



XA 82/220.5Y Analytical Balance, XA 110.5Y Analytical Balance, XA 210.5Y Analytical Balance,  
XA 52.5Y Analytical Balance, XA 120/250.5Y Analytical Balance

More information on the website  
[radwag.com/en/info,w1,MD7](http://radwag.com/en/info,w1,MD7)



XA 82/220.5Y Analytical Balance  
XA 210.5Y Analytical Balance  
XA 52.5Y Analytical Balance  
XA 120/250.5Y Analytical Balance

## Functions



Autotest



Dosing



Percent Weighing



Parts counting



Peak hold



Formulation



Newton unit  
measurement



Statistics



Checkweighing



IR sensors



GLP Procedures



Animal weighing



Pipettes Calibration



Air density correction



Density determination



Differential weighing



Ambient conditions  
monitoring



Statistical Quality Control



Packaged Goods Control



ALIBI Memory



Wi-Fi

# Datasheet

	XA 52.5Y Analytical Balance	XA 82/220.5Y Analytical Balance	XA 110.5Y Analytical Balance
<b>Metrological parameters</b>			
<b>Maximum capacity [Max]</b>	52 g	82 / 220 g	110 g
<b>Minimum load</b>	1 mg	1 mg	1 mg
<b>Readability [d]</b>	0,01 mg	0,01 / 0,1 mg	0,01 mg
<b>Verification scale interval [e]</b>	1 mg	1 mg	1 mg
<b>Tare range</b>	-52 g	-220 g	-110 g
<b>Standard repeatability [5% Max]</b>	0,005 mg	0,005 mg	0,005 mg
<b>Standard repeatability [Max]</b>	0,01 mg	0,06 mg	0,02 mg
<b>Standard minimum weight (USP)</b>	10 mg	10 mg	10 mg
<b>Standard minimum weight (U=1%, k=2)</b>	1 mg	1 mg	1 mg
<b>Permissible repeatability [5% Max]</b>	0,012 mg	0,012 mg	0,012 mg
<b>Permissible repeatability [Max]</b>	0,02 mg	0,08 mg	0,03 mg
<b>Linearity</b>	±0,03 mg	±0,06 / 0,2 mg	±0,06 mg
<b>Eccentric load deviation</b>	0,03 mg	0,02 mg	0,06 mg
<b>Sensitivity time drift</b>	1×10 <sup>-6</sup> /Year×Rt	1×10 <sup>-6</sup> /Year×Rt	1×10 <sup>-6</sup> /Year×Rt
<b>Stabilization time</b>	4 s	4 s	4 s
<b>Adjustment</b>	internal (automatic)	internal (automatic)	internal (automatic)
<b>OIML Class</b>	I	I	I
<b>Physical parameters</b>			
<b>Leveling system</b>	semi-automatic - LevelSENSING	semi-automatic - LevelSENSING	semi-automatic - LevelSENSING
<b>Display</b>	10" touchscreen	10" touchscreen	10" touchscreen
<b>Delivery components</b>	Analytical Balance, weighing pan, weighing pan shield, centring ring, bottom cover, brush, fabric dust cover, power supply, RS232 cable.	Analytical Balance, weighing pan, weighing pan shield, centring ring, bottom cover, brush, fabric dust cover, power supply, RS232 cable.	Analytical Balance, weighing pan, weighing pan shield, centring ring, bottom cover, brush, fabric dust cover, power supply, RS232 cable.
<b>Weighing chamber dimensions</b>	168×160×228 mm	168×160×228 mm	168×160×228 mm
<b>Weighing pan dimensions</b>	ø90 + ø85 (option) mm	ø90 + ø85 (option) mm	ø90 + ø85 (option) mm
<b>Packaging dimensions</b>	435 x 885 x 540 mm	435 x 885 x 540 mm	435 x 885 x 540 mm
<b>Net weight</b>	9,8 kg	9,8 kg	9,8 kg
<b>Gross weight</b>	14,3 kg	14,3 kg	14,3 kg
<b>Communication interface</b>			
<b>Communication interface</b>	USB-A x2, USB-C, HDMI, Ethernet, Wi-Fi, Hotspot	USB-A x2, USB-C, HDMI, Ethernet, Wi-Fi, Hotspot	USB-A x2, USB-C, HDMI, Ethernet, Wi-Fi, Hotspot
<b>Electrical parameters</b>			
<b>Power supply</b>	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*
<b>Environmental conditions</b>			
<b>Operating temperature</b>	+10 – +40 °C	+10 – +40 °C	+10 – +40 °C
<b>Operating temperature change rate</b>	±0,3°C/1h (±1°C/8h)	±0,3°C/1h (±1°C/8h)	±0,3°C/1h (±1°C/8h)
<b>Relative humidity</b>	20% – 80%	20% – 80%	20% – 80%
<b>Relative humidity change rate</b>	±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 Analytical Balance	XA 210.5Y Analytical Balance
<b>Metrological parameters</b>		
Maximum capacity [Max]	120 / 250 g	210 g
Minimum load	10 mg	1 mg
Readability [d]	0,01 / 0,1 mg	0,01 mg
Verification scale interval [e]	1 mg	1 mg
Tare range	-250 g	-210 g
Standard repeatability [5% Max]	0,005 mg	0,005 mg
Standard repeatability [Max]	0,06 mg	0,025 mg
Standard minimum weight (USP)	10 mg	10 mg
Standard minimum weight (U=1%, k=2)	1 mg	1 mg
Permissible repeatability [5% Max]	0,012 mg	0,012 mg
Permissible repeatability [Max]	0,1 mg	0,035 mg
Linearity	±0,06 / 0,2 mg	±0,1 mg
Eccentric load deviation	0,2 mg	0,1 mg
Sensitivity time drift	$1 \times 10^{-6} / \text{Year} \times \text{Rt}$	$1 \times 10^{-6} / \text{Year} \times \text{Rt}$
Stabilization time	4 s	4 s
Adjustment	internal (automatic)	internal (automatic)
OIML Class	I	I
<b>Physical parameters</b>		
Leveling system	semi-automatic - LevelSENSING	semi-automatic - LevelSENSING
Display	10" touchscreen	10" touchscreen
Delivery components	Analytical Balance, weighing pan, weighing pan shield, centring ring, bottom cover, brush, fabric dust cover, power supply, RS232 cable.	Analytical Balance, weighing pan, weighing pan shield, centring ring, bottom cover, brush, fabric dust cover, power supply, RS232 cable.
Weighing chamber dimensions	168×160×228 mm	168×160×228 mm
Weighing pan dimensions	ø90 + ø85 (option) mm	ø90 + ø85 (option) mm
Packaging dimensions	435 x 885 x 540 mm	435 x 885 x 540 mm
Net weight	9,8 kg	9,8 kg
Gross weight	14,3 kg	14,3 kg
<b>Communication interface</b>		
Communication interface	USB-A ×2, USB-C, HDMI, Ethernet, Wi-Fi, Hotspot	USB-A ×2, USB-C, HDMI, Ethernet, Wi-Fi, Hotspot
<b>Electrical parameters</b>		
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*
<b>Environmental conditions</b>		
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

Adapter for Pipette Calibration  
Barcode scanners  
Density determination KIT  
Professional weighing table  
Holders for test tubes and filters  
USB Hubs  
Label Printers  
Holders for laboratory flasks

THBR 2.0 System - Ambient Conditions Monitoring  
Under-Pan Weighing Rack  
Anti-Draft Chamber for XA 4Y and XA 5Y Balances  
Weighing dishes  
Fingerprint Reader  
RS 232 – USB Converter  
RS 232, RS 485 cables

## Software

RAD-KEY  
Label Editor R02  
R-LAB  
RADWAG Development Studio

LabVIEW Driver  
RADWAG Remote Desktop  
Scales Editor 2.1  
R.Barcode

## Device dimensions

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