



5Y ELLIPSIS Laboratory Balances

www.radwag.com



UYA 5Y Ultra-microbalances MYA 5Y Microbalances

[d] down to 0.1 μg

[Max] up to 52 g



UYA 5Y

Ultra-microbalances

MYA 5Y

Microbalances

- World's lowest reading unit [d] 0.1 μg
- Weighing range up to [Max] 52 g
- The lowest minimum weight [USP] 0.3 mg
- Automatic, draft-proof weighing chamber
- Fully automatic levelling system
- Wide variety of applications



UYA 5Y.F

Ultra-microbalances for filters

MYA 5Y.F

Microbalances for filters



MYA 5Y.P

Microbalances for pipette calibration

XA 5Y.M.A Microbalances

[d] down
to 1 μg
[Max] up
to 53 g



XA 5Y.M.A
Microbalances

- Reading unit [d] 1 μg
- Spacious weighing chamber: 199 x 157 x 218 mm
- Large weighing pan: \varnothing 30 mm
- Integrated ionizer
- Tool-free disassembly of the chamber



XA 5Y.M.A.P

Microbalances for pipette calibration



XA 5Y.M.A.S

Microbalances for stents

XA 5Y.A Analytical Balances

[d] down
to 0.01 mg

[Max] up
to 520 g



XA 5Y.A
Analytical balances

- Reading unit [d] 0.01 mg
- Minimum weight: 10 mg
- Conditioning shelf
- Open-work weighing pan
- Integrated ionizer
- Tool-free disassembly of the chamber

AP-12.1.5Y

Automatic Device for Multichannel Pipette Calibration

[d] = 0.001 mg

[Max] = 18 g



AP-12.1.5Y

Automatic Device for Multichannel Pipette Calibration

- For calibration of 1-channel and multichannel pipettes starting at 10 µl
- Calibration of up to 12-channel fixed-volume and variable-volume pipettes
- Ambient conditions monitoring
- Semi-automatic levelling system
- Internal adjustment

5Y PM Precision Balances

[d] down to 0.01 g

[Max] up to 60 kg



5Y PM

Precision balances

- One of the most innovative balance in the world with [Max] = 20 kg and [d] = 0.01 g
- Large weighing pan: 200 x 185 mm
- Innovative **MONOBLOCK®** weighing module
- Diagnostic tools in accordance with metrological requirements: sensitivity test
- Wide variety of applications

5Y.20.PM



The 5Y.20.PM laboratory balance by Radwag is one of the most innovative in the world that can weigh up to 20 kg with 0.01 g readability, using a large 200 x 185 mm weighing pan.

Light mode

Fully secure login system
(face recognition camera)

Touch-free
operation
(IR sensor)

16 working modes

Clear weighing
result

Always visible
necessary statuses

Always visible
necessary statuses

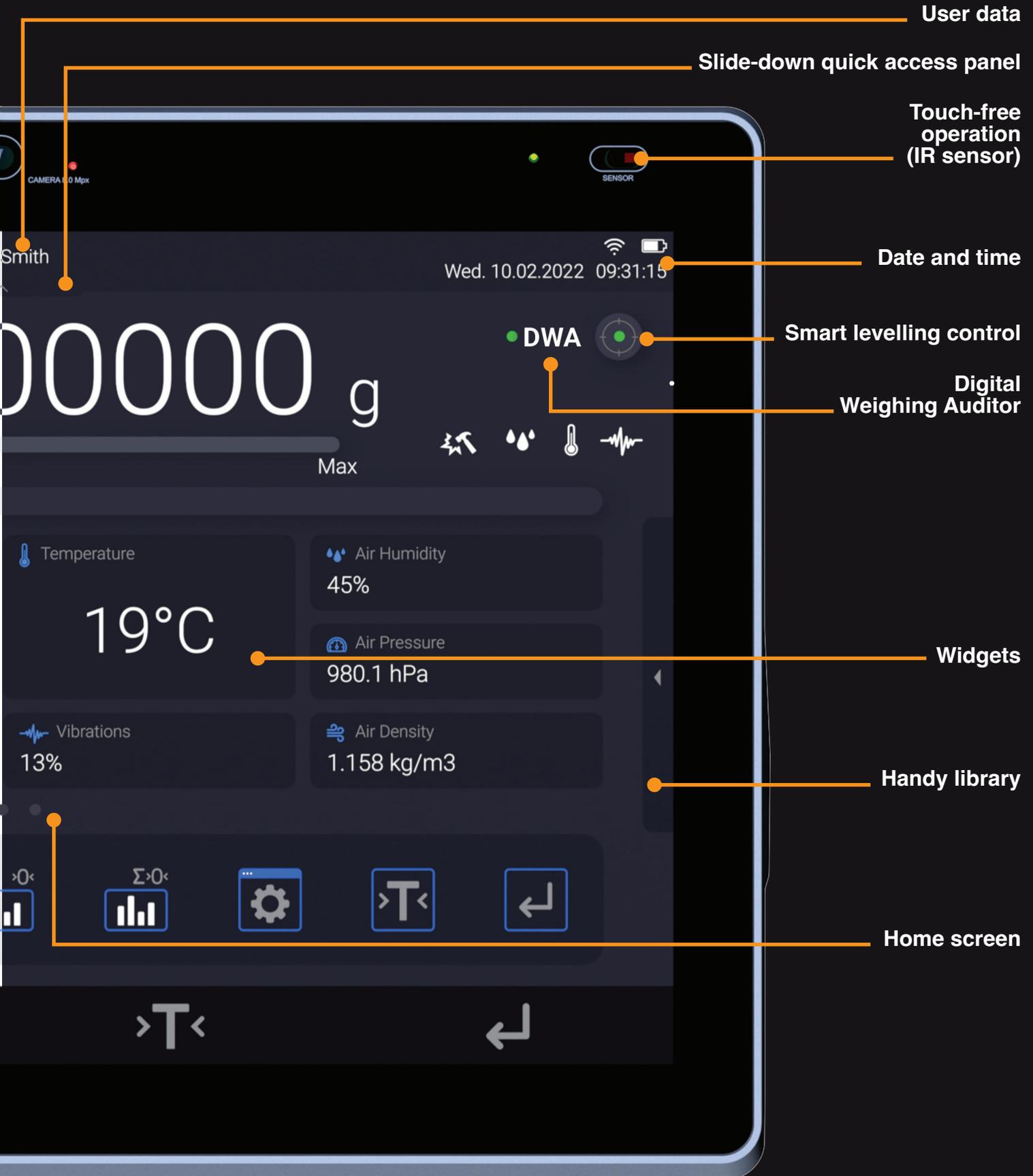
Customized data

Slide-out quick access
panel

Quick access
to commands

Home





Innovative way
of user - balance
communication.

One look
and everything's clear.



Light



It couldn't be easier: the backlight colour informs you about status, process results, procedures, or alerts.

- statuses
- process results
- procedures
- alerts



Connecting ELLIPSIS



Media Box

HDMI
(any large screen)

Ethernet
(printer, computer)

USB-C (Free Link)
(spreadsheet)

Safety First

Audited
login
methods



Quick logout

Hotspot
(smartphone, tablet)



Wi-Fi®
(printer, computer)



USB-A
(printer, computer, barcode scanner)

Compliance confirmation

- 21 CFR Part 11
- DWA
- GMP
- Qualifications
- Validations
- Quality system
- and more



Discover ELLIPSIS

The lowest minimum weight of 0.3 mg,
achievable with modern weighing module.

Such a large chamber, yet still very accurate balance

Work with different labware in a chamber
space of 199 x 157 x 218 mm.

Ionizer

Do you have an electrostatic sample
that cannot be weighed? The ionizer will
neutralize its electrostatic charge.

Give ELLIPSIS a command, and it will carry it out

A set of actions ready to be performed
upon detecting a voice command.

Kensington Lock On/Off

Sample weighed? See the measurements on your computer

Available interfaces: 2 x USB-A, USB-C
(Free Link), Ethernet, Wi-Fi®, Hotspot.

Uncompromising user verification

Fingerprint reader.

One look and everything's clear

It couldn't be easier: the backlight colour informs you about status,
process results, procedures, or alerts.

Tool-free disassembly of the weighing chamber

Contaminated weighing chamber? You don't need any tools to disassemble and clean the ELLIPSIS weighing chamber.



Terminal tilt adjustment





RFID

Always the correct choice of a product or ingredient for a formulation.

ELLIPSIS works with RFID tags that can be used to tag your products or formulation ingredients in the database. It can also be used to identify a user.

5Y ELLIPSIS Laboratory Balances

Hotspot

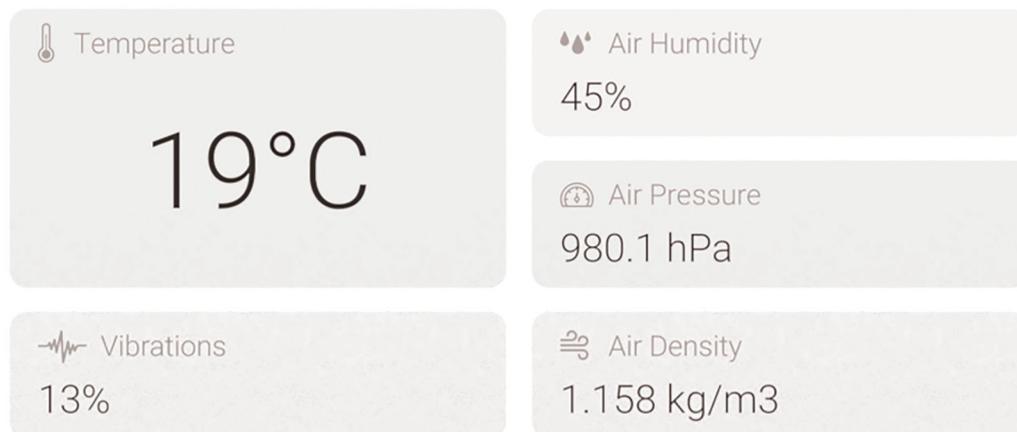
No space in your fume cupboard or access to the weighing terminal (glovebox)? Or maybe you want to operate the balance remotely?



Thanks to the hotspot, you can operate the balance on any device previously connected to it. This can be a smartphone, tablet, or computer.

Widgets

Always at hand, grouped so that the essentials never slip away.



Up-to-date information on ambient conditions



Real-time statistics from a series of measurements



Looking for More than Just Weighing?

Working modes



Weighing

Basic working mode that displays the mass of a sample.



Parts counting

Quick counting of samples of similar mass.



Checkweighing

Control of sample mass in the set min/max thresholds.



Dosing

Weighing to a target value.



Percent weighing

Percent mass control.



Density

Determining the density of solids and liquids.



Animal weighing

Control of mass change over a set period of time.



Formulations

Weighing of predefined ingredients, according to the order described in the formulation.



Statistics

Real-time statistics determined from carried out weighings.



Pipette calibration

Checking piston pipettes according to customer-specific requirements or ISO 8655.



Differential weighing

Analysing the change in mass of a single sample over time.



SQC

Statistical mass control with set thresholds.



Peak hold

Control of the maximum mass on the pan.



Mass control

Statistical control of samples of similar mass.



Comparator

Control of mass standards.



PGC

Statistical mass measurement in accordance with Packaged Goods Control.

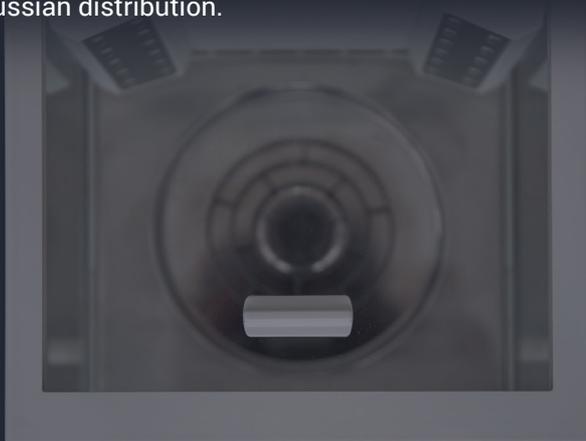
Note Down Your Conclusions

One of ELLIPSIS' innovative features is the ability to add a voice or text note to a series of measurements or a procedure report.



Do You Like to Analyse Data From a Series of Measurements Presented Graphically?

The balance gives you this possibility. You can choose between graphs of measurement series, ambient conditions, SQC with thresholds, and Gaussian distribution.



Weighing graph



Ambient conditions graph



Vibration graph



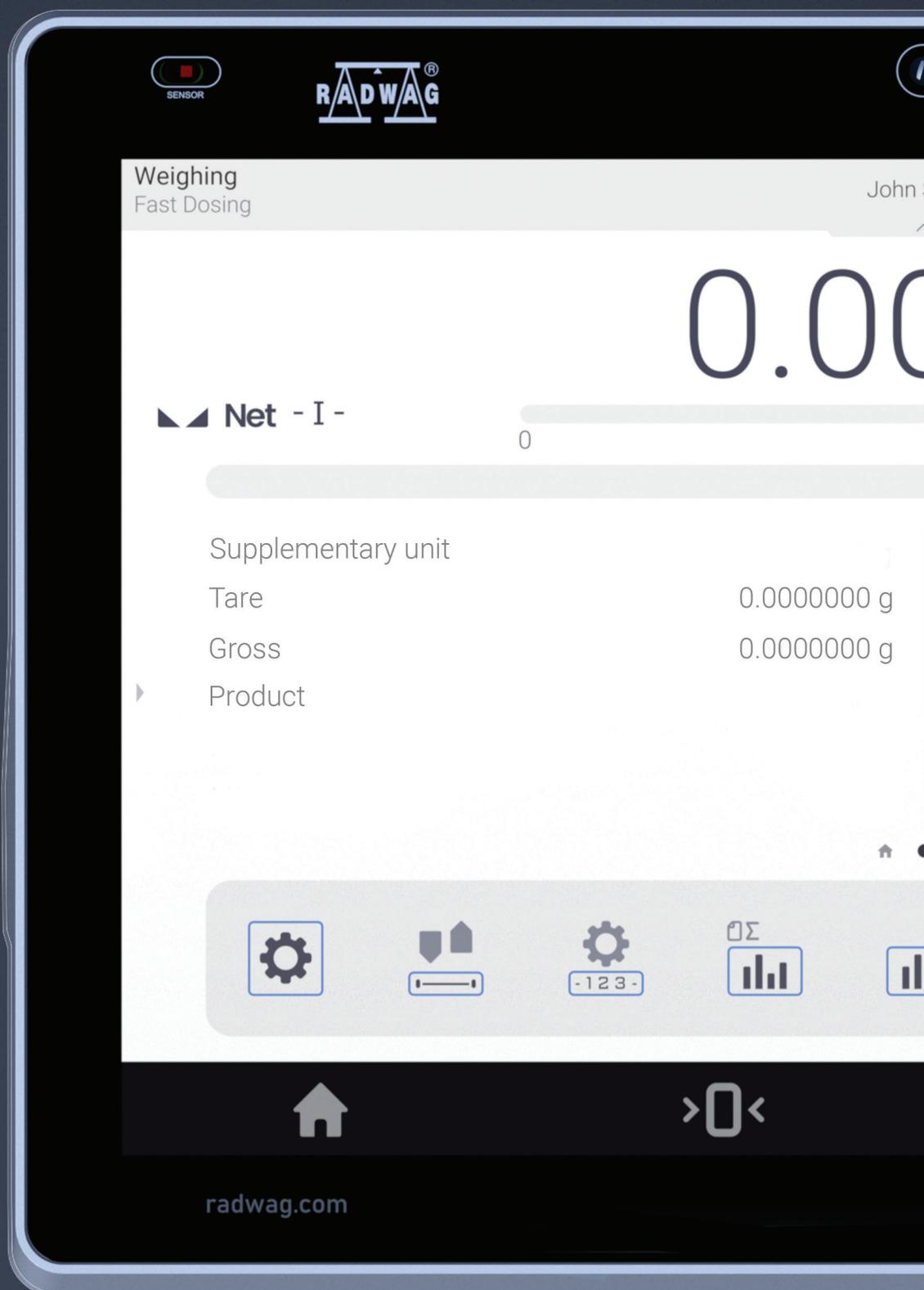
SQC graph



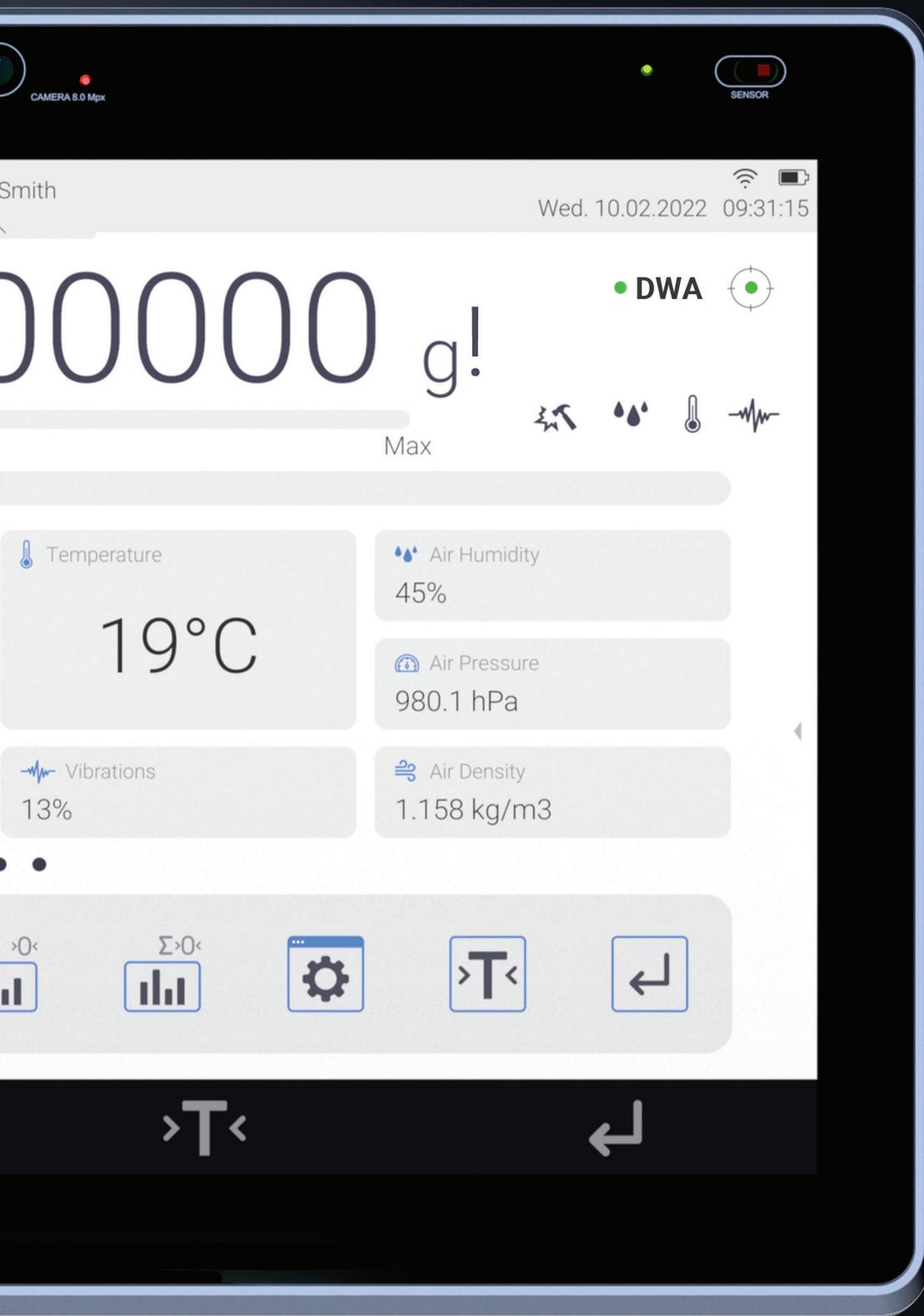
Gaussian distribution graph

DWA - Digital Weighing Auditor

Have you ever wondered if your balance is ready for work?
The Digital Weighing Auditor makes sure it is.



DWA is a system that monitors ambient conditions (temperature, humidity, pressure, and vibration), balance levelling, adjustment, USP compliance, and ionizer operation. It enables air buoyancy compensation in real-time. What is more, it signals the need for a balance inspection or a periodic audit of the balance's accuracy and sensitivity. ELLIPSIS signals the results of the digital audit via Ambient Light, pictograms on the home screen, or a speaker.



- DWA
- DWA
- DWA

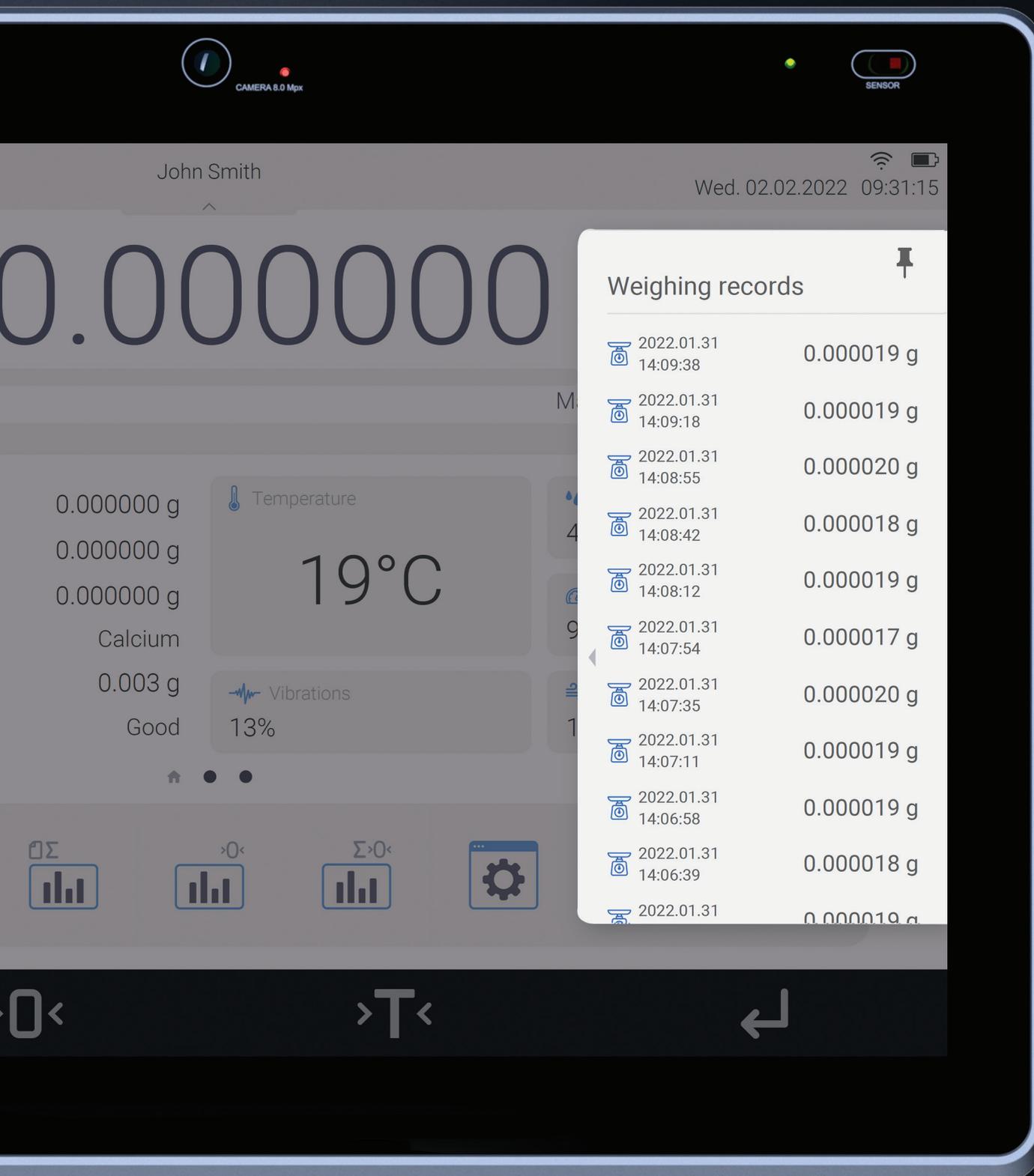
Are the Conditions in Your Laboratory the Best for the Balance You Have?

ELLIPSIS monitors temperature, humidity, pressure, and vibration. The results are displayed as graphs or a widget on the home screen. Unsuitable conditions for the balance are signalled by DWA. And all of this is recorded in a dedicated database.



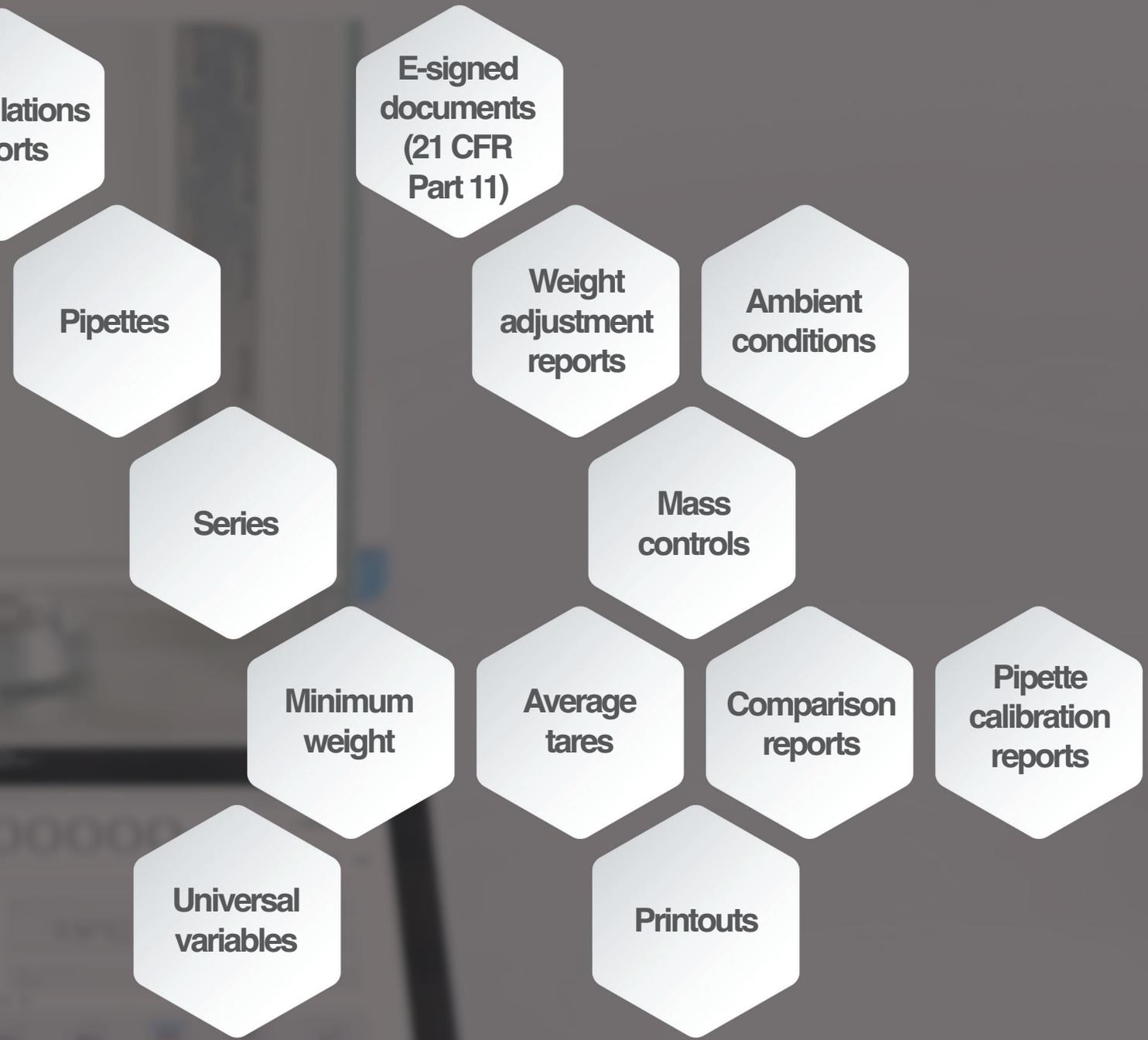
What Was the Value of the Previous Measurement?

ELLIPSIS always displays the history of the last 20 measurements on the slide-out panel. It is also here where the measurement series ready for e-signature, in accordance with 21 CFR Part 11, can be found.



Have You Ever Failed to Record the Weighing Result?





Don't Take Our Word for It?

With ELLIPSIS, you can get:

- Declaration of conformity
- Calibration certificate
- IQ, OQ, PQ documents
- 21 CFR Part 11 qualification
- USP compliance qualification
- Compliance with the latest version of the Pharmacopoeia





Weighing
Fast Dosing



John Smith

Wed, 10.02.2022

0.000000 g

Net -1-

Supplementary unit
Tare
Gross
Product

0.00000 g
0.00000 g

Temperature
19°C

Vibrations
3%

Air Humidity
45%

Air Pressure
980



RFID

radwag.com

21 CFR Part 11

EU GMP Annex 11



- Password strength settings
- Maximum number of incorrect login attempts
- Auto-logout of inactive user
- Permissions for non-logged-in users
- Permissions for electronic signature
- Permissions for databases management
- Creating database backup
- Adding respectively secured users
- Adding and editing databases according to permissions granted
- Replacing paper documents with digital ones
- Highest level of report security
- Separate database with saved reports
- Signature information
- Validation of the electronically signed report
- Comments on the report
- Three validation levels
- Automatic recording of changes in databases
- Audit trail preview
- Export of audit trail data

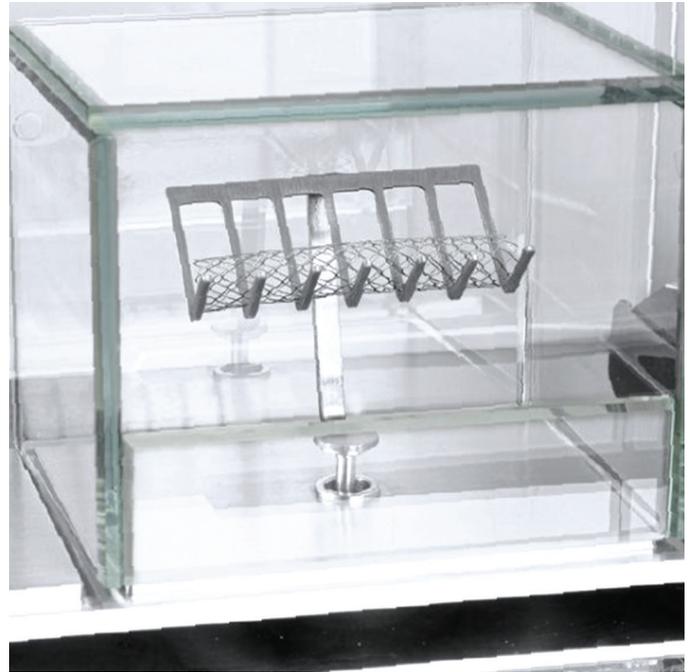
**Do you work in the pharmaceutical industry? Do you need a digital signature?
We are offering the laboratory balance which as a standalone fully meets the requirements
of 21 CFR Part 11 / EU GMP Annex 11.**

Applications

If you use labware, weigh stents or filters, or want to check your pipette, use the ELLIPSIS accessories available:



Microscale glassware



Stents



Pipette calibration adapters



Filters

Technical Specification



| | UYA 5Y | UYA 5Y.F | MYA 5Y | MYA 5Y.F | MYA 5Y.P | XA 5Y.M.A | XA 5Y.M.A.P |
|--------------------------|---|---|---|---|---|---|---|
| Maximum capacity [Max] | 2.1-6.1 g | 2.1 g | 0.8-52 g | 5.1 g | 21 g | 6.1 - 53 g | 6 - 53 g |
| Readability [d] | 0.1 µg | 0.1 µg | 1-10 µg | 1 µg | 1 µg | 1-5 µg | 1-5 µg |
| Repeatability (5% Max)* | 0.15-0.2 µg | 0.15 µg | 0.6-1.5 µg | 0.6 µg | 1 µg | 1.3-2.2 µg | 1.3-2.2 µg |
| Minimum weight (USP) | 0.3-0.4 mg | 0.3 mg | 1.2-3 mg | 1.2 mg | 2 mg | 2.6-4.4 mg | 2,6-4,4 mg |
| Linearity | ±1.5 µg | ±1.5 µg | ±3-30 µg | ±5 µg | ±7 µg | ±9-20 µg | ±9-20 µg |
| Stabilization time | 10-20 s | 10-20 s | 8-10 s | max 8 s | max 10 s | ~3.5 s | ~3.5 s |
| Adjustment | 2-point internal | 2-point internal | 2-point internal | 2-point internal | 2-point internal | 2-point internal | 2-point internal |
| Weighing pan dimensions | ø 16 mm | ø 16 mm ø 70 mm for filters | ø 16 mm ø 26 mm ø 40 mm | ø 16 mm ø 16 mm ø 70 mm for filters ø 160 mm for filters | ø 26 mm | ø 30 mm | ø 26 mm |
| Communication interfaces | USB-A × 2 USB-C HDMI Ethernet Wi-Fi® Hotspot | USB-A × 2 USB-C HDMI Ethernet Wi-Fi® Hotspot | USB-A × 2 USB-C HDMI Ethernet Wi-Fi® Hotspot | USB-A × 2 USB-C HDMI Ethernet Wi-Fi® Hotspot | USB-A × 2 USB-C HDMI Ethernet Wi-Fi® Hotspot | USB-A × 2 USB-C HDMI Ethernet Wi-Fi® Hotspot | USB-A × 2 USB-C HDMI Ethernet Wi-Fi® Hotspot |

Accessories

- Label Printers
- Professional Weighing Table
- Antivibration Tables
- Audit Trail Reader
- E2R System
- Label Editor R02
- R.Barcode
- R-LAB
- RAD-KEY
- RADWAG Development Studio
- RADWAG Remote Deskop
- LabVIEW Driver
- Under-Pan Weighing Rack
- Density Determination KIT
- Receipt Printer
- THBR 2.0 System - Ambient Conditions Monitoring
- USB Hubs
- RS 232 Cables (scale-printer)
- RS 232, RS 485 Cables
- RS 232 - USB Converter
- Barcode Scanners
- Holders for test tubes and filters
- Displays
- Fingerprint Reader



| XA 5Y.M.A.S | XA 5Y.A | XA 5Y.F | 5Y PM | AP-12.5Y |
|---|---|---|---|---|
| 6 g | 52-520 g | 52-110 g | 10-120 kg | 18-52 g |
| 1 µg | 0.01-0.1 mg | 0.01 mg | 0.01-0.2 g | 1-10 µg |
| 1.3 µg | 0.005-0.07 mg | 0.007 mg | 0.004-0.06 g | 2.8-5 µg |
| 2.6 mg | 10-140 mg | 14 mg | 0.82-12 g | 2-10 µg |
| ±9 µg | ±0.06-0.1 mg | ±0.03-0.06 mg | ±0.03-0.6 mg | ±0.01-0.03 mg |
| ~3.5 s | 1.3-4 s | max 5 s | max 3 s | 4-10 s |
| 2-point internal | 2-point internal | 2-point internal | 2-point internal | 2-point internal |
| Intended for stents | ∅ 90 mm + ∅ 85mm ∅ 100 mm | 210×254 mm for filters ∅90 mm ∅85 mm | 200 × 185 mm 350 × 260 mm 400 × 500 mm | 12-channel and 1-channel case with evaporation ring |
| USB-A × 2 USB-C HDMI Ethernet Wi-Fi® Hotspot | USB-A × 2 USB-C HDMI Ethernet Wi-Fi® Hotspot | USB-A × 2 USB-C HDMI Ethernet Wi-Fi® Hotspot | USB-A × 2 USB-C HDMI Ethernet Wi-Fi® Hotspot | USB-A × 2 USB-C HDMI Ethernet Wi-Fi® Hotspot |

| PMV 50.5Y | |
|------------------------------|---|
| Maximum capacity [Max] | 50 g |
| Readability [d] | 0.1 mg |
| Moisture content readability | 0.0001% |
| Heating module power | 800 W |
| Finish mode | 4 modes |
| Maximum sample weight | 50 g |
| Adjustment | external |
| Weighing pan dimensions | glass fibre filter ∅ 90 mm |
| Communication interfaces | USB-A × 2 USB-C HDMI Ethernet Wi-Fi® Hotspot |

Scan the QR code

to see the ELLIPSIS offer



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

Wi-Fi® is a registered trademark of Wi-Fi® Alliance.



Scan the QR code

to see the ELLIPSIS offer

