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AS 160.X7 Analytical Balance, AS 120.X7 Analytical Balance, AS 3100.X7 Analytical Balance, AS 520.X7 Analytical Balance, AS 60/220.X7 Analytical Balance, AS 82/220.X7 Analytical Balance, AS 220.X7 Analytical Balance, AS 62.X7 Analytical Balance, AS 310.X7 Analytical Balance

More information on the website
radwag.com/en/info,w1,GL5



AS 160.X7 Analytical Balance
AS 520.X7 Analytical Balance
AS 220.X7 Analytical Balance
AS 310.X7 Analytical Balance



AS 120.X7 Analytical Balance
AS 3100.X7 Analytical Balance
AS 60/220.X7 Analytical Balance
AS 82/220.X7 Analytical Balance
AS 62.X7 Analytical Balance

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

Functions

- Autotest
- Dosing
- Plus/Minus Control
- 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
- Drying modes:
  - AS 3100.X7 Analytical Balance
- Samples drying:
  - AS 3100.X7 Analytical Balance
- Moisture content analysis:
  - AS 3100.X7 Analytical Balance
- Dry mass determination:
  - AS 3100.X7 Analytical Balance

Datasheet

	AS 60/220.X7 Analytical Balance	AS 62.X7 Analytical Balance	AS 82/220.X7 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]	0,01 mg	0,01 mg	0,01 mg
Standard repeatability [Max]	0,06 mg	0,017 mg	0,06 mg
Standard minimum weight (USP)	20 mg	20 mg	20 mg
Standard minimum weight (U=1%, k=2)	2 mg	2 mg	2 mg
Permissible repeatability [5% Max]	0,02 mg	0,02 mg	0,02 mg
Permissible repeatability [Max]	0,1 mg	0,03 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	semi-automatic – LevelSENSING	semi-automatic – LevelSENSING	semi-automatic – LevelSENSING
Display	7" graphic colour touchscreen	7" graphic colour touchscreen	7" graphic colour touchscreen
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 chamber dimensions	190×190×222 mm	190×190×222 mm	190×190×222 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	545×455×575 mm	545×455×575 mm	545×455×575 mm
Net weight	7,3 kg	7,31 kg	7,14 kg
Gross weight	10,5 kg	9,3 kg	10,5 kg
Construction			
Protection class	IP 43	IP 43	IP 43
Components and software			
Database capacity	7	7	7
Features of use			
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
Ambient conditions monitoring (option)	THBR 2.0 System, THBR BOX, THB P, THB W, THB S	THBR 2.0 System, THBR BOX, THB P, THB W, THB S	THBR 2.0 System, THBR BOX, THB P, THB W, THB S
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 120.X7 Analytical Balance	AS 160.X7 Analytical Balance	AS 220.X7 Analytical Balance
Metrological parameters			
Maximum capacity [Max]	120 g	160 g	220 g
Minimum load	1 mg	10 mg	10
Readability [d]	0,01 mg	0,1 mg	0,1 mg
Verification unit [e]	1 mg	1 mg	1
Tare range	-120 g	-160 g	-220 g
Standard repeatability [5% Max]	0,01 mg	0,06 mg	0,06 mg
Standard repeatability [Max]	0,025 mg	0,07 mg	0,07 mg
Standard minimum weight (USP)	20 mg	120 mg	120 mg
Standard minimum weight (U=1%, k=2)	2 mg	12 mg	12 mg
Permissible repeatability [5% Max]	0,02 mg	0,09 mg	0,09 mg
Permissible repeatability [Max]	0,04 mg	0,1 mg	0,1 mg
Linearity	±0,07 mg	±0,2 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	semi-automatic – LevelSENSING	semi-automatic – LevelSENSING	semi-automatic – LevelSENSING
Display	7" graphic colour touchscreen	7" graphic colour touchscreen	7" graphic colour touchscreen
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.	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	ø90 open-work pan + ø85 (option) mm	ø100 mm	ø100 mm
Packaging dimensions	545×455×575 mm	490×400×520 mm	490×400×520 mm
Net weight	7,3 kg	7,3 kg	7,06 kg
Gross weight	9,3 kg	9,3 kg	9,5 kg
Construction			
Protection class	IP 43	IP 43	IP 43
Components and software			
Database capacity	7	7	7
Features of use			
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
Ambient conditions monitoring (option)	THBR 2.0 System, THBR BOX, THB P, THB W, THB S	THBR 2.0 System, THBR BOX, THB P, THB W, THB S	THBR 2.0 System, THBR BOX, THB P, THB W, THB S
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 310.X7 Analytical Balance	AS 520.X7 Analytical Balance	AS 3100.X7 Analytical Balance
Metrological parameters			
Maximum capacity [Max]	310 g	520 g	3100 g
Minimum load	10 mg	-	- mg
Readability [d]	0,1 mg	0,1 mg	1 mg
Verification unit [e]	1 mg	-	-
Tare range	-310 g	-520 g	-3,1 kg
Standard repeatability [5% Max]	0,07 mg	0,07 mg	0,5 mg
Standard repeatability [Max]	0,1 mg	0,2 mg	0,6 mg
Standard minimum weight (USP)	140 mg	140 mg	1 g
Standard minimum weight (U=1%, k=2)	14 mg	14 mg	100 mg
Permissible repeatability [5% Max]	0,12 mg	0,12 mg	0,8 mg
Permissible repeatability [Max]	0,15 mg	0,4 mg	1 mg
Linearity	±0,3 mg	±0,6 mg	±4 mg
Stabilization time	2,5 s	2,5 s	2 s
Adjustment	internal (automatic)	internal (automatic)	internal (automatic)
OIML Class	I	-	-
Physical parameters			
Leveling system	semi-automatic – LevelSENSING	semi-automatic – LevelSENSING	semi-automatic – LevelSENSING
Display	7" graphic colour touchscreen	7" graphic colour touchscreen	7" graphic colour touchscreen
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, centring ring, 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	ø90 mm (open-work pan)
Packaging dimensions	490×400×520 mm	490×400×520 mm	490×400×520 mm
Net weight	7,32 kg	7,3 kg	7,3 kg
Gross weight	9,3 kg	9,3 kg	9,3 kg
Construction			
Protection class	IP 43	IP 43	IP 43
Components and software			
Database capacity	7	7	7
Features of use			
Touch-free operation	2 IR Sensors	2 IR Sensors	2 IR Sensors
Communication interface			
Communication interface	RS232, 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
Ambient conditions monitoring (option)	THBR 2.0 System, THBR BOX, THB P, THB W, THB S	THBR 2.0 System, THBR BOX, THB P, THB W, THB S	THBR 2.0 System, THBR BOX, THB P, THB W, THB S
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.

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Extra payment for verification

Accessories

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
THBR 2.0 System - Ambient Conditions Monitoring
Displays
Protective cover for balances
Weighing dishes
Antistatic ionizer
Receipt Printer
RS 232, RS 485 cables
Additional modules
Under-pan weighing
RS 232 cables (scale - printer)
RS 232 – RS 485 Converter

Software

RAD-KEY
R-LAB
RADWAG Development Studio
Alibi Reader
Scales Editor 2.1

Device dimensions

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