

# MA 3Y Moisture Analyzers

Maximum functionality in drying processes, and moisture content analysis **Most Advanced Technology** 



### Features

## Maximum Measurement Precision with High Performance and Productivity

Ideal measurement parameters and high performance, **make** the **the** 3Y **Series M**oisture **A**nalyzers **usable** for **a** vast range of moisture content determination processes.

## Mass Measurement Accuracy and Drying Temperature Optimization

Smart control of **the** heating modules, guarantees optimum drying temperature, fast and precise measurement, and short analysis **time**, **along with excellent** repeatability throughout the measurement **process**. **The user has** numerous drying profiles **available**.

#### **Online Drying Process Visualization**

3Y **Series M**oisture analyzers 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 Level Control

Leveling system continuously monitors and controls the level state, and provides feedback 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 operation touch-free.

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

Record sample-related information and drying parameters in the database.

## Technical Specifications IR EMITTER IS THE DEFAULT HEAT SOURCE CONTACT COFFEE LABORAOTRY FOR OPTIONS

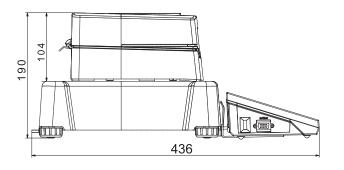
	MA 60.3Y	MA 200.3Y
Maximum capacity [Max]	60 g	200 g
Readability [d]	0.1 mg	1 mg
Tare range	-60 g	–200 g
Maximum sample weight	60 g	200 g
Drying temperature range	max. 160 °C, max. 250 °C (option) <b>*</b>	max. 160 ℃, max. 250 ℃ (option)*
Moisture content readability	0.0001%	0.001%
Moisture content repeatability	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 ℃	+10 ÷ +40 ℃
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 × 250 × 190 mm
Net weight	6 kg	6 kg
Gross weight	10 kg	10 kg
Packaging dimensions	595 × 395 × 420 mm	595 × 395 × 420 mm

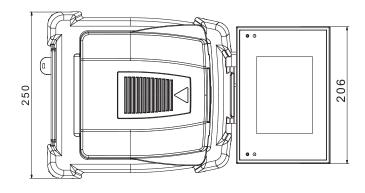
\* optional design with halogen lamp – max temperature  $250^{\circ}\,\mathrm{C}$ 

\*\* 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

## **Cables, Converters**

• disposable pans

Consumables

- P0108: RS 232 cable (balance-computer) • P0167: RS 232 cable (balance-computer)
- P0151: RS 232 cable (balance Epson printer)

#### **Radwag Development Studio**

- 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