

PORTABLE ELECTRONIC BALANCE ELB SERIES

Precision without compromise in the field

Specifications

Model	High resolution type								Standard resolution type	
	ELB120	ELB200	ELB300	ELB600	ELB1200	ELB2000	ELB3000	ELB12K	ELB600S	ELB6000S
Capacity	120g	200g	300g	600g	1200g	2000g	3000g	12kg	600g	6000g
Minimum display	0.01g	0.01g	0.01g	0.05g	0.1g	0.1g	0.1g	1g	0.1g	1g
Taring range	0g to capacity									
Ambient temperature	5 - 35°C									
Functions	Piece counting, % display, Specific gravity measurement S/W, Environmental adjustment, Zero-tracking, Auto power off									
Unit conversion	g, kg, ct, oz, ozt, dwt, GN, HK tael, SP tael, TW tael, mom									
Data output	DATA I/O (For electronic printer, RS-232C interface)									
Pan size	110mm dia		170 x 130mm							
Dimensions (approx)	185W x 215D x 55H mm									
Weight (approx)	1.25 kg (without batteries)									
Power Source	6AA batteries, or AC (optional Ac adapter required)									
Standard accessories	Battery holder, In-use protective keypad cover									

Peripherals

- Electronic Printer "EP-60A" (thermal print)
- RS-232C Interface "IFB-102A"
- Specific Gravity Measurement Kit "SMK-201" (for square-pan models only)
- Carrying case
- In-use protective cover
- Below weight hook

BL SERIES

High-precision Electro-magnetic Balances

Specifications

Model	BL3200HL NEW	BL3200H NEW	BL2200H	BL320H NEW	BL220H	BL3200S	BL620S	BL320S	
Capacity	3200g	3200g	2200g	320g	220g	3200g	620g	320g	
Minimum display	0.01g	0.01g	0.01g	0.001g	0.001g	0.1g	0.01g	0.01g	
Repeatability (standard deviation)	0.01g	0.01g	0.01g	0.001g	0.001g	0.6g	0.01g	0.006g	
Linearity	0.03g	0.03g	0.02g	0.003g	0.001g	0.1g	0.01g	0.01g	
Response time (approx)	1.0 1.2 sec				0.8 1.0sec				
Ambient Temperature	5 .40. /41. .104F								
Temperature coefficient of sensitivity (15 .35.)	. 8ppm/-				. 10ppm/- .				
Pan size (mm)	160 .124 (mm)			100 .100 (mm)		160 .124 (mm)		100 .100 (mm)	
Dimensions (approx.)	170W . 240D . 75H mm								
Weight (approx.)	2.2 kg								
Power requirements	AC adapter; 90V .264V, -15% .+10%, 50/60Hz								
Standard accessories	Protective in-use cover		Simple windbreak (brown smoke color) Protective in-use cover			Protective in-use cover			
Display	LCD with back light		LCD						

WINDOWS DIRECT FUNCTION

Pat Pending

Only a single cable is required to transfer balance data to MSEXCEL®, or other application. No troublesome interface attachment or software installation is necessary. This unique function makes Shimadzu balances extremely convenient.

ONE-KEY CALIBRATION AUTO TOUCH-KEY CALIBRATION

Press just one key to calibrate the balance whenever calibration is needed.

FULL AUTO TEMPERATURE CALIBRATION

(Pat. Pending)

Detected temperature changes trigger calibration to automatically maintain the balance sensitivity.

CLOCK-CAL *(UW only)*

(Utility model Patent)

This function conducts calibration automatically at pre-set time. Clock-CAL can be set to operate at up to 3 specific times per day. Once you set it, Clock-CAL works everyday, even during holidays.

ISO-COMPATIBLE CALIBRATION RECORD

Just connect the optional printer to automatically output calibration results, showing who calibrated which balance and when.

TIME- AND DATE-STAMPED PRINTOUTS

The optional printer outputs time and date stamps printed data. Calibration results are similarly time and date stamped. This feature is perfect for establishing the measuring control and traceability demanded by GLP/GMP/ISO-9000.

RECHARGEABLE BATTERY OPERATION

Connect the optional external battery to use the balance outside or anywhere no power supply is available.

BACKLIT LED DISPLAY

The backlit LED display can be clearly read in the darkest of environments.

RESOLUTION 1/620,000 ULTIMATE RESOLUTION

High-resolution models with a resolution of 620g/1 mg or 6200g/0.01 g can accurately detect minute changes in a large mass. Ideal for trace mixing and weighing minute changes in mass.

PASS/FAIL EVALUATION

When upper and lower limits are preset, the balance indicates if the sample weight is correct (GO), high or low.

SPECIFIC GRAVITY FUNCTION

The internal specific gravity calculation function uses the precipitation method. Attaching the optional specific gravity measurement kit allows the balance to be used as a hydrometer

ITEM COUNTER

In addition to item counting, the balance handles various unit systems including % weights and carats.

UW/UX SERIES

Specifications

UW (with built-in calibration weights)

UW Series Model	UW220H	UW420H	UW620H	UW2200H	UW4200H	UW6200H	UW420S	UW820S	UW4200S	UW8200S
Capacity	200g	420g	620g	2200g	4200g	6200g	420g	820g	4200g	8200g
Minimum display	0.001g	0.001g	0.001g	0.01g	0.01g	0.01g	0.01g	0.01g	0.1g	0.1g
Calibration range with external weights	100-200g	100-420g	100-620g	1000-2200g	1000-4200g	1000-6200g	100-420g	100-820g	1000-4200g	1000-8200g
Repeatability (g)	≤0.001			≤0.01			≤0.008		≤0.008	
Linearity (g)	≤0.002			≤0.02			≤0.01		≤0.1	
Response time (s)	1.5-2.5						0.7-1.2			
Ambient temperature (°C)	5-40									
Temperature coefficient sensitivity (ppm/C)(10-30°C)	±3					±5				
Pan size (mm) approx.	108x105			170x180			108x105		170x180	
Main body dimensions (mm) approx.	190Wx317Dx78H									
Weight (kg) approx.	3.4			4.6			3.4		4.6	
Display	LCD with backlight									
Power requirement	12V 1A									
Data I/O	RS-232C									
Features	Windows Direct PSC Clock-CAL GLP/GMP/ISO conformance Analog display, % display, PCS, User unit, Animal weighing, specific gravity measurement S/W, Checkweighing									

UX (Standard Model)

UX Series Model	UX220H	UX420H	UX620H	UX2200H	UX4200H	UX6200H	UX420S	UX820S	UX4200S	UX8200S
Capacity	220g	420g	620g	2200g	4200g	6200g	420g	820g	4200g	8200g
Minimum display	0.001g	0.001g	0.001g	0.01g	0.01g	0.01g	0.01g	0.01g	0.1g	0.1g
Calibration range with external weights	100-200g	100-420g	100-620g	1000-2200g	1000-4200g	1000-6200g	100-420g	100-820g	1000-4200g	1000-8200g
Repeatability (g)	≤0.001			≤0.01			≤0.008		≤0.008	
Linearity (g)	≤0.002			≤0.02			≤0.01		≤0.1	
Response time (s)	1.5-2.5						0.7-1.2			
Ambient temperature (°C)	5-40									
Temperature coefficient sensitivity (ppm/C)(10-30°C)	±3					±5				
Pan size (mm) approx.	108x105			170x180			108x105		170x180	
Main body dimensions (mm) approx.	190Wx317Dx78H									
Weight (kg) approx.	2.7			2.9			2.7		2.9	
Display	LCD with backlight									
Power requirement	12V 1A									
Data I/O	RS-232C									
Features	Windows Direct PSC Clock-CAL GLP/GMP/ISO conformance Analog display, % display, PCS, User unit, Animal weighing, specific gravity measurement S/W, Checkweighing									

Option	Peripherals	Catalog No.
UW/UX series	Electronic Printer EP_50 100V (including AC adaptor for 100V)	321-34986
	Electronic Printer EP-50	321-34986-80, 320-03692 (AC Adaptor 120/220V)
	Electronic Printer EP-60A 100V (including AC adaptor for 100V)	321-42008-10
	Electronic Printer EP-60A	321-42008-90, 074-83004-01 (AC Adaptor 100/240V)
	RS-232C Interface IFB-102A (needed only for multiple connection)	321-41167-10
	Small size Windbreak (for models with capacity of 300g to 620g only) (Std. Acc. for models with readability of 0.001g)	321-60575
	Large size Windbreak (for all models)	321-53537
	Specific Gravity Measurement Kit SMK-101 (for Large size pan 170x180mm)	321-60576-01
	Specific Gravity Measurement Kit SMK-102 (for Small size pan 108x105mm)	321-60576-02
	Protective in-use cover for large-pan model (with capacity of 3000g and up) (5 pcs)	321-61228
	Protective in-use cover for small-pan models (with capacity of 300g to 620g) (5 pcs)	321-61229
	Angle adjuster and Wall Hook for remote display	321-55953
	Stand for Remote display (1m high)	321-55954-01
	Comparator Lamps 100V (needs IFB-RY1)	321-60112
	Interface for comparator IFB-RY1 100V	321-54026
	Foot Switch FSB-102PK (For printing)	321-60110-11
	Foot Switch FSB-102PK (For taring)	321-60110-12
	RS-232C Cable, for IBM PC/AT Compatibles (25P-9P, Null modem, 1.5m)	321-60117-01
	RS232C Cable for multiple connection (25P-25P, Null modem, 1.5m)	321-60116-01
	Battery Pack 100V	321-61691-02
	Application Keyboard AKB-301	321-53382-01
	Remote display Unit RDB-201 with operation keys	321-53600-01
	Remote display unit RDB-202	321-53600-02

UNIBLOC TECHNOLOGY AND OVER 80 YEARS OF EXPERIENCE IN PRECISION WEIGHING

Specifications

SeriesAUW-D (dual range semi-micro)		AUWAUX					AUY				
Model	AUW220D	AUW120D	AUW320	AUW220	AUW120	AUX320	AUX220	AUX120	AUY220	AUY120	
Capacity	220g/2g	120g/42g	320g	220g	120g	320g	220g	120g	220g	120g	
Minimum Display	0.1mg/0.01mg	0.1mg/0.01mg	0.1 mg	0.1mg	0.1mg	0.1mg	0.1mg	0.1mg	0.1mg	0.1mg	
Repeatability Standard deviation)	≤ 0.1mg (large range) <0.05mg (small range)	≤0.1mg (large range) <0.02mg (small range)	≤ 0.15mg	≤0.1mg	≤0.1mg	≤0.15mg	≤0.1mg	≤0.1mg	≤0.1mg	≤0.1mg	
Linearity	±0.2mg (large range) ±0.1mg (small range)	±0.2mg (large range) ±0.03mg (small range)	±0.3mg	±0.2mg	±0.2mg	±0.3mg	±0.2mg	±0.2mg	±0.2mg	±0.2mg	
Response time (stabilization time, typical)	3s (Large range) 15s (small range)	3s (Large range) 12s (small range)	3s								
Temperature coefficient of sensitivity (10 to 30°C)	±2ppm/C (When PSC is Off)							±2ppm/C			
Sensitivity stability against temperature change (When PSC is On 10 to 30°C)	±2ppm										
Pan size	80mm dia approx.										
Body dimensions	200mmW x 330mmD x 310mmH approx.										
Weight	7kg approx.										
Power consumption	7VA approx.										
Functions and Features	Available mass units	g, mg, ct, mom (monme), Lb, Oz, Ozt, Hong Kong tael, Singapore tael, Taiwan tael, Malaysia tael, Chinese tael, dwt, GN, m(mesghal), b(baht), t(tola), o(parts pound) *Availability of unit displays is subject to each area's legal restrictions.									
	Backlighted Display	●	●	●	●	●	●	●	●	●	●
	Built-in calibration weight	●	●	●	●	●	●	●	●	●	●
	PSD	●	●	●	●	●	●	●	●	●	●
	Clock-CAL	●	●	●	●	●	●	●	●	●	●
	Built-in Clock	●	●	●	●	●	●	●	●	●	●
	GLP/GMP/ISO	●	●	●	●	●	●	●	●	●	●
	Calibration Report	●	●	●	●	●	●	●	●	●	●
	Windows Direct	●	●	●	●	●	●	●	●	●	●
	Interval timer output	●	●	●	●	●	●	●	●	●	●
	RS-232 I/F	●	●	●	●	●	●	●	●	●	●
	Specific gravity measurement software	●	●	●	●	●	●	●	●	●	●
	piece counting	●	●	●	●	●	●	●	●	●	●
	% display	●	●	●	●	●	●	●	●	●	●
Analog display	●	●	●	●	●	●	●	●	●	●	