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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

More information on the website
radwag.com/en/info,w1,E3O

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 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 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
Standard repeatability [5% Max]	0,004 mg	0,005 mg	0,005 mg
Standard repeatability [Max]	0,012 mg	0,01 mg	0,06 mg
Standard minimum weight (USP)	8 mg	10 mg	10 mg
Standard minimum weight (U=1%, k=2)	0,8 mg	1 mg	1 mg
Permissible repeatability [5% Max]	0,008 mg	0,012 mg	0,012 mg
Permissible repeatability [Max]	0,02 mg	0,02 mg	0,08 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	1×10^{-6}/Year×Rt	1×10^{-6}/Year×Rt	1×10^{-6}/Year×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 open-work pan + ø85 (option) 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	15,27 kg
Gross weight	16 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; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max*	Adapter: 100 – 240V AC 50/60Hz 1A; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max*	Adapter: 100 – 240V AC 50/60Hz 1A; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max*
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)

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. * 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
Standard repeatability [5% Max]	0,005 mg	0,005 mg	0,005 mg
Standard repeatability [Max]	0,02 mg	0,06 mg	0,025 mg
Standard minimum weight (USP)	10 mg	10 mg	10 mg
Standard minimum weight (U=1%, k=2)	1 mg	1 mg	1 mg
Permissible repeatability [5% Max]	0,012 mg	0,012 mg	0,01 mg
Permissible repeatability [Max]	0,03 mg	0,1 mg	0,035 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	1×10^{-6}/Year×Rt	1×10^{-6}/Year×Rt	1×10^{-6}/Year×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 open-work pan + ø85 (option) mm	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; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max*	Adapter: 100 – 240V AC 50/60Hz 1A; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max*	Adapter: 100 – 240V AC 50/60Hz 1A; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max*
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)

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. * 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
Standard repeatability [5% Max]	0,005 mg	0,05 mg	0,05 mg
Standard repeatability [Max]	0,025 mg	0,08 mg	0,1 mg
Standard minimum weight (USP)	10 mg	100 mg	100 mg
Standard minimum weight (U=1%, k=2)	1 mg	10 mg	10 mg
Permissible repeatability [5% Max]	0,012 mg	0,07 mg	0,07 mg
Permissible repeatability [Max]	0,035 mg	0,1 mg	0,15 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	1×10^{-6}/Year×Rt	1×10^{-6}/Year×Rt	1×10^{-6}/Year×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	14,7 kg	14,7 kg	14,7 kg
Gross weight	20 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; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max*	Adapter: 100 – 240V AC 50/60Hz 1A; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max*	Adapter: 100 – 240V AC 50/60Hz 1A; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max*
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)

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. * 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	4,1 mg	-
Readability [d]	0,05 mg	0,1 mg
Verification unit [e]	1 mg	-
Tare range	-320 g	-520 g
Standard repeatability [5% Max]	0,02 mg	0,07 mg
Standard repeatability [Max]	0,06 mg	0,18 mg
Standard minimum weight (USP)	41 mg	140 mg
Standard minimum weight (U=1%, k=2)	4,1 mg	14 mg
Permissible repeatability [5% Max]	0,06 mg	0,12 mg
Permissible repeatability [Max]	0,07 mg	0,25 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	1×10^{-6}/Year×Rt	1×10^{-6}/Year×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; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max*	Adapter: 100 – 240V AC 50/60Hz 1A; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max*
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)

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. * 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
Protective cover for balances
Barcode scanners
Automatic feeders
Label Printers
THBR 2.0 System - Ambient Conditions Monitoring
RS 232, RS 485 cables
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
Under-pan weighing

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