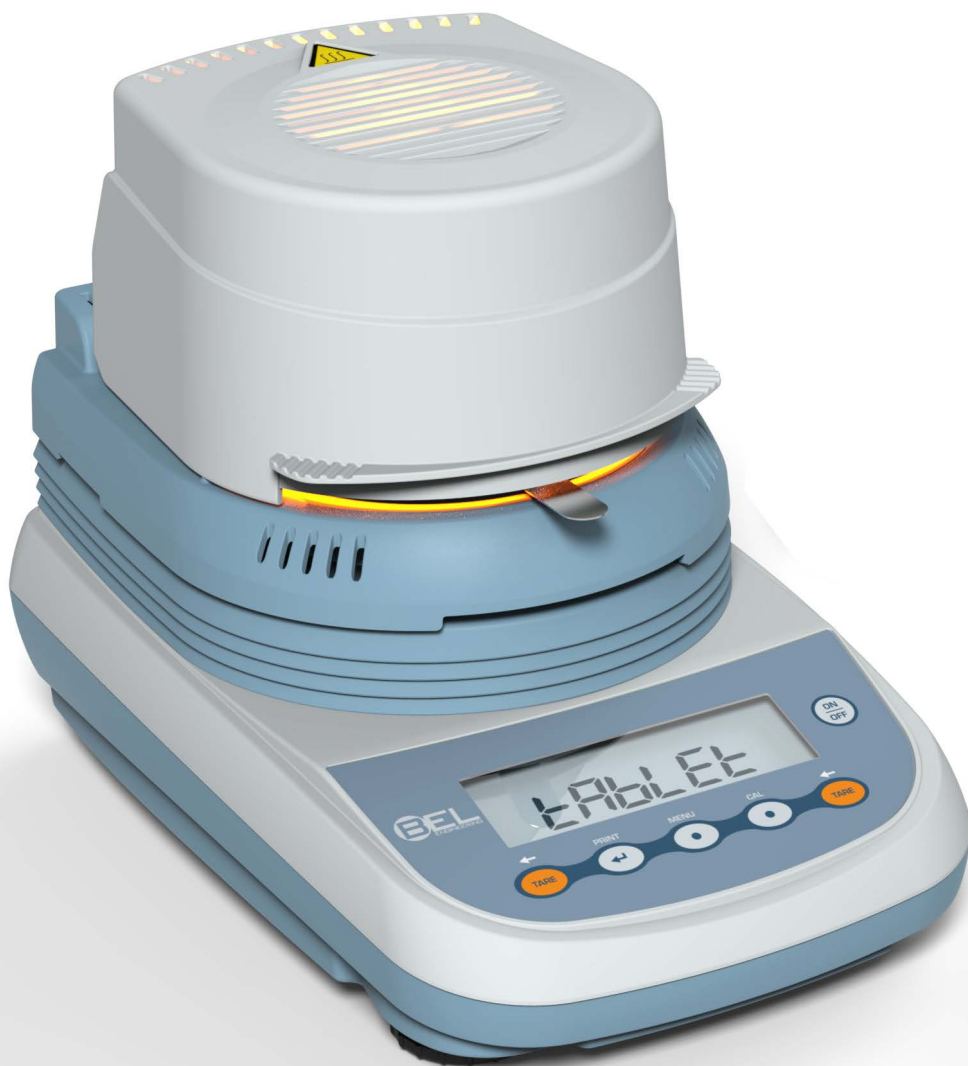
- The large display shows all informations at same time, that is preferable for moisture determination analysis
- See the REAL-TIME graph of ongoing sample drying process
- Save time: easy to use and intuitive touch screen technology
- Save space: Centralize your weighing actions in one place
- Immediately share the results of the drying process through the Tablet wifi connection

Markets/Applications

- **Food industry:** coffee, sugar, cocoa, beverages, ...
- **Cosmetics industry:** cosmetic powder moisture analysis for process optimization and quality control
- **Materials testing:** analysis of pastes, mass, woods, adhesive materials, dusts... for the production and control of materials
- **Seed production:** moisture control in grains, flour, edible seeds and nuts is critical to product quality
- **Plastic Quality control:** PET plastics pellet, plastic resin, production control

Accessories

- Bluetooth printer DPP-250-BT (AC013)



The BEL Tablet System consists of:

7" tablet	Multi-touch, 1280x800 screen resolution, Android OS.
Tab-Box	Connecting interface complete of cables to connect the Balance to the Tablet.
APP	Application software for all weighing functions management, already installed on the Tablet.
Support	Inclinable support for Tablet.

Compatible Balances:

i-Thermo	LCD display, from 0,1g to 0,01g resolution
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Code Description

Code	Description
BL0361	BEL Tablet System for Moisture analyzers. Includes Tablet, Tab-box, support, Application. USB version.
BL0362	BEL Tablet System for Moisture analyzers. Includes Tablet, Tab-box, support, Application. BLUETOOTH version.



Optional wireless printer.



Functions included in the APP:

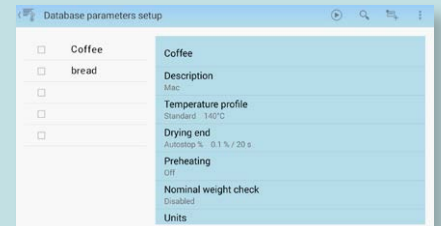
Simple Weighing	Basic weighing operations with selectable measuring units (g,mg), preTare and zero/Tare commands.
Moisture determination	Set and start drying process of your sample. See real-time graph of drying process
Drying modes	Manual, Time, Autostop %, Autostop absolute
Temperature profiles	Standard, ramp, fast, steps
Units	Moisture (M%), Solid (R%), Atro (A%), Weight
Database of results	Store drying process results and graph in internal database (300 entries for each profile). Results can be also later recalled and viewed in different units
Database of methods	Store drying methods in internal database (300 entries for each profile). Five hotkeys can be set for fastest recall of most used drying methods

Other features included in the APP:

Heater parameters	Set Standby temperature, Start mode, Start delay, Adjustment points
Peripherals	Print header configuration, print time/date, Printer selection
Profiles	It is possible to create up to 10 different profiles. Each profile has its own preferences and database management.
Backup/Restore	Database can be backed up and restored in case of necessity
Bluetooth	The Tablet Bluetooth can send data to the DPP-250-BT (code AC013) printer so that drying process results and graph can be quickly printed
GLP	Allows to store the identification data of balance, project and user



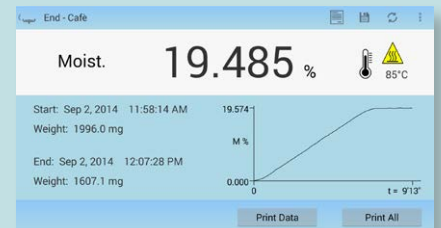
Real-time graph of ongoing drying process



Database of drying methods



Heater parameters set-up



See and print results of drying process



Drying modes



Units



CODE:
AC007 (cable version)
AC013 (BLUETOOTH version)

Portable thermal printer model DPP-250/DPP250-BT

DPP-250 and DPP-250-BT printers are small footprint portable printers that can be used with BEL laboratory balances. Weight values are printed quickly and sharply.

The internal rechargeable battery grants mobility and the Bluetooth version (DPP-250-BT) ensures work completely without cables.

Printer DPP-250 is supplied with connection cable to be connected directly to BEL balances.

Printer DPP-250-BT is suggested when Tablet system is attached to the balance

Type	Line Thermal printer
Print width	48mm (384dots/line)
Print speed	Up to 80mm/sec
Battery	Rechargeable battery (Li-Ion 7.4V, 1150mAh). Battery charge time: 2 hours. 20 000 lines with one charge
Paper roll	Width 57mm
External power supply unit (included)	AC 100 to 240 V, 50 to 60 Hz, DC 9V/1 A
Interface	- RS232 for DPP-250 - Bluetooth for DPP-250-BT
Operating temperature	5 - 40°C
Humidity	Max 85% relative (not condensing)
Dimensions	66 x 105 x 57h mm
Weight	295g (excl. paper roll)
Connection cable	Included for DPP-250



CODE: C054

Line thermal dot printer model TLP-50

TLP-50 printer is a compact printer that can be used with BEL laboratory balances. This printer has internal clock so it can print date/time together with weight values.

Paper type is label.

Type	Line thermal dot printing
Print width	54mm (432 dots)
Print resolution	203 x 203 dpi
Print speed	50mm/sec
Prints	Date/time
Paper type	Thermal paper rolls Label rolls
Paper roll	Width 58mm
External power supply unit (included)	AC 100-240 V, 50/60 Hz, DC 12V /2.5A
Interface	RS-232C
Operating temperature	5 - 40°C
Humidity	Max 85% relative (not condensing)
Dimensions	106 x 184 x 110h mm
Weight	950g (incl. power supply)
Connection cable	Included

**CODE: AC022**

only for HPB, M, MW, L, LW, S series

Serial Printer with Statistics function model STAT

STAT printer is a thermal printer that can be used with BEL laboratory balances. It can print weight values and, when requested, a full statistical analysis of the values including: number of values, mean value, sum, minimum, maximum, standard deviation, etc.. The printer can also record and print date/time and calibration details in compliance with GLP.

Printer is supplied with connection cable to be connected directly to HPB, M, L, MW, LW, S and KL balances.

Features:

- Count and total of all measurements, Minimum, Maximum values, Range (Max-Min)
- Average value, Standard deviation
- GLP Record keeping of balance calibration with date/time print
- Available units: mg, g, Kg, pcs
- Languages: English, French, German

Type	Bidirectional RS-232 Thermal printer
Print speed	0,75 lines/sec ; 40/80 characters/line
Paper roll	Width 112mm, length 20m
External power supply unit (included)	230V 50Hz 0,12A / 9V DC 1,3A
Energy consumption (average)	min 0.5A (4W) - max 1.1A (9W)
Baud rate	1200-2400-4800-9600 Baud
Operating temperature	5 - 35°C
Humidity	Max 80% relative (not condensing)
Working life	5000 hours or 500000 lines
Dimensions	165 x 140 x 50 mm
Weight	450 g (excl. paper roll)
Connection cable	Included



Paper rolls for printers

CODE	MODEL
AC010	roll of 54x24mm labels (500) for TLP-50 printer
AC011	roll of paper for TLP-50 printer
AC012	roll of paper for DPP250 printer
AC025	roll for STAT printer

**CODE: AC005**

Alphanumeric external keyboard model KEYMODULE

External keyboard for inserting alphanumeric values into the balances. With TARE function button and manual pre-tare value inserting button.

Interface	RS232
Dimensions	115x210x35h mm
Weight	250 g



CODE: BL0371

Ioniser model ION-A15

Static charges accumulate in many kind of samples that are being weighed during the laboratory routine. By blowing ions, the portable ionizer ION-A15 neutralizes static electricity on charged samples like plastic parts, containers or films. Within seconds the sample is ready to be weighted free from static charges giving the operator accurate results.

The ionizer ION-A15 is small and light, easy to transport and use everywhere in the laboratory.

Distance sample-ion source	about 5-40 cm
Discharge time	9s/5cm, 13s/10cm, 100s/40cm (with fan turned on)
Ozone concentration	0-0.05 ppm (2cm from ion source)
Maximum air volume	0.06 cm ³ /min
Ambient conditions	0-50°C, 20-80% air humidity (non-condensing)
AC adapter (primary)	AC 100-240V, 50/60Hz
Dimensions	11 x 10,5 x 4,5 cm
Weight	310 g
Installation site	device may be only used indoors



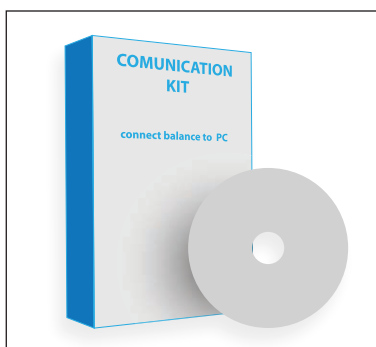
CODE:
AC002: Density kit (0.0001g and 0.001g res.)
AC004: Density kit (0.01g res.)

Density KIT

Density KIT for density calculation of SOLIDS and LIQUIDS for BEL Engineering balances with resolution 0,1mg/0,001g/0,01g.

It contains:

2 Glass graduated Beaker: height 150mm Ø 50mm 250ml and height 95mm Ø 65 mm 250ml
Analogic thermometer 10°C - 40°C/1°C
Glass Plummet
Basket for floating and not floating samples
Suspension arm for basket or plummet
Support for plummet/basket
Support base for beaker



CODE: BL0476

Communication KIT for balances

Complete kit to connect BEL balances to a computer. It allows data collection, Statistics, creation of graphs and export results to Excel file.

The software included allows to perform all the functions of the balance from the PC such as Piececount, Density, Peak hold, Limits set etc...from your computer.

The Kit includes:

- RS232-to-USB converter
- serial cable
- i-Weight Software for data collection and analysis

Operating systems: Windows 7, 8, 10 (32&64bit)

NOT compatible with BEL balances series HPB 0.01mg, HPBG, MG, MGW, LG, LGW, M5-Thermo, i-Thermo





CODE: AC015

Portable rechargeable battery pack

Portable Li-Ion rechargeable battery pack. Can connect and power balances LW, LG, LGW and KL series for outdoor use or for enhance the portability of the balance.

Input	9/12V
Output	5V 2100mA x 2 USB and 1xDC 9V/12V 2000mA
Battery charge time	5 hours
Battery duration	40 hours about (depends on use and on the device connected)
Charge status indication	By 4 LEDs
Capacity	10000mAh/37Wh
Dimensions	120x80x23mm
Weight	304g



CODE: BL0364

Thermometer calibration KIT model STCi-02

Small, fast-response thermometer for verify and calibrate the heating source of BEL moisture Analyzers i-Thermo & M5-Thermo series. A calibrated moisture analyzer's heater allows to have always accurate results. Essential for application where are required certified results.

Temperature range	40...+200°C
Resolution	1°C
Precision	+/-2°C
Diameter	Ø 46 mm
Indicator casing	AISI 304
Box Dimensions	200x210x60h mm; weight 260g



CODE: A753

Aluminum Test pans for moisture analyzers

Aluminium sample dishes are essential for using with moisture analyzers. Reusable, diameter 100mm, thickness 0.5mm. One box contains 80 pans



CODE: AC026

Fiber glass discs for moisture analyzers

Glass fibre discs are used when analysing liquids and semi solid samples. They are used in conjunction with the aluminium test disc code A753 (see photo below).

It ensures accurate results when testing samples that contain large amounts of liquid and prevent liquid splashing during the sample drying process.

It also facilitate a better distribution of heat throughout the sample.

Diameter 90mm.

One box contains 200 discs.





Protection cover ODE T222: roll for STAT printer

CODE	MODEL
A731	plastic cover for Balances series i-Thermo
A913	plastic cover for Balances series M, MG Analytical
NA0091	plastic cover for Balances series M, MG, L, LG
T222	plastic cover for Balances series L 0,1g (-PQ)
A132	plastic cover for Balances series S and ES
A851	plastic cover for Balances series KL



Communication cables

CODE	MODEL
E1002	RS232/USB converter balance/PC
E743	Serial cable 9pins M/M for serial output printer/PC



Calibration weights

CODE	MASS	CLASS	MATERIAL
M0021	20g	E1	MEC finely turned stainless steel
M0001	20g	F1	MEC finely turned brass
M0019	20g	E2	MEC finely turned stainless steel
M0022	100g	E1	MEC finely turned stainless steel
M0002	100g	E2	MEC finely turned stainless steel
M0003	100g	F1	MEC finely turned brass
M0004	200g	E1	MEC finely turned stainless steel
M0005	200g	E2	MEC finely turned stainless steel
M0006	200g	F1	MEC finely turned brass
M0020	500g	E1	MEC finely turned stainless steel
M0007	500g	E2	MEC finely turned stainless steel
M0017	500g	F1	MEC finely turned stainless steel
M0008	1000g	F1	MEC finely turned stainless steel
M0009	2000g	F1	MEC finely turned stainless steel
M0018	2000g	F2	MEC finely turned stainless steel
M0010	5000g	E2	MEC finely turned stainless steel
M0011	5000g	F1	MEC finely turned stainless steel
M0012	5000g	F2	MEC finely turned stainless steel
M0013	5000g	M1	MEC finely turned brass
M0014	10000g	F1	MEC finely turned stainless steel
M0015	10000g	F2	MEC finely turned stainless steel
M0016	10000g	M1	MEC finely turned brass



BEL Engineering® s.r.l. is an Italian company manufacturer of Electronic Precision Balances and laboratory scientific instruments, with headquarters in Monza (Milano), ITALY.

The company was born at the beginning of the '80s, taking care from the very beginning to its own production through a deep scientific and technological research. Each step of the production process (mechanics, electronics, software, design) is completely followed, ensuring a full quality check on each part related to the electronic balance and to other products.

The experience acquired in more than 35 years and the direct design of our products ensures to BEL Engineering srl to be strongly innovative and to be able to give an accurate and quick service thanks to a qualified and skilled personell. Thanks to all this and to a refined italian style,

each product of Bel Engineering combines Quality, Design and Performance.

BEL Photonics® is a division of BEL Engineering® s.r.l. concerned with Optical instruments design and Optical Microscopy. Bel Photonics leads the field of Optical Microscopy with a innovative range of video Microscopes, biological, stereo, inverted microscopes and high-resolution cameras for Microscopy.

BEL Engineering Quality System is certified ISO9001:2008, certificate 39000071401. Production Quality is CE-NAWI certified (directive 2009/23/CEE), certificate CE-205.



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┌ Distributor ─┐

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