



More information on the website
radwag.com/en/info,w1,N0J

XA 310.5Y.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 220.5Y.A Analytical Balance, XA 52.5Y.A Analytical Balance, XA 520.5Y.A Analytical Balance



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

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 52.5Y.A Analytical Balance	XA 82/220.5Y.A Analytical Balance	XA 110.5Y.A Analytical Balance
Metrological parameters			
Maximum capacity [Max]	52 g	82 / 220 g	110 g
Minimum load	1 mg	1 mg	1 mg
Readability [d]	0,01 mg	0,01 / 0,1 mg	0,01 mg
Verification unit [e]	1 mg	1 mg	1 mg
Tare range	-52 g	-220 g	-110 g
Standard repeatability [5% Max]	0,005 mg	0,005 mg	0,005 mg
Standard repeatability [Max]	0,01 mg	0,06 mg	0,02 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	0,012 mg
Permissible repeatability [Max]	0,02 mg	0,08 mg	0,03 mg
Linearity	±0,03 mg	±0,06 / 0,2 mg	±0,06 mg
Eccentric load deviation	0,03 mg	0,2 mg	0,06 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	4 s	4 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	ø90 open-work pan + ø85 (option) mm
Packaging dimensions	750×492×595 mm	750×492×595 mm	750×492×595 mm
Net weight	14,7 kg	15,27 kg	14,7 kg
Gross weight	20 kg	19,1 kg	16 kg
Construction			
Protection class	IP 43	IP 43	IP 43
Communication interface			
Communication interface	2×USB-A, USB-C, HDMI, Ethernet, Wi-Fi, Hotspot	2×USB-A, USB-C, HDMI, Ethernet, Wi-Fi, Hotspot	2×USB-A, USB-C, 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/1h (±1°C/8h)	±0,3°C/1h (±1°C/8h)	±0,3°C/1h (±1°C/8h)
Relative humidity	20% – 80%	20% – 80%	20% – 80%
Relative humidity change rate	±1%/h (±4%/8h)	±1%/h (±4%/8h)	±1%/h (±4%/8h)

* The power supply can be connected to the socket on the back of the balance housing or to the terminal.

Datasheet

	XA 120/250.5Y.A Analytical Balance	XA 210.5Y.A Analytical Balance	XA 220.5Y.A Analytical Balance
Metrological parameters			
Maximum capacity [Max]	120 / 250 g	210 g	220 g
Minimum load	1 mg	1 mg	10 mg
Readability [d]	0,01 / 0,1 mg	0,01 mg	0,1 mg
Verification unit [e]	1 mg	1 mg	1 mg
Tare range	-250 g	-210 g	-220 g
Standard repeatability [5% Max]	0,005 mg	0,005 mg	0,05 mg
Standard repeatability [Max]	0,06 mg	0,025 mg	0,08 mg
Standard minimum weight (USP)	10 mg	10 mg	100 mg
Standard minimum weight (U=1%, k=2)	1 mg	1 mg	10 mg
Permissible repeatability [5% Max]	0,012 mg	0,012 mg	0,07 mg
Permissible repeatability [Max]	0,1 mg	0,035 mg	0,1 mg
Linearity	±0,06 / 0,2 mg	±0,1 mg	±0,2 mg
Eccentric load deviation	0,2 mg	0,1 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 s	4 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, 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	200×170×220 mm
Weighing pan dimensions	ø90 open-work pan + ø85 (option) mm	ø90 open-work pan + ø85 (option) mm	ø100 mm
Packaging dimensions	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	19,1 kg	20 kg	20 kg
Construction			
Protection class	IP 43	IP 43	IP 43
Communication interface			
Communication interface	2×USB-A, USB-C, HDMI, Ethernet, Wi-Fi, Hotspot	2×USB-A, USB-C, HDMI, Ethernet, Wi-Fi, Hotspot	2×USB-A, USB-C, 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/1h (±1°C/8h)	±0,3°C/1h (±1°C/8h)	±0,3°C/1h (±1°C/8h)
Relative humidity	20% – 80%	20% – 80%	20% – 80%
Relative humidity change rate	±1%/h (±4%/8h)	±1%/h (±4%/8h)	±1%/h (±4%/8h)

* The power supply can be connected to the socket on the back of the balance housing or to the terminal.

Datasheet

	XA 310.5Y.A Analytical Balance	XA 520.5Y.A Analytical Balance
Metrological parameters		
Maximum capacity [Max]	310 g	520 g
Minimum load	10 mg	-
Readability [d]	0,1 mg	0,1 mg
Verification unit [e]	1 mg	-
Tare range	-310 g	-520 g
Standard repeatability [5% Max]	0,05 mg	0,07 mg
Standard repeatability [Max]	0,1 mg	0,18 mg
Standard minimum weight (USP)	100 mg	140 mg
Standard minimum weight (U=1%, k=2)	10 mg	14 mg
Permissible repeatability [5% Max]	0,07 mg	0,12 mg
Permissible repeatability [Max]	0,15 mg	0,25 mg
Linearity	±0,3 mg	±0,5 mg
Eccentric load deviation	0,3 mg	0,4 mg
Sensitivity time drift	$1 \times 10^{-6} / \text{Year} \times R_t$	$1 \times 10^{-6} / \text{Year} \times R_t$
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, 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	Ø100 mm	Ø100 mm
Packaging dimensions	750×492×595 mm	750×492×595 mm
Net weight	14,7 kg	14,7 kg
Gross weight	19,1 kg	20,5 kg
Construction		
Protection class	IP 43	IP 43
Communication interface		
Communication interface	2×USB-A, USB-C, HDMI, Ethernet, Wi-Fi, Hotspot	2×USB-A, USB-C, 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/1h (±1°C/8h)	±0,3°C/1h (±1°C/8h)
Relative humidity	20% – 80%	20% – 80%
Relative humidity change rate	±1%/h (±4%/8h)	±1%/h (±4%/8h)

* 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.

Accessories

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
RS 232, RS 485 cables
THBR 2.0 System - Ambient Conditions Monitoring
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

E2R System
Label Editor R02
R-LAB
RADWAG Development Studio

RAD-KEY
RADWAG Remote Desktop
Scales Editor 2.1

Device dimensions

XA 310.5Y.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 220.5Y.A Analytical Balance, XA 52.5Y.A Analytical Balance, XA 520.5Y.A Analytical Balance

