



More information on the website
radwag.com/en/info,w1,E30

XA 310.5Y.A Analytical Balance, XA 121/220.5Y.A Analytical Balance, XA 110.5Y.A Analytical Balance, XA 82/220.5Y.A Analytical Balance, XA 210.5Y.A Analytical Balance, XA 120/250.5Y.A Analytical Balance, XA 41/120.5Y.A Analytical Balance, XA 220.5Y.A Analytical Balance, XA 52.5Y.A Analytical Balance, XA 520.5Y.A Analytical Balance, XA 320.5Y.A Analytical Balance



XA 310.5Y.A Analytical Balance
XA 220.5Y.A Analytical Balance
XA 520.5Y.A Analytical Balance



XA 121/220.5Y.A Analytical Balance
XA 41/120.5Y.A Analytical Balance



XA 110.5Y.A Analytical Balance
XA 82/220.5Y.A Analytical Balance
XA 210.5Y.A Analytical Balance
XA 120/250.5Y.A Analytical Balance
XA 52.5Y.A Analytical Balance
XA 320.5Y.A Analytical Balance

The drawings, photos and graphics used are for illustrative purposes only.

Functions



Autotest



Dosing



Percent Weighing



Parts counting



Peak hold



Formulation



Newton unit measurement



Statistics



Checkweighing



IR sensors



Under-pan weighing



GLP Procedures



Animal weighing



Pipettes Calibration



Air density correction



Automatic sliding door



Density determination



Differential weighing



Ambient conditions monitoring



Statistical Quality Control



Packaged Goods Control



ALIBI Memory



Wi-Fi



Moveable range:

- XA 82/220.5Y.A Analytical Balance
- XA 120/250.5Y.A Analytical Balance

Datasheet

	XA 41/120.5Y.A Analytical Balance WL-110-0027	XA 52.5Y.A Analytical Balance WL-110-0001	XA 82/220.5Y.A Analytical Balance WL-110-0004
Metrological parameters			
Maximum capacity [Max]	41 / 120 g	52 g	82 / 220 g
Minimum load	0,2 mg	1 mg	1 mg
Readability [d]	0,002 / 0,005 mg	0,01 mg	0,01 / 0,1 mg
Verification unit [e]	1 mg	1 mg	1 mg
Tare range	-120 g	-52 g	-220 g
Minimum weight (USP)	8,2 mg	10 mg	10 mg
Minimum weight (U=1%, k=2)	0,82 mg	1 mg	1 mg
Standard repeatability [5% Max]	0,004 mg	0,005 mg	0,005 mg
Permissible repeatability [5% Max]	0,008 mg	0,012 mg	0,012 mg
Standard linearity	0,03 mg	—	—
Permissible linearity	0,1 mg	—	—
Linearity	—	±0,03 mg	±0,06 / 0,2 mg
Standard eccentric load deviation	0,04 mg	—	—
Permissible eccentric load deviation	0,1 mg	—	—
Eccentric load deviation	—	0,03 mg	0,2 mg
Sensitivity time drift	$1 \times 10^{-6} / \text{Year} \times \text{Rt}$	$1 \times 10^{-6} / \text{Year} \times \text{Rt}$	$1 \times 10^{-6} / \text{Year} \times \text{Rt}$
Stabilization time	3,5 s	4 s	4 s
Adjustment	internal (automatic)	internal (automatic)	internal (automatic)
OIML Class	-	I	I
Physical parameters			
Leveling system	automatic – Reflex Level System	automatic – Reflex Level System	automatic – Reflex Level System
Display	10" graphic colour touchscreen	10" graphic colour touchscreen	10" graphic colour touchscreen
Weighing chamber	automatic	automatic	automatic
Weighing chamber doors	automatic	automatic	automatic
Delivery components	Analytical Balance, weighing pan, weighing pan shield, centring ring, brush, fabric dust cover, power supply.	Analytical Balance, weighing pan, weighing pan shield, centring ring, brush, fabric dust cover, power supply.	Analytical Balance, weighing pan, weighing pan shield, centring ring, brush, fabric dust cover, power supply.
Weighing chamber dimensions	200×170×220 mm	200×170×220 mm	200×170×220 mm
Weighing pan dimensions	ø64 mm	ø90 open-work pan + ø85 (option) mm	ø90 mm open-work pan + ø85 mm (option) + ø68 mm (option) with pipette calibration adapter XA100-2 + ø36 mm (option) with pipette calibration adapter XA17-2
Packaging dimensions W x D x H	750×492×595 mm	750×492×595 mm	750×492×595 mm
Net weight	14,1 kg	14,7 kg	15,27 kg
Gross weight	18,45 kg	20 kg	20 kg
Construction			
Protection class	IP 43	IP 43	IP 43
Communication interface			
Communication interface	2×USB-A, USB-C, RS 232 (COM3), HDMI, Ethernet, Wi-Fi, Hotspot	2×USB-A, USB-C, RS 232 (COM3), HDMI, Ethernet, Wi-Fi, Hotspot	2×USB-A, USB-C, RS 232 (COM3), HDMI, Ethernet, Wi-Fi, Hotspot
Electrical parameters			
Power supply	Adapter: 100 – 240V AC 50/60Hz 1A Max; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max; 10 – 19W*	Adapter: 100 – 240V AC 50/60Hz 1A Max; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max; 10 – 19W*	Adapter: 100 – 240V AC 50/60Hz 1A Max; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max; 10 – 19W*
Environmental conditions			
Operating temperature	+10 – +40 °C	+10 – +40 °C	+10 – +40 °C
Operating temperature change rate	±0,3 °C / 1 h (±1 °C / 8 h)	±0,3 °C / 1 h (±1 °C / 8 h)	±0,3 °C / 1 h (±1 °C / 8 h)
Relative humidity	20% – 80%	20% – 80%	20% – 80%
Relative humidity change rate	±1% / h (±4% / 8 h)	±1% / h (±4% / 8 h)	±1% / h (±4% / 8 h)

Standard repeatability [5% Max] and Standard minimum weight (USP) are parameters obtained in automatic mode under special laboratory

conditions. Repeatability is expressed as a standard deviation from 10 cycles of mass standard weighing. Stabilization time depends on the ambient conditions and the dynamics of weighing pan loading; specified for FAST profile. * Power consumption depends on the terminal configuration as well as the number and type of external devices connected. The power supply can be connected to the socket on the back of the balance housing or to the terminal.

Datasheet

	XA 110.5Y.A Analytical Balance WL-110-0002	XA 120/250.5Y.A Analytical Balance WL-110-1000	XA 121/220.5Y.A Analytical Balance WL-110-0026
Metrological parameters			
Maximum capacity [Max]	110 g	120 / 250 g	121 / 220 g
Minimum load	1 mg	1 mg	0,5 mg
Readability [d]	0,01 mg	0,01 / 0,1 mg	0,005 / 0,01 mg
Verification unit [e]	1 mg	1 mg	1 mg
Tare range	-110 g	-250 g	-220 g
Minimum weight (USP)	10 mg	10 mg	10 mg
Minimum weight (U=1%, k=2)	1 mg	1 mg	1 mg
Standard repeatability [5% Max]	0,005 mg	0,005 mg	0,005 mg
Permissible repeatability [5% Max]	0,012 mg	0,012 mg	0,01 mg
Standard linearity	—	—	0,06 mg
Permissible linearity	—	—	0,1 mg
Linearity	±0,06 mg	±0,06 / 0,2 mg	—
Standard eccentric load deviation	—	—	0,06 mg
Permissible eccentric load deviation	—	—	0,1 mg
Eccentric load deviation	0,06 mg	0,2 mg	—
Sensitivity time drift	$1 \times 10^{-6} / \text{Year} \times \text{Rt}$	$1 \times 10^{-6} / \text{Year} \times \text{Rt}$	$1 \times 10^{-6} / \text{Year} \times \text{Rt}$
Stabilization time	4 s	3 s	2 s
Adjustment	internal (automatic)	internal (automatic)	internal (automatic)
OIML Class	I	I	I
Physical parameters			
Leveling system	automatic – Reflex Level System	automatic – Reflex Level System	automatic – Reflex Level System
Display	10" graphic colour touchscreen	10" graphic colour touchscreen	10" graphic colour touchscreen
Weighing chamber	automatic	automatic	automatic
Weighing chamber doors	automatic	automatic	automatic
Delivery components	Analytical Balance, weighing pan, weighing pan shield, centring ring, brush, fabric dust cover, power supply.	Analytical Balance, weighing pan, weighing pan shield, centring ring, brush, fabric dust cover, power supply.	Analytical Balance, weighing pan, weighing pan shield, centring ring, brush, fabric dust cover, power supply.
Weighing chamber dimensions	200×170×220 mm	200×170×220 mm	200×170×220 mm
Weighing pan dimensions	ø90 open-work pan + ø85 (option) mm	ø90 mm open-work pan + ø85 mm (option) + ø68 mm (option) with pipette calibration adapter XA100-2 + ø36 mm (option) with pipette calibration adapter XA17-2	ø78 mm
Packaging dimensions W x D x H	750×492×595 mm	750×492×595 mm	750×492×595 mm
Net weight	14,7 kg	14,7 kg	14,7 kg
Gross weight	16 kg	19,1 kg	16 kg
Construction			
Protection class	IP 43	IP 43	IP 43
Communication interface			
Communication interface	2×USB-A, USB-C, RS 232 (COM3), HDMI, Ethernet, Wi-Fi, Hotspot	2×USB-A, USB-C, RS 232 (COM3), HDMI, Ethernet, Wi-Fi, Hotspot	2×USB-A, USB-C, RS 232 (COM3), HDMI, Ethernet, Wi-Fi, Hotspot
Electrical parameters			
Power supply	Adapter: 100 – 240V AC 50/60Hz 1A Max; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max; 10 – 19W*	Adapter: 100 – 240V AC 50/60Hz 1A Max; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max; 10 – 19W*	Adapter: 100 – 240V AC 50/60Hz 1A Max; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max; 10 – 19W*
Environmental conditions			
Operating temperature	+10 – +40 °C	+10 – +40 °C	+10 – +40 °C
Operating temperature change rate	±0,3 °C / 1 h (±1 °C / 8 h)	±0,3 °C / 1 h (±1 °C / 8 h)	±0,3 °C / 1 h (±1 °C / 8 h)
Relative humidity	20% – 80%	20% – 80%	20% – 80%
Relative humidity change rate	±1% / h (±4% / 8 h)	±1% / h (±4% / 8 h)	±1% / h (±4% / 8 h)

Standard repeatability [5% Max] and Standard minimum weight (USP) are parameters obtained in automatic mode under special laboratory conditions. Repeatability is expressed as a standard deviation from 10 cycles of mass standard weighing. Stabilization time depends on the ambient conditions and the dynamics of weighing pan loading; specified for FAST profile. * Power consumption depends on the terminal

configuration as well as the number and type of external devices connected. The power supply can be connected to the socket on the back of the balance housing or to the terminal.

Datasheet

	XA 210.5Y.A Analytical Balance WL-110-0003	XA 220.5Y.A Analytical Balance WL-110-0006	XA 310.5Y.A Analytical Balance WL-110-0007
Metrological parameters			
Maximum capacity [Max]	210 g	220 g	310 g
Minimum load	1 mg	10 mg	10 mg
Readability [d]	0,01 mg	0,1 mg	0,1 mg
Verification unit [e]	1 mg	1 mg	1 mg
Tare range	-210 g	-220 g	-310 g
Minimum weight (USP)	10 mg	100 mg	100 mg
Minimum weight (U=1%, k=2)	1 mg	10 mg	10 mg
Standard repeatability [5% Max]	0,005 mg	0,05 mg	0,05 mg
Permissible repeatability [5% Max]	0,012 mg	0,1 mg	0,1 mg
Standard linearity	—	—	—
Permissible linearity	—	—	—
Linearity	±0,1 mg	±0,2 mg	±0,3 mg
Standard eccentric load deviation	—	—	—
Permissible eccentric load deviation	—	—	—
Eccentric load deviation	0,1 mg	0,2 mg	0,3 mg
Sensitivity time drift	$1 \times 10^{-6} / \text{Year} \times \text{Rt}$	$1 \times 10^{-6} / \text{Year} \times \text{Rt}$	$1 \times 10^{-6} / \text{Year} \times \text{Rt}$
Stabilization time	4 s	1,3 s	1,3 s
Adjustment	internal (automatic)	internal (automatic)	internal (automatic)
OIML Class	I	I	I
Physical parameters			
Leveling system	automatic – Reflex Level System	automatic – Reflex Level System	automatic – Reflex Level System
Display	10" graphic colour touchscreen	10" graphic colour touchscreen	10" graphic colour touchscreen
Weighing chamber	automatic	automatic	automatic
Weighing chamber doors	automatic	automatic	automatic
Delivery components	Analytical Balance, weighing pan, weighing pan shield, centring ring, brush, fabric dust cover, power supply.	Analytical Balance, weighing pan, weighing pan shield, brush, fabric dust cover, power supply.	Analytical Balance, weighing pan, weighing pan shield, brush, fabric dust cover, power supply.
Weighing chamber dimensions	200×170×220 mm	200×170×220 mm	200×170×220 mm
Weighing pan dimensions	ø90 open-work pan + ø85 (option) mm	ø100 mm	ø100 mm
Packaging dimensions W x D x H	750×492×595 mm	750×492×595 mm	750×492×595 mm
Net weight	14,8 kg	14,7 kg	14,7 kg
Gross weight	16,5 kg	20 kg	20,5 kg
Construction			
Protection class	IP 43	IP 43	IP 43
Communication interface			
Communication interface	2×USB-A, USB-C, RS 232 (COM3), HDMI, Ethernet, Wi-Fi, Hotspot	2×USB-A, USB-C, RS 232 (COM3), HDMI, Ethernet, Wi-Fi, Hotspot	2×USB-A, USB-C, RS 232 (COM3), HDMI, Ethernet, Wi-Fi, Hotspot
Electrical parameters			
Power supply	Adapter: 100 – 240V AC 50/60Hz 1A Max; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max; 10 – 19W*	Adapter: 100 – 240V AC 50/60Hz 1A Max; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max; 10 – 19W*	Adapter: 100 – 240V AC 50/60Hz 1A Max; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max; 10 – 19W*
Environmental conditions			
Operating temperature	+10 – +40 °C	+10 – +40 °C	+10 – +40 °C
Operating temperature change rate	±0,3 °C / 1 h (±1 °C / 8 h)	±0,3 °C / 1 h (±1 °C / 8 h)	±0,3 °C / 1 h (±1 °C / 8 h)
Relative humidity	20% – 80%	20% – 80%	20% – 80%
Relative humidity change rate	±1% / h (±4% / 8 h)	±1% / h (±4% / 8 h)	±1% / h (±4% / 8 h)

Standard repeatability [5% Max] and Standard minimum weight (USP) are parameters obtained in automatic mode under special laboratory conditions. Repeatability is expressed as a standard deviation from 10 cycles of mass standard weighing. Stabilization time depends on the ambient conditions and the dynamics of weighing pan loading; specified for FAST profile. * Power consumption depends on the terminal configuration as well as the number and type of external devices connected. The power supply can be connected to the socket on the back of the balance housing or to the terminal.

Datasheet

	XA 320.5Y.A Analytical Balance WL-110-0023	XA 520.5Y.A Analytical Balance WL-110-0008
Metrological parameters		
Maximum capacity [Max]	320 g	520 g
Minimum load	5 mg	-
Readability [d]	0,05 mg	0,1 mg
Verification unit [e]	1 mg	-
Tare range	-320 g	-520 g
Minimum weight (USP)	40 mg	140 mg
Minimum weight (U=1%, k=2)	4 mg	14 mg
Standard repeatability [5% Max]	0,02 mg	0,07 mg
Permissible repeatability [5% Max]	0,06 mg	0,12 mg
Standard linearity	—	—
Permissible linearity		
Linearity	±0,3 mg	±0,5 mg
Standard eccentric load deviation		
Permissible eccentric load deviation	—	—
Eccentric load deviation	0,15 mg	0,4 mg
Sensitivity time drift	$1 \times 10^{-6} / \text{Year} \times \text{Rt}$	$1 \times 10^{-6} / \text{Year} \times \text{Rt}$
Stabilization time	1,3 s	1,3 s
Adjustment	internal (automatic)	internal (automatic)
OIML Class	I	-
Physical parameters		
Leveling system	automatic – Reflex Level System	automatic – Reflex Level System
Display	10" graphic colour touchscreen	10" graphic colour touchscreen
Weighing chamber	automatic	automatic
Weighing chamber doors	automatic	automatic
Delivery components	Analytical Balance, weighing pan, weighing pan shield, centring ring, brush, fabric dust cover, power supply.	Analytical Balance, weighing pan, weighing pan shield, brush, fabric dust cover, power supply.
Weighing chamber dimensions	200×170×220 mm	200×170×220 mm
Weighing pan dimensions	ø90 open-work pan + ø85 (option) mm	ø100 mm
Packaging dimensions W x D x H	750×492×595 mm	750×492×595 mm
Net weight	14,7 kg	14,7 kg
Gross weight	16 kg	20,5 kg
Construction		
Protection class	IP 43	IP 43
Communication interface		
Communication interface	2×USB-A, USB-C, RS 232 (COM3), HDMI, Ethernet, Wi-Fi, Hotspot	2×USB-A, USB-C, RS 232 (COM3), HDMI, Ethernet, Wi-Fi, Hotspot
Electrical parameters		
Power supply	Adapter: 100 – 240V AC 50/60Hz 1A Max; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max; 10 – 19W*	Adapter: 100 – 240V AC 50/60Hz 1A Max; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max; 10 – 19W*
Environmental conditions		
Operating temperature	+10 – +40 °C	+10 – +40 °C
Operating temperature change rate	±0,3 °C / 1 h (±1 °C / 8 h)	±0,3 °C / 1 h (±1 °C / 8 h)
Relative humidity	20% – 80%	20% – 80%
Relative humidity change rate	±1% / h (±4% / 8 h)	±1% / h (±4% / 8 h)

Standard repeatability [5% Max] and Standard minimum weight (USP) are parameters obtained in automatic mode under special laboratory conditions. Repeatability is expressed as a standard deviation from 10 cycles of mass standard weighing. Stabilization time depends on the ambient conditions and the dynamics of weighing pan loading; specified for FAST profile. * Power consumption depends on the terminal configuration as well as the number and type of external devices connected. The power supply can be connected to the socket on the back of the balance housing or to the terminal.

* Wi-Fi® is a registered trademark of Wi-Fi® Alliance.



Additional fee for verification



Accessories (Additional Fee)

MediaBox
RFID Tags
Antivibration Tables
Adapters for Pipettes Calibration
Power Adapters
Protective cover for balances
RS 232, RS 485 cables
Holders for laboratory flasks
Density determination KIT
Additional modules
Holders for test tubes and filters
Professional Weighing Tables
Barcode scanners

Automatic feeders
Label Printers
THBR 2.0 System - Ambient Conditions Monitoring
MICRO-KIT - Set of Holders for Microscale Glassware
Under-pan weighing
Anti-Draft Chamber for XA 4Y and XA 5Y Balances
Weighing dishes
Antistatic ionizer
Receipt Printer
Fingerprint Reader
RS 232 – USB Converter
Balance Storage Case

Software (Additional Fee)

E2R System
Label Editor R02
R-LAB
RADWAG Development Studio

RAD-KEY
RADWAG Remote Desktop
Scales Editor 2.1

Device dimensions W x D x H

XA 310.5Y.A Analytical Balance, XA 121/220.5Y.A Analytical Balance, XA 110.5Y.A Analytical Balance, XA 82/220.5Y.A Analytical Balance, XA 210.5Y.A Analytical Balance, XA 120/250.5Y.A Analytical Balance, XA 41/120.5Y.A Analytical Balance, XA 220.5Y.A Analytical Balance, XA 52.5Y.A Analytical Balance, XA 520.5Y.A Analytical Balance, XA 320.5Y.A Analytical Balance

