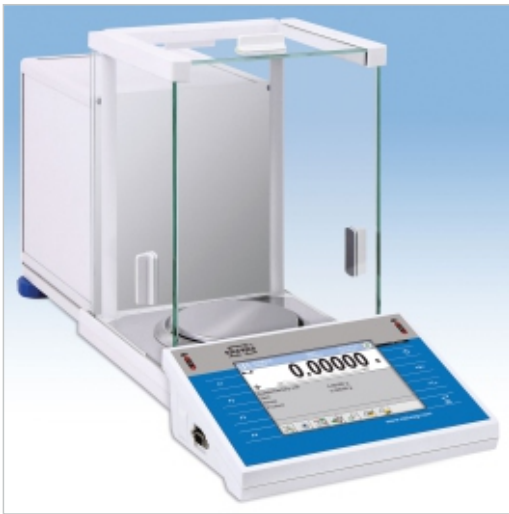


# ANALYTICAL BALANCES XA 3Y



release date 11-04-2014



- ✓ New electronics and technological solutions!
- ✓ New software, intuitive and comfortable operation!
- ✓ Removable glass side and top doors of the weighing chamber!

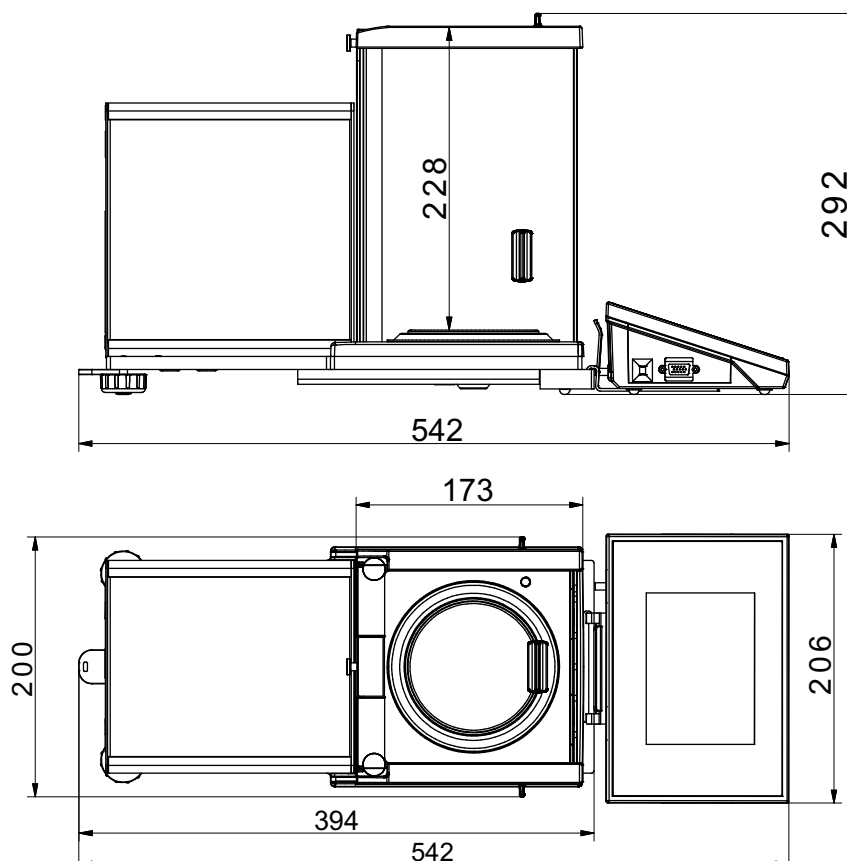
Balances XA 3Y series are laboratory weighing instruments featuring 5,7" LCD colour touch panel which provides new possibilities of balance operation and presenting measurement results.

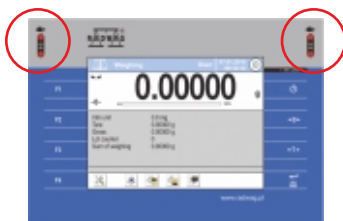
Personalization of balance settings is carried out in extended user profiles. XA 3Y series comes standard with system of automatic adjustment using an internal mass standard. Level control is based on LevelSENSING system, RADWAG patented solution, which uses a system of an electronic level. New function of XA 3Y series is online monitoring of ambient conditions through built-in sensors or an external ambient conditions module THB 2 series.

Balances with  $d = 0,01$  mg are optionally available with openwork weighing pan which limits ambient conditions impact on the measuring result. Design of the weighing chamber enables easy disassembling its glass parts for keeping them clean and sterile. Interactive formulation mode is a reliable tool for creating various mixtures with application of databases. Differential weighing mode aids mass control of the same sample subjected to differed processes over time. Extended databases enable storing all carried out measurements, with option of printing and exporting them. New function of pipette calibration in the XA 3Y series is carried out with application of an optional adapter, which is an ergonomic tool aiding calibration and checking of piston pipettes using gravimetric measuring method.

Standard and user defined printouts allow for maintaining documentation complying with GLP/GMP requirements practically in any application.

- Weighing
- Parts counting
- Checkweighing
- Filling
- Percent setup
- Density determination
- Animal weighing
- Formulation
- Statistics
- Pipette calibration
- Differential weighing
- Mass control





### Infrared proximity sensors

- PRINT function
- TARE function
- sensors' sensitivity adjustment



### Data exchange through USB storage devices

- export weighing data
- export/import databases
- export/import balance settings
- exchanging data between balances



### Communication interfaces

- Ethernet 10/100Mbit
- RS 232
- 2×USB 2.0
- 4 in/out

## Technical data:

	XA 52.3Y <b>M</b>	XA 110.3Y <b>M</b>	XA 210.3Y <b>M</b>	XA 82/220.3Y** <b>M</b>
Max capacity	52 g	100 g	210 g	82/220 g
Min load	1 mg	1 mg	1 mg	1 mg
Readability	0,01 mg	0,01 mg	0,01 mg	0,01/0,1 mg
Tare range	-52 g	-100 g	-210 g	-220 g
Working temperature	+10° ÷ +40°C			
Relative air humidity ***	40% ÷ 80%			
Repeatability *	0,01 mg	0,015 mg (to 20g) 0,02 mg (20g+50g) 0,03 mg (50g+100g)	0,015 mg (to 20g) 0,02 mg (20g+50g) 0,025 mg (50g+100g) 0,04 mg (100g+210g)	0,015 mg (to 20g) 0,02 mg (20g+50g) 0,025 mg (50g+82g) 0,08 mg (82g+220g)
Linearity	±0,03 mg	±0,07 mg	±0,1 mg	±0,06/0,2 mg
Eccentric load deviation	0,03 mg	0,07 mg	0,1 mg	0,2 mg
Sensitivity offset	$2 \times 10^{-6} \times R_t$			
Sensitivity temperature drift	$1 \times 10^{-6} / ^\circ\text{C} \times R_t$			
Sensitivity time drift	$1 \times 10^{-6} / \text{Year} \times R_t$			
Minimum weight (USP)	20 mg	40 mg		
Minimum weight (U = 1%, k = 2)	2 mg	4 mg		
Stabilization time	5 s			
Interface	2×USB, RS 232, Ethernet, 4in / 4out (digital)			
Power supply	13,5 ÷ 16 V DC / 2,1 A			
Adjustment / Calibration	internal (automatic)			
Pan size	ø 85 mm			
Weighing chamber dimensions	170×200×220 mm			
Net weight/Gross weight	9,8 kg / 14,3 kg			
Packaging size	715×385×485 mm			

R<sub>t</sub> - net weight

\* Repeatability is expressed as a standard deviation from 10 weighing cycles (mass of 20g for balances with d=0,01mg and 220g for balances with d=0,1mg)

\*\* Balance in moveable fine range version

Data given in tables are values determined in typical laboratory conditions. In the actual operation conditions the values of these parameters may differ from those listed above because of the impact of ambient conditions and/or balance settings.

\*\*\* - Non-condensing conditions

**Technical data:**

	XA 100.3Y <b>M</b>	XA 160.3Y <b>M</b>	XA 220.3Y <b>M</b>	XA 310.3Y <b>M</b>	XA 510.3Y -
Max capacity	100 g	160 g	220 g	310 g	510 g
Min load	10 mg	10 mg	10 mg	10 mg	10 mg
Readability	0,1 mg	0,1 mg	0,1 mg	0,1 mg	0,1 mg
Tare range	-100 g	-160 g	-220 g	-310 g	-510 g
Working temperature	+10° ÷ +40°C				
Relative air humidity ***	40% ÷ 80%				
Repeatability *	0,08 mg	0,08 mg	0,08 mg	0,08 mg (to 220g) 0,2 mg (220g÷310g)	0,08 mg
Linearity	±0,2 mg	±0,2 mg	±0,2 mg	±0,3 mg	±0,3 mg
Eccentric load deviation	0,2 mg	0,2 mg	0,2 mg	0,3 mg	0,3 mg
Sensitivity offset	$2 \times 10^{-6} \times Rt$				
Sensitivity temperature drift	$1 \times 10^{-6} / ^\circ C \times Rt$				
Sensitivity time drift	$1 \times 10^{-6} / Rok \times Rt$				
Minimum weight (USP)	160 mg				
Minimum weight (U = 1%, k = 2)	16 mg				
Stabilization time	3 s				
Interface	2×USB, RS 232, Ethernet, 4in / 4out (digital)				
Power supply	13,5 ÷ 16 V DC / 2,1 A				
Adjustment / Calibration	internal (automatic)				
Pan size	ø 100 mm				
Weighing chamber dimensions	170×200×220 mm				
Net weight/Gross weight	9,8 kg / 14,3 kg				
Packaging size	715×385×485 mm				

Rt - net mass

\* Repeatability is expressed as a standard deviation from 10 weighing cycles (mass of 20g for balances with d=0,01mg and 220g for balances with d=0,1mg)

Data given in tables are values determined in typical laboratory conditions. In the actual operation conditions the values of these parameters may differ from those listed above because of the impact of ambient conditions and/or balance settings..

\*\*\* - Non-condensing conditions

**Additional equipment:**

Anti vibration table for laboratory balances	Density determination kit
Professional weighing table	THB 2 ambient conditions module
Kafka thermal printer	LCD display „WD-5/3Y“
Epson impact printer	PC USB keyboard
Citizen label printer	Additional adapter for pipettes calibration
Holders for laboratory vessels	Power adapter ZR-02
Foot tare and print buttons	Mass standard
PW-WIN 2004 computer software	Antistatic cable PA 1
RAD-KEY 2000 computer software	Barcode scanner
Pipettes computer software	RS 232 cable: scale - thermal printer: P0136
Antistatic ionizer DJ-02	RS 232 cable: scale - "Epson/Citizen" printer: P0151