

# MA 3Y Moisture Analyzers

Maximum functionality and a 'professional level' measurement in drying processes and moisture content analysis



## Features

## Measurement Precision Along with High Performance and Productivity

Due to ideal measurement parameters and high performance, the MA 3Y moisture analyzers can be used for vast range of moisture content determination processes.

## Mass Measurement Accuracy and Drying Temperature Optimisation

Smart control of heating modules operation guarantees optimum drying temperature, fast and precise measurement and short analysis, plus repeatability throughout the measurement series. You have numerous drying profiles at your disposal, they ensure various methods of obtaining the pre-set temperature.

#### **Online Drying Process Visualisation**

MA 3Y moisture analyzer enables display of dynamically registered graph that visualizes the drying process, and bar graph that controls sample's mass. With this the measurement process is monitored to the maximum.

#### Intuitive Operation and Touch Screen

5.7" colour touch screen enables intuitive operation and easy access to numerous applications and functions.

#### Automatic Control of the Level

Leveling system facilitates adjustment of device level, it also uninterruptedly controls the level state, and informs about potential level deviations.

#### **Touch-Free Operation**

Two programmable proximity sensors can be assigned with any function or application. The given function when assigned is both run and operated touch-free.

#### **Databases as Drying Processes Support**

Possibility to record sample-related information and drying parameters in the database improves managing of measurement processes and makes comfort of operation more advanced.

## **Technical Specifications**

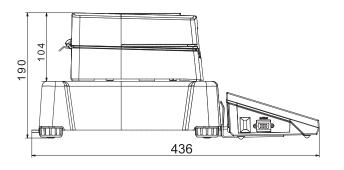
	MA 60.3Y	MA 200.3Y
Maximum capacity [Max]	60 g	200 g
Readability [d]	0.1 mg	1 mg
Tare range	–60 g	–200 g
Maximum sample weight	60 g	200 g
Drying temperature range	max. 160 °C, max. 250 °C (option) <b>*</b>	max. 160 °C, max. 250 °C (option) <b>*</b>
Moisture content readability	0.0001%	0.001%
Moisture content repeatability	0.05% (ca. 2 g sample), 0.01% (ca. 10 g sample)	0.05% (ca. 2 g sample) 0.01% (ca. 10 g sample)
Adjustment	external	external
Display	5.7" colour, resistive touch screen	5.7" colour, resistive touch screen
Keypad	8 keys	8 keys
Heating module	IR emitter halogen lamp (option)** metal heater (option)**	IR emitter halogen lamp (option)** metal heater (option)**
Databases	10	10
Drying profiles	standard, fast, step, mild	standard, fast, step, mild
Finish mode	manual, automatic, time-defined, user-defined	manual, automatic, time-defined, user-defined
Touch-free operation	2 programmable proximity sensors	2 programmable proximity sensors
Additional functions	sample traceability, drying process graph	sample traceability, drying process graph
USB-A	2	2
RS 232	1	1
Wireless connection	802.11 b/g/n	802.11 b/g/n
Ethernet	10 / 100 Mbit	10 / 100 Mbit
IN/OUT	$4 \times IN, 4 \times OUT$	$4 \times IN, 4 \times OUT$
Power supply	230 V	230 V
Power consumption	8 W (during weighing) and max 450 W (during drying)	8 W (during weighing) and max 450 W (during drying)
Heating module power	450 W	450 W
Operating temperature	+10 ÷ +40 °C	+10 ÷ +40 °C
Atmospheric humidity***	40 ÷ 80%	40 ÷ 80%
Transport and storage temperature	−20 ÷ +50 °C	-20 ÷ +50 ℃
Maximum sample height	h= 20 mm	h= 20 mm
Weighing pan dimensions	ø 90 mm, h= 8 mm	ø 90 mm, h= 8 mm
Weighing device dimensions	436 × 250 × 190 mm	$436 \times 250 \times 190 \text{ mm}$
Net weight	6 kg	6 kg
Gross weight	10 kg	10 kg
Packaging dimensions	595 × 395 × 420 mm	595 × 395 × 420 mm

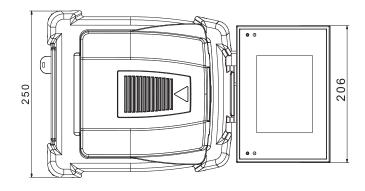
\*

optional design with halogen lamp – max temperature 250° C optional design with preferable heating module: halogen lamp – WH version, metal heater – NS version non-condensing conditions \*\*

\*\*\*

## Dimensions





### Accessories

#### Weighing Tables

• antivibration tables for laboratory balances

## Special Purpose Weighing

water vapour permeability determination set

Ambient Conditions GT105K-12/Z control thermometer

#### **Peripheral Devices**

- dot matrix Epson printer
- barcode scanners

## **Dedicated Software**

#### R-LAB

- collecting measurements
- carrying out statistical analysis of measurements
- customized graphs and reports

#### E2R Moisture Analyzer

- drying programs synchronization
- online preview of the drying process
- drying processes record
- reporting of single and group drying operations

#### RAD KEY

• Establishing cooperation between a weighing instrument and a computer

#### **RADWAG Remote Desktop**

- remote operation via computer, mobile phone or tablet
- sending text messages
- version for Windows 10 and Android systems

## Radwag Development Studio

Consumables

• disposable pans

**Cables, Converters** 

• P0108: RS 232 cable (balance-computer) • P0167: RS 232 cable (balance-computer)

• P0151: RS 232 cable (balance - Epson printer)

- presentation of functions (and subfunctions) of communication protocol (Common Communication Protocol)
- possibility of connection with weighing equipment on which each function is carried out,
- library with mass control, contained within the development environment
- complete documentation of the communication protocol
- set of user manuals for different solutions addressed for programmers employed in companies using RADWAG-manufactured weighing equipment

#### LabView Driver

• operation of RADWAG balances in LabView environment