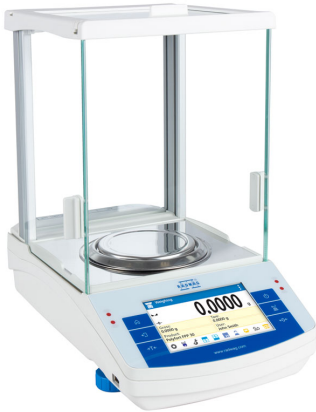


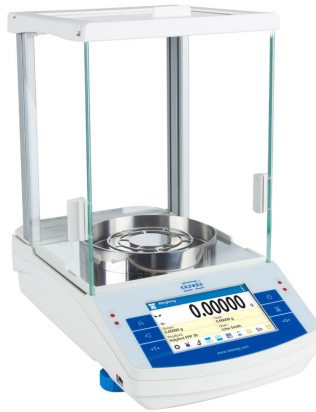


AS 520.X2 PLUS Analytical Balance, AS 82/220.X2 PLUS Analytical Balance, AS 160.X2 PLUS Analytical Balance, AS 120.X2 PLUS Analytical Balance, AS 60/220.X2 PLUS Analytical Balance, AS 3100.X2 PLUS Analytical Balance, AS 62.X2 PLUS Analytical Balance, AS 220.X2 PLUS Analytical Balance, AS 310.X2 PLUS Analytical Balance

More information on the website
radwag.com/en/info,w1,B6V



AS 520.X2 PLUS Analytical Balance
AS 160.X2 PLUS Analytical Balance
AS 220.X2 PLUS Analytical Balance
AS 310.X2 PLUS Analytical Balance



AS 82/220.X2 PLUS Analytical Balance
AS 120.X2 PLUS Analytical Balance
AS 60/220.X2 PLUS Analytical Balance
AS 62.X2 PLUS Analytical Balance



AS 3100.X2 PLUS 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 | Density determination | Ambient conditions monitoring | Replaceable unit |
| Statistical Quality Control | ALIBI Memory | Mass for titrator | Wi-Fi |

Datasheet

	AS 3100.X2 PLUS Analytical Balance	AS 60/220.X2 PLUS Analytical Balance	AS 62.X2 PLUS Analytical Balance
Metrological parameters			
Maximum capacity [Max]	3,1 kg	60 / 220 g	62 g
Minimum load	-	1 mg	1 mg
Readability [d]	1 mg	0,01 / 0,1 mg	0,01 mg
Verification scale interval [e]	-	1 mg	1 mg
Tare range	-3,1 kg	-220 g	-62 g
Standard repeatability [5% Max]	0,5 mg	0,01 mg	0,01 mg
Standard repeatability [Max]	0,6 mg	0,06 mg	0,017 mg
Standard minimum weight (USP)	1 g	20 mg	20 mg
Standard minimum weight (U=1%, k=2)	100 mg	2 mg	2 mg
Permissible repeatability [5% Max]	0,8 mg	0,02 mg	0,02 mg
Permissible repeatability [Max]	1 mg	0,1 mg	0,03 mg
Linearity	±6 mg	±0,05/0,2 mg	±0,05 mg
Stabilization time	2 s	2 s	3 s
Adjustment	internal (automatic)	internal (automatic)	internal (automatic)
OIML Class	-	I	I
Physical parameters			
Leveling system	manual	manual	manual
Display	5" graphic color touchscreen	5" graphic color touchscreen	5" graphic color touchscreen
Protection class	IP 43	IP 43	IP 43
Delivery components	Balance, weighing pan, weighing pan shield, centring ring, bottom cover, power supply.	Balance, weighing pan, weighing pan shield, centring ring, bottom cover, power supply, fabric dust cover.	Balance, weighing pan, weighing pan shield, centring ring, bottom cover, power supply, fabric dust cover.
Weighing chamber dimensions	190×190×222 mm	190×190×222 mm	190×190×222 mm
Weighing pan dimensions	ø90 mm (open-work pan)	ø90 + ø85 (option) mm	ø90 open-work pan + ø85 (option) mm
Packaging dimensions	495×400×515 mm	550×455×565 mm	495×400×515 mm
Net weight	7,3 kg	7,3 kg	7,3 kg
Gross weight	9,3 kg	9,3 kg	9,3 kg
Features of use			
Database capacity	7	7	7
Touch-free operation	2 IR Sensors	2 IR Sensors	2 IR Sensors
Communication interface			
Communication interface	RS232 ¹ , 2×USB-A (interchangeable), USB-B, Wi-Fi, Ethernet	RS232 ¹ , 2×USB-A (interchangeable), USB-B, Wi-Fi, Ethernet	RS232 ¹ , 2×USB-A (interchangeable), USB-B, Wi-Fi, Ethernet
Electrical parameters			
Power supply	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,8A max	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,8A max	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,8A max
Power consumption max.	4 W	4 W	4 W
Environmental conditions			
Operating temperature	+10 ÷ +40 °C	+10 ÷ +40 °C	+10 ÷ +40 °C
Relative humidity	40% ÷ 80%	40% ÷ 80%	40% ÷ 80%

Repeatability is expressed as a standard deviation from 10 weighing cycles. Stabilization time depends on the ambient conditions and the dynamics of weighing pan loading; specified for FAST profile. 1 Barcode scanners, available as weighing instrument accessory, communicate with the instrument via RS232 interface exclusively.

Datasheet

	AS 82/220.X2 PLUS Analytical Balance	AS 120.X2 PLUS Analytical Balance	AS 160.X2 PLUS Analytical Balance
Metrological parameters			
Maximum capacity [Max]	82 / 220 g	120 g	160 g
Minimum load	1 mg	1 mg	10 mg
Readability [d]	0,01 / 0,1 mg	0,01 mg	0,1 mg
Verification scale interval [e]	1 mg	1 mg	1 mg
Tare range	-220 g	-120 g	-160 g
Standard repeatability [5% Max]	0,01 mg	0,01 mg	0,06 mg
Standard repeatability [Max]	0,06 mg	0,025 mg	0,07 mg
Standard minimum weight (USP)	20 mg	20 mg	120 mg
Standard minimum weight (U=1%, k=2)	2 mg	2 mg	12 mg
Permissible repeatability [5% Max]	0,02 mg	0,02 mg	0,09 mg
Permissible repeatability [Max]	0,1 mg	0,04 mg	0,1 mg
Linearity	±0,05/0,2 mg	±0,07 mg	±0,2 mg
Stabilization time	2 s	2 s	2 s
Adjustment	internal (automatic)	internal (automatic)	internal (automatic)
OIML Class	I	I	I
Physical parameters			
Leveling system	manual	manual	manual
Display	5" graphic color touchscreen	5" graphic color touchscreen	5" graphic color touchscreen
Protection class	IP 43	IP 43	IP 43
Delivery components	Balance, weighing pan, weighing pan shield, centring ring, bottom cover, power supply, fabric dust cover.	Balance, weighing pan, weighing pan shield, centring ring, bottom cover, power supply, fabric dust cover.	Balance, weighing pan, weighing pan shield, centring ring, bottom cover, power supply.
Weighing chamber dimensions	190×190×222 mm	190×190×222 mm	190×190×222 mm
Weighing pan dimensions	ø90 + ø85 (option) mm	ø90 + ø85 (option) mm	ø100 mm
Packaging dimensions	550×455×565 mm	495×400×515 mm	495×400×515 mm
Net weight	7,3 kg	7,3 kg	7,3 kg
Gross weight	9,3 kg	9,3 kg	9,3 kg
Features of use			
Database capacity	7	7	7
Touch-free operation	2 IR Sensors	2 IR Sensors	2 IR Sensors
Communication interface			
Communication interface	RS232 ¹ , 2×USB-A (interchangeable), USB-B, Wi-Fi, Ethernet	RS232 ¹ , 2×USB-A (interchangeable), USB-B, Wi-Fi, Ethernet	RS232 ¹ , 2×USB-A (interchangeable), USB-B, Wi-Fi, Ethernet
Electrical parameters			
Power supply	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,8A max	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,8A max	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,8A max
Power consumption max.	4 W	4 W	4 W
Environmental conditions			
Operating temperature	+10 ÷ +40 °C	+10 ÷ +40 °C	+10 ÷ +40 °C
Relative humidity	40% ÷ 80%	40% ÷ 80%	40% ÷ 80%

Repeatability is expressed as a standard deviation from 10 weighing cycles. Stabilization time depends on the ambient conditions and the dynamics of weighing pan loading; specified for FAST profile. 1 Barcode scanners, available as weighing instrument accessory, communicate with the instrument via RS232 interface exclusively.

Datasheet

	AS 220.X2 PLUS Analytical Balance	AS 310.X2 PLUS Analytical Balance	AS 520.X2 PLUS Analytical Balance
Metrological parameters			
Maximum capacity [Max]	220 g	310 g	520 g
Minimum load	10 mg	10 mg	-
Readability [d]	0,1 mg	0,1 mg	0,1 mg
Verification scale interval [e]	1 mg	1 mg	—
Tare range	-220 g	-310 g	-520 g
Standard repeatability [5% Max]	0,06 mg	0,07 mg	0,07 mg
Standard repeatability [Max]	0,07 mg	0,1 mg	0,2 mg
Standard minimum weight (USP)	120 mg	140 mg	140 mg
Standard minimum weight (U=1%, k=2)	12 mg	14 mg	14 mg
Permissible repeatability [5% Max]	0,09 mg	0,12 mg	0,12 mg
Permissible repeatability [Max]	0,1 mg	0,15 mg	0,4 mg
Linearity	±0,2 mg	±0,2 mg	±0,6 mg
Stabilization time	2 s	2,5 s	2,5 s
Adjustment	internal (automatic)	internal (automatic)	internal (automatic)
OIML Class	I	I	I
Physical parameters			
Leveling system	manual	manual	manual
Display	5" graphic color touchscreen	5" graphic color touchscreen	5" graphic color touchscreen
Protection class	IP 43	IP 43	IP 43
Delivery components	Balance, weighing pan, weighing pan shield, bottom cover, power supply.	Balance, weighing pan, weighing pan shield, bottom cover, power supply.	Balance, weighing pan, weighing pan shield, bottom cover, power supply.
Weighing chamber dimensions	190×190×222 mm	190×190×222 mm	190×190×222 mm
Weighing pan dimensions	ø100 mm	ø100 mm	ø100 mm
Packaging dimensions	400×520×490 mm	495×400×515 mm	495×400×515 mm
Net weight	7,3 kg	7,3 kg	7,3 kg
Gross weight	9,3 kg	9,3 kg	9,3 kg
Features of use			
Database capacity	7	7	7
Touch-free operation	2 IR Sensors	2 IR Sensors	2 IR Sensors
Communication interface			
Communication interface	RS232 ¹ , 2×USB-A (interchangeable), USB-B, Wi-Fi, Ethernet	RS232, 2×USB-A (interchangeable), USB-B, Wi-Fi, Ethernet	RS232 ¹ , 2×USB-A (interchangeable), USB-B, Wi-Fi, Ethernet
Electrical parameters			
Power supply	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,8A max	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,8A max	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,8A max
Power consumption max.	4 W	4 W	4 W
Environmental conditions			
Operating temperature	+10 ÷ +40 °C	+10 ÷ +40 °C	+10 ÷ +40 °C
Relative humidity	40% ÷ 80%	40% ÷ 80%	40% ÷ 80%

Repeatability is expressed as a standard deviation from 10 weighing cycles. Stabilization time depends on the ambient conditions and the dynamics of weighing pan loading; specified for FAST profile. 1 Barcode scanners, available as weighing instrument accessory, communicate with the instrument via RS232 interface exclusively.



Accessories

Antivibration Tables
Holders for laboratory flasks
Barcode scanners
Cigarette lighter receptacle power supply cables
Density determination KIT
USB cable (scale - printer)
Professional weighing table
Holders for test tubes and filters
Workstation for Pipettes Calibration
Power Adapters

Displays
Protective cover for balances
Weighing dishes
Antistatic ionizer
Receipt Printer
RS 232, RS 485 cables
Under-Pan Weighing Rack
RS 232 cables (scale - printer)
Under-pan weighing

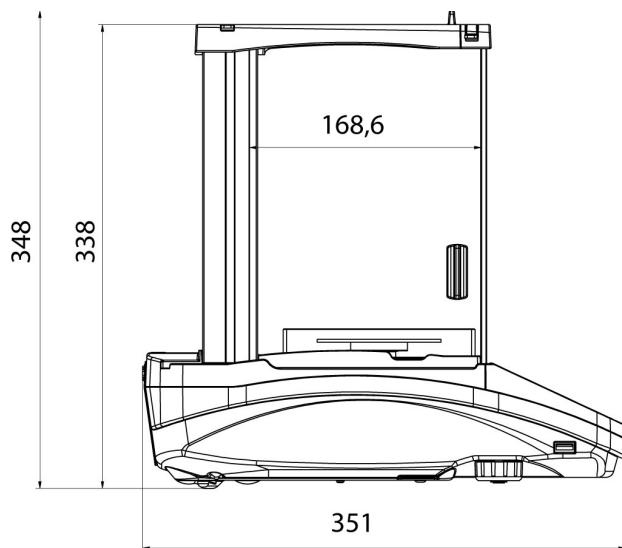
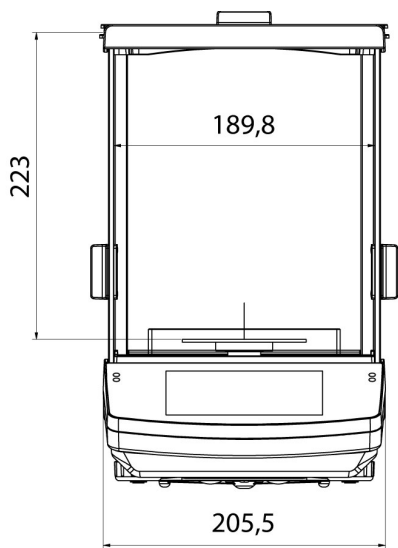
Software

RAD-KEY
Alibi Reader
RADWAG Development Studio
R.Barcode

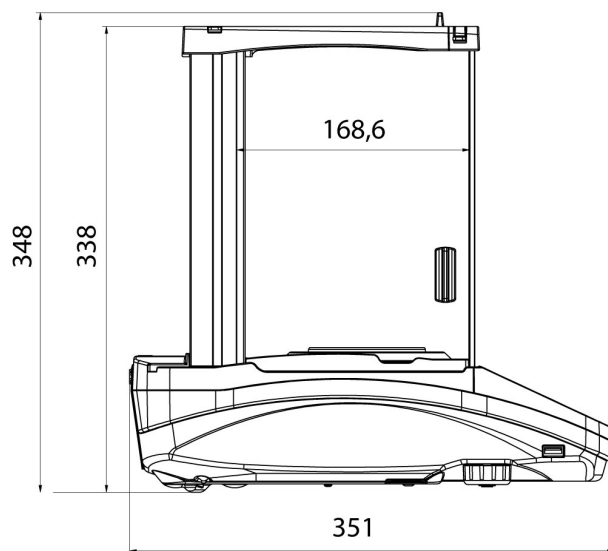
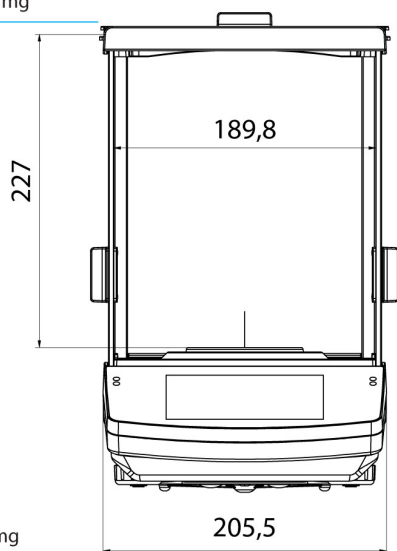
LabVIEW Driver
R-LAB
E2R System

Device dimensions

AS 520.X2 PLUS Analytical Balance, AS 82/220.X2 PLUS Analytical Balance, AS 160.X2 PLUS Analytical Balance, AS 120.X2 PLUS Analytical Balance, AS 60/220.X2 PLUS Analytical Balance, AS 3100.X2 PLUS Analytical Balance, AS 62.X2 PLUS Analytical Balance, AS 220.X2 PLUS Analytical Balance, AS 310.X2 PLUS Analytical Balance



AS X2 PLUS, d = 0.01 mg



AS X2 PLUS, d = 0.1 mg