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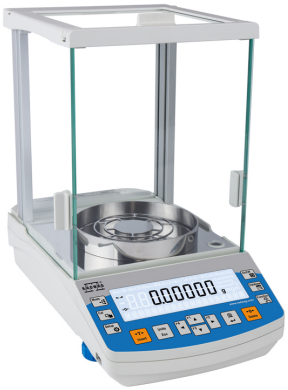
AS 310.R2 PLUS Analytical Balance, AS 62.R2 PLUS Analytical Balance, AS 520.R2 PLUS Analytical Balance, AS 60/220.R2 PLUS Analytical Balance, AS 160.R2 PLUS Analytical Balance, AS 82/220.R2 PLUS Analytical Balance, AS 110.R2 PLUS Analytical Balance, AS 120.R2 PLUS Analytical Balance, AS 220.R2 PLUS Analytical Balance

More information on the website
radwag.com/en/info,w1,NQ5

AS 310.R2 PLUS Analytical Balance
AS 520.R2 PLUS Analytical Balance
AS 160.R2 PLUS Analytical Balance
AS 110.R2 PLUS Analytical Balance
AS 220.R2 PLUS Analytical Balance



AS 62.R2 PLUS Analytical Balance
AS 60/220.R2 PLUS Analytical Balance
AS 82/220.R2 PLUS Analytical Balance
AS 120.R2 PLUS Analytical Balance

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

Functions

- Autotest
- Dosing
- Percent Weighing
- Totalizing
- Parts counting
- Peak hold
- Newton unit measurement
- Statistics
- Checkweighing
- Under-pan weighing
- GLP Procedures
- Animal weighing
- Density determination

Datasheet

	AS 60/220.R2 PLUS Analytical Balance	AS 62.R2 PLUS Analytical Balance	AS 82/220.R2 PLUS Analytical Balance
Metrological parameters			
Maximum capacity [Max]	60 / 220 g	62 g	82 / 220 g
Minimum load	1 mg	1 mg	1 mg
Readability [d]	0,01 / 0,1 mg	0,01 mg	0,01 / 0,1 mg
Verification unit [e]	1 mg	1 mg	1 mg
Tare range	-220 g	-62 g	-220 g
Standard repeatability [5% Max]	0,012 mg	0,012 mg	0,012 mg
Standard repeatability [Max]	0,08 mg	0,02 mg	0,08 mg
Standard minimum weight (USP)	24 mg	24 mg	24 mg
Standard minimum weight (U=1%, k=2)	2,4 mg	2,4 mg	2,4 mg
Permissible repeatability [5% Max]	0,02 mg	0,02 mg	0,02 mg
Permissible repeatability [Max]	0,1 mg	0,035 mg	0,1 mg
Linearity	±0,05 / 0,2 mg	±0,05 mg	±0,05 / 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	LCD (backlit)	LCD (backlit)	LCD (backlit)
Weighing chamber doors	manual	manual	manual
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, fabric dust cover.
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	545×455×575 mm	545×455×575 mm	545×455×575 mm
Net weight	7 kg	6,98 kg	7,3 kg
Gross weight	10,5 kg	10,5 kg	10,5 kg
Construction			
Protection class	IP 43	IP 43	IP 43
Communication interface			
Communication interface	2×RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi (option)	2×RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi (option)	2×RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi (option)
Electrical parameters			
Power supply	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,4A max	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,4A max	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,4A max
Power consumption max.	3 W	3 W	3 W
Overvoltage protection	–	–	–
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 110.R2 PLUS Analytical Balance	AS 120.R2 PLUS Analytical Balance	AS 160.R2 PLUS Analytical Balance
Metrological parameters			
Maximum capacity [Max]	110 g	120 g	160 g
Minimum load	10 mg	1 mg	10 mg
Readability [d]	0,1 mg	0,01 mg	0,1 mg
Verification unit [e]	1 mg	1 mg	1 mg
Tare range	-110 g	-120 g	-160 g
Standard repeatability [5% Max]	0,06 mg	0,012 mg	0,07 mg
Standard repeatability [Max]	0,08 mg	0,03 mg	0,08 mg
Standard minimum weight (USP)	120 mg	24 mg	140 mg
Standard minimum weight (U=1%, k=2)	12 mg	2,4 mg	14 mg
Permissible repeatability [5% Max]	0,09 mg	0,02 mg	0,09 mg
Permissible repeatability [Max]	0,1 mg	0,05 mg	0,1 mg
Linearity	±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	LCD (backlit)	LCD (backlit)	LCD (backlit)
Weighing chamber doors	manual	manual	manual
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.
Weighing pan dimensions	ø100 mm	ø90 open-work pan + ø85 (option) mm	ø100 mm
Packaging dimensions	490×400×520 mm	545×455×575 mm	490×400×520 mm
Net weight	7,3 kg	7,04 kg	7 kg
Gross weight	9 kg	10 kg	9 kg
Construction			
Protection class	IP 43	IP 43	IP 43
Communication interface			
Communication interface	2×RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi (option)	2×RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi (option)	2×RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi (option)
Electrical parameters			
Power supply	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,4A max	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,4A max	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,4A max
Power consumption max.	3 W	3 W	3 W
Overvoltage protection	—	—	YES
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.R2 PLUS Analytical Balance	AS 310.R2 PLUS Analytical Balance	AS 520.R2 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 unit [e]	1 mg	1 mg	-
Tare range	-220 g	-310 g	-520 g
Standard repeatability [5% Max]	0,07 mg	0,08 mg	0,08 mg
Standard repeatability [Max]	0,08 mg	0,12 mg	0,25 mg
Standard minimum weight (USP)	140 mg	160 mg	160 mg
Standard minimum weight (U=1%, k=2)	14 mg	16 mg	16 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	±0,3 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	-
Physical parameters			
Leveling system	manual	manual	manual
Display	LCD (backlit)	LCD (backlit)	LCD (backlit)
Weighing chamber doors	manual	manual	manual
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 pan dimensions	ø100 mm	ø100 mm	ø100 mm
Packaging dimensions	490×400×520 mm	490×400×520 mm	490×400×520 mm
Net weight	6,95 kg	7,01 kg	7,3 kg
Gross weight	9 kg	9 kg	8,5 kg
Construction			
Protection class	IP 43	IP 43	IP 43
Communication interface			
Communication interface	2×RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi (option)	2×RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi (option)	2×RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi (option)
Electrical parameters			
Power supply	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,4A max	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,4A max	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,4A max
Power consumption max.	3 W	3 W	3 W
Overvoltage protection	–	–	–
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.

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


Additional fee for verification


Accessories (Additional Fee)

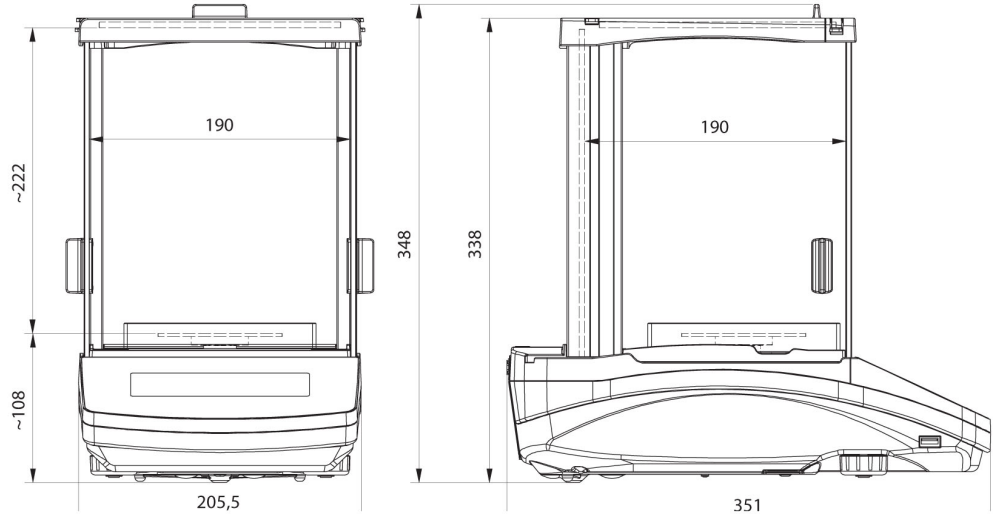
Antivibration Tables
Holders for laboratory flasks
Power Adapters
Cigarette lighter receptacle power supply cables
Density determination KIT
USB cable (scale - printer)
Professional Weighing Tables
Barcode scanners
Holders for test tubes and filters
Workstation for Pipettes Calibration
RS 232, RS 485 cables
Displays
Protective cover for balances
Weighing dishes
Antistatic ionizer
Receipt Printer
RS 232, RS 485 cables
Under-pan weighing
RS 232 cables (scale - printer)

Software (Additional Fee)

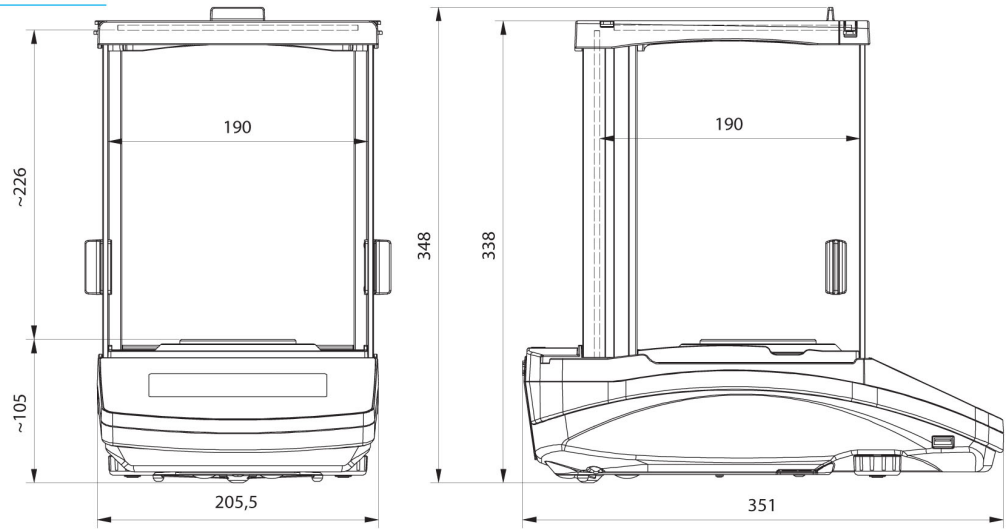
RAD-KEY
Alibi Reader
RADWAG Development Studio
R Panel
R-LAB

Device dimensions

AS 310.R2 PLUS Analytical Balance, AS 62.R2 PLUS Analytical Balance, AS 520.R2 PLUS Analytical Balance, AS 60/220.R2 PLUS Analytical Balance, AS 160.R2 PLUS Analytical Balance, AS 82/220.R2 PLUS Analytical Balance, AS 110.R2 PLUS Analytical Balance, AS 120.R2 PLUS Analytical Balance, AS 220.R2 PLUS Analytical Balance



AS R2, d = 0.01 mg



AS R2, AS R1 d = 0.1 mg