XA 4Y.F ANALYTICAL BALANCES

CE M17 OIML ISO 9001 CERTIFIED

RADWAG®

APPLICATION

4Y series is a modern weighing device, especially useful when the measurement requires perfect accuracy and high speed.

FEATURES OF 4Y SERIES MICROBALANCE

REPEATABILITY (SD) **<1d**
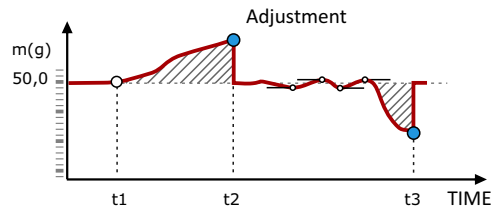
MEASUREMENT DURATION **<5 s.**

ETHERNET

XA 4Y.F is also functions as a standard analytical balance

Special weighing pan for weighing large filters

ACCURACY

Measurement accuracy is guaranteed with an adjustment procedure carried out using an internal adjustment weight. This fully automatic process is controlled by a module intended to diagnose ambient conditions change (on-line). Adjustment processes (internal and external) can be performed in accordance with a specially designed schedule.

Adjustment

FUNCTIONALITY

4Y series microbalance is an optimized modern device which features an option of automatic level control (LevelSENSING) as one of numerous functions.

The practical effect of balance customization are individual user profiles and gradable permission levels for access to balance menu.

Programmable proximity sensors offer wide range of possibilities: zeroing, tarring, printout. Several functions such as differential weighing facilitate multi-stage mass control of one and the same sample subjected to various processes. Pipettes calibration function is an ergonomic tool designed to calibrate and control piston pipettes with the use of gravimetric method. MEDIA module, as one of the greatest 4Y series assets, provides the user with an on-screen help and support.
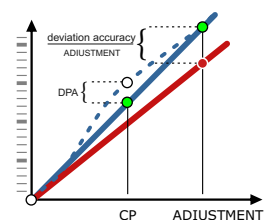
COMPLIANCE WITH REGULATIONS

Owing to security system and possibility to document the process by means of printouts (standard/editable), the 4Y balance meets requirements imposed by GLP/GMP systems for various industries (pharmacy, petrochemistry, environmental protection).

- PARTS COUNTING
- DOSING
- CHECKWEIGHING
- FORMULATION
- PERCENT WEIGHING [%]
- STATYSTICS
- ANIMAL WEIGHING
- DIFFERENTIAL WEIGHING
- PIPETTES CALIBRATION
- SQC STATISTICAL QUALITY CONTROL
- AUTOTEST
- DENSITY
- AIR DENSITY CORRECTION
- COOPERATION WITH TITRATORS
- GLP / GMP PROCEDURES
- INFRARED SENSORS
- AMBIENT COND. MONITORING
- UNITS
- MOVABLE RANGE

MECHANICAL DESIGN

The 4Y series features reliable measuring system housed within a tight casing. With this feature, the balance provides accuracy and fast measurement for any working environment. DPA SYSTEM (Dual Point Adiustment), which is the great novelty of RADWAG analytical balances, guarantees perfect linearity even for challenging ambient conditions. DPA is a standard solution of the XA.4Y series regardless of the reading unit value.

4Y microbalances offer modern hardware and software. In-build programs, Windows Embeded Compact 7 operating system, Flash memory, Double Hardware system guarantee fast measurement and reliability when it comes to data acquiring and processing. The 4Y series comprises 5,7'' colour touchscreen providing ever more increased balance operation functionality and even more practical results presentation. Complex databases allow measurement record along with printout and export option. The system supports 13 languages.
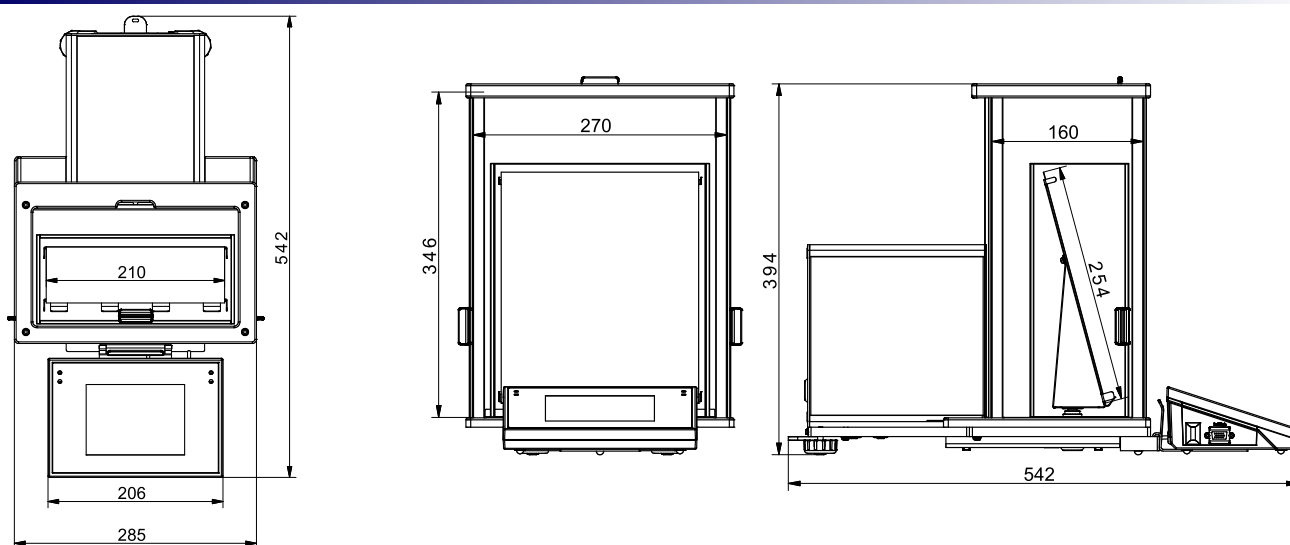
Technical specification:

	XA 52 4Y.F M17	XA 110 4Y.F M17
Max capacity	52 g	110 g
Min load	1 mg	1 mg
Readability	0,01 mg	0,01 mg
Tare range	-52 g	-110 g
Working temperature	+10° ÷ +40°C	
Repeatability *	0,01 mg (for a concentrated mass) 0,03 mg (for filters weighing)	0,012 mg (for a concentrated mass) 0,03 mg (for filters weighing)
Linearity	±0,03 mg	±0,07 mg
Eccentric load deviation	0,03 mg	0,07 mg
Sensitivity offset	$2 \times 10^{-6} \times Rt$	
Sensitivity temperature drift	$1 \times 10^{-6} / °C \times Rt$	
Sensitivity stability	$1 \times 10^{-6} / Year \times Rt$	
Minimum weight (USP)	30 mg	24 mg
Minimum weight (U = 1%, k = 2)	2 mg	3 mg
Stabilization time	~ 5 s (30 s for filters)	~ 5 s (30 s dla filtrów)
Interface	2×USB, 2×RS 232, 1×Ethernet, Wireless Module, 4 Inputs / 4 Outputs	
Power supply	13,5÷16 V DC / 2,1 A	
Adjustment / Calibration	internal (automatic)	
Pan size	210×254 mm for filters (+grid pan Ø 90 mm)	
Display	5,7" (touch screen)	
Net weight/Gross weight	16,5 kg / 21 kg	
Packaging size	820 × 460 × 625 mm	

Rt - net weight

* Repeatability is expressed as a standard deviation from 10 weighing cycles.

Dimensions:

Additional equipment:

Anti vibration table for laboratory balances	Ambient conditions module
Profesional weighing table	Density determination kit
Impact Epson printer	Additional LCD display "WD-5"
Label printer Citizen	PC keyboard
Holders for glass vessels	Additional adapter for pipettes calibration
Air density determination kit	Power adapter with battery and charger ZR-02
Tare and "Print" foot button	Mass standard
PW-WIN computer software	Antistatic cable
RAD-KEY computer software	Cable RS 232 (balance - computer) "P0108"
PIPETTES computer software	Cable RS 232 (balance - Epson , Citizen printer) "P0151"
Antistatic ionizer DJ-02	