5Y Series
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
- Large weighing pan: ø 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
- Open-work weighing pan
- Integrated ionizer
- Tool-free disassembly of the chamber

AP-12.5Y
Automatic Device for Multichannel Pipette Calibration

[d] down to 0.001 mg

[Max] up to 52 g

AP-12.5Y

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

AS 5Y
Analytical Balances

[d] down to 0.01 mg

[Max] up to 3100 g

AS 5Y
Analytical balances

- Reading unit [d] 0.01 mg
- Open-work weighing pan
- Spacious weighing chamber
- Ergonomic Mechanical Design
- Under-pan weighing (option)

PS 5Y
Precision Balances

[d] down to 1 mg

[Max] up to 10100 g

PS 5Y
Precision balances

- Reading unit [d] 1 mg
- Spacious weighing chamber
- Ergonomic Mechanical Design
- Weighing of large masses under laboratory conditions

5Y PM
Precision Balances

[d] down to 0.01 g

[Max] up to 120 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 RADWAG MONO**BLOCK**® 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.

5Y ELLIPSIS Laboratory Balances

MA 5Y
Moisture Analyzer

[d] down to 0.1 mg

[Max] up to 210 g

MA 5Y
Moisture analyzers

- Automatic opening and closing of the drying chamber
- Drying profiles (standard, mild, step, fast)
- GLP/GMP printouts-reports
- Spacious drying chamber
- Four types of results: %M, %R, %D, g

PMV 5Y
Microwave Moisture Analyzer

[d] down to 0.1 mg

[Max] up to 52 g

PMV 5Y
Microwave moisture analyzers

- Intended for drying of samples containing significant amount of moisture (up to 100%)
- Ultra short drying time
- Microwave-based solution
- Uniform heating of entire sample's surface
- Four types of results: %M, %R, %D, g

Two Faces

Light mode

Fully secure login system (face recognition camera)

Touch-free operation (IR sensor)

16 working modes

Clear weighing result

Always visible necessary statuses

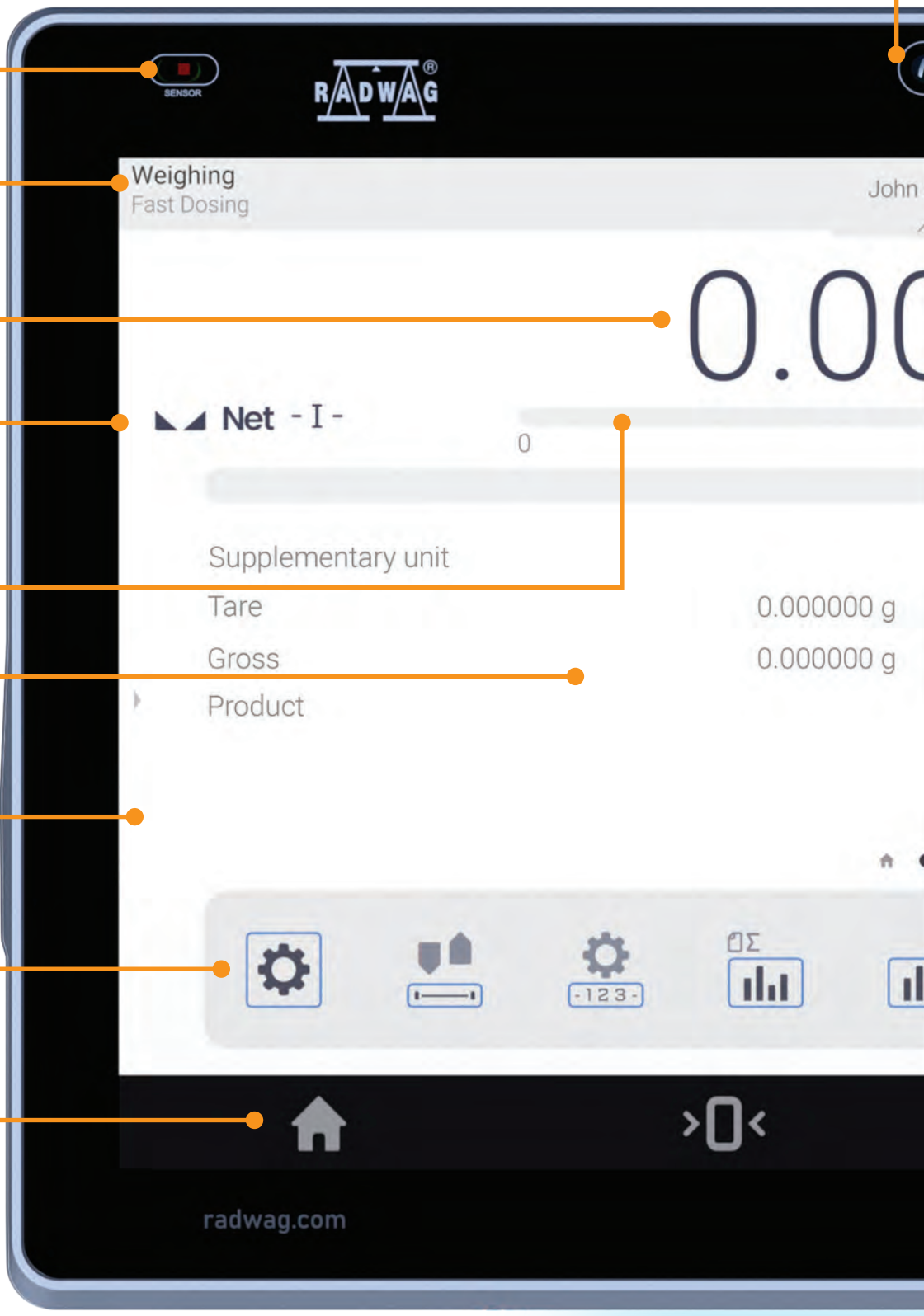
Always visible necessary statuses

Customized data

Slide-out quick access panel

Quick access to commands

Home



# of ELLIPSIS

Dark mode

User data

Slide-down quick access panel

Touch-free operation (IR sensor)

Date and time

Smart levelling control

Digital Weighing Auditor

Widgets

Handy library

Home screen

Ambien

Innovative way of user - balance communication.

One look and everything's clear.

nt 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 (RS 232 via converter)

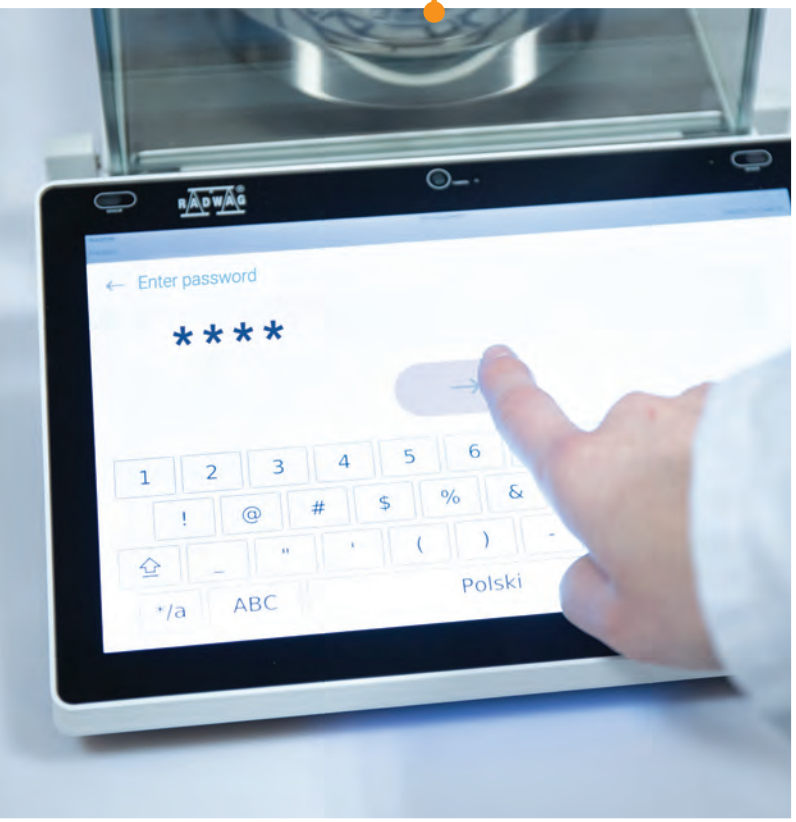
HDMI
(any large screen)

Ethernet
(printer, computer)

USB-C (Free Link)
(spreadsheet)

Safety First

Audited login methods



Quick logout

Hotspot
(smartphone, tablet)

Wi-Fi®
(printer, computer)

USB-A (RS 232 via converter)
(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.

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.

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

Percent weighing
Percent mass control.

Animal weighing
Control of mass change over a set period of time.

Statistics
Real-time statistics determined from carried out weighings.

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

Peak hold
Control of the maximum mass on the pan.

Comparator
Control of mass standards.

Parts counting
Quick counting of samples of similar mass.

Dosing
Weighing to a target value.

Density
Determining the density of solids and liquids.

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

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

SQC
Statistical mass control with set thresholds.

Mass control
Statistical control of samples of similar mass.

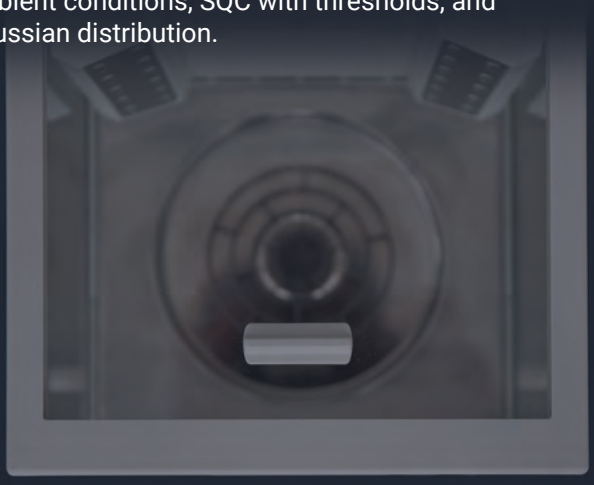
PGC
Statistical mass measurement in accordance with Packaged Goods Control.

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

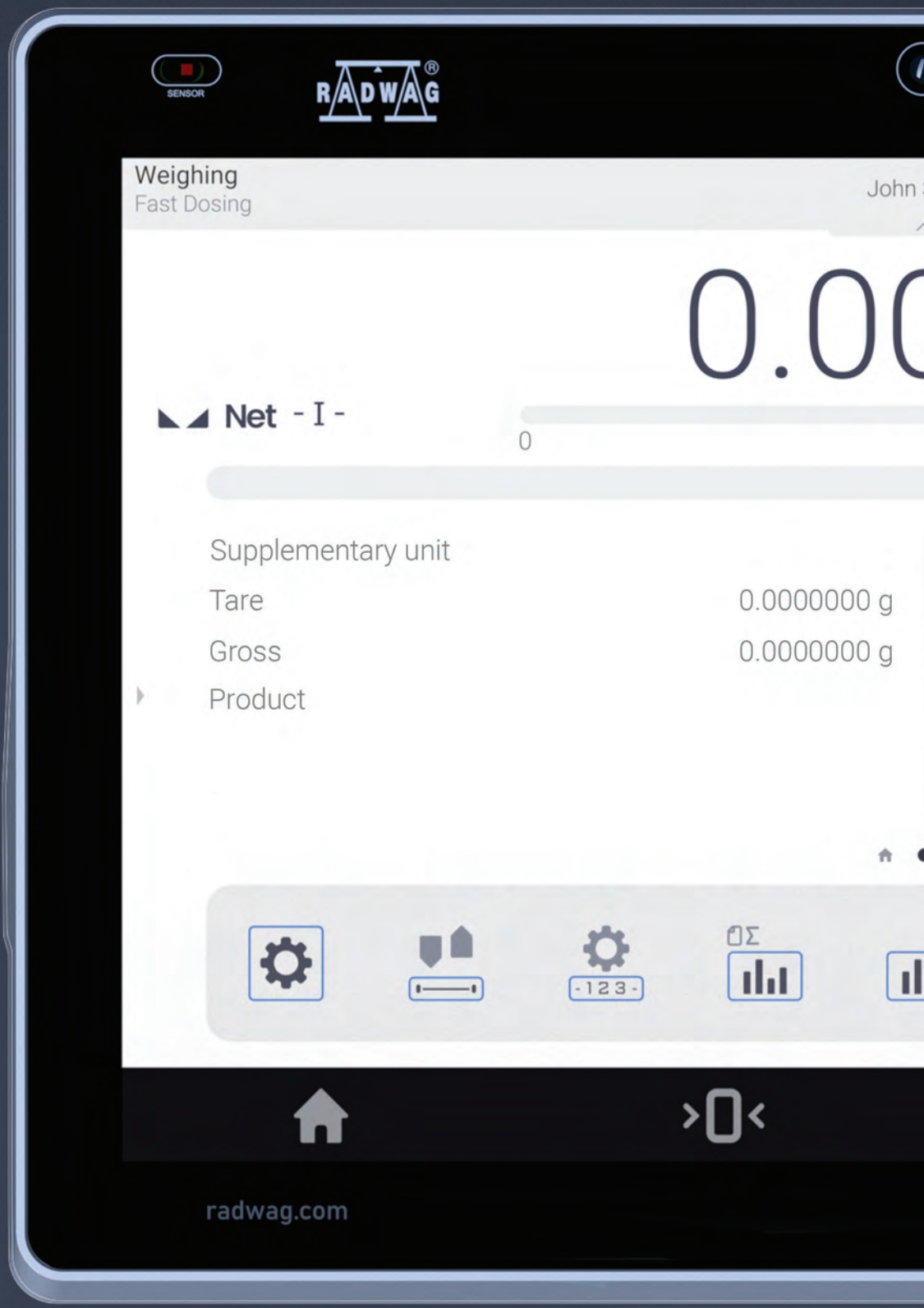
Vibration graph

SQC graph

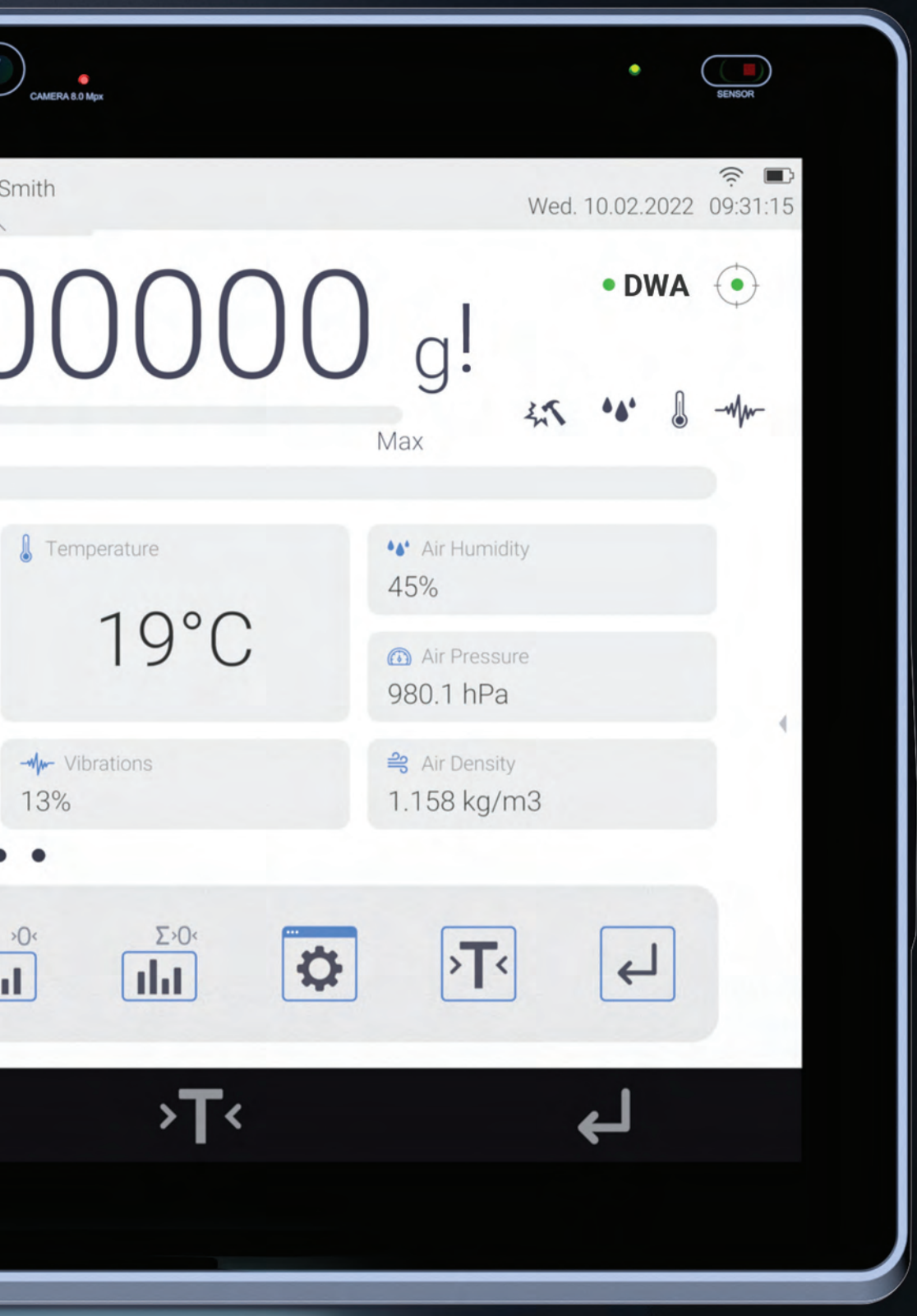
Gaussian distribution graph

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

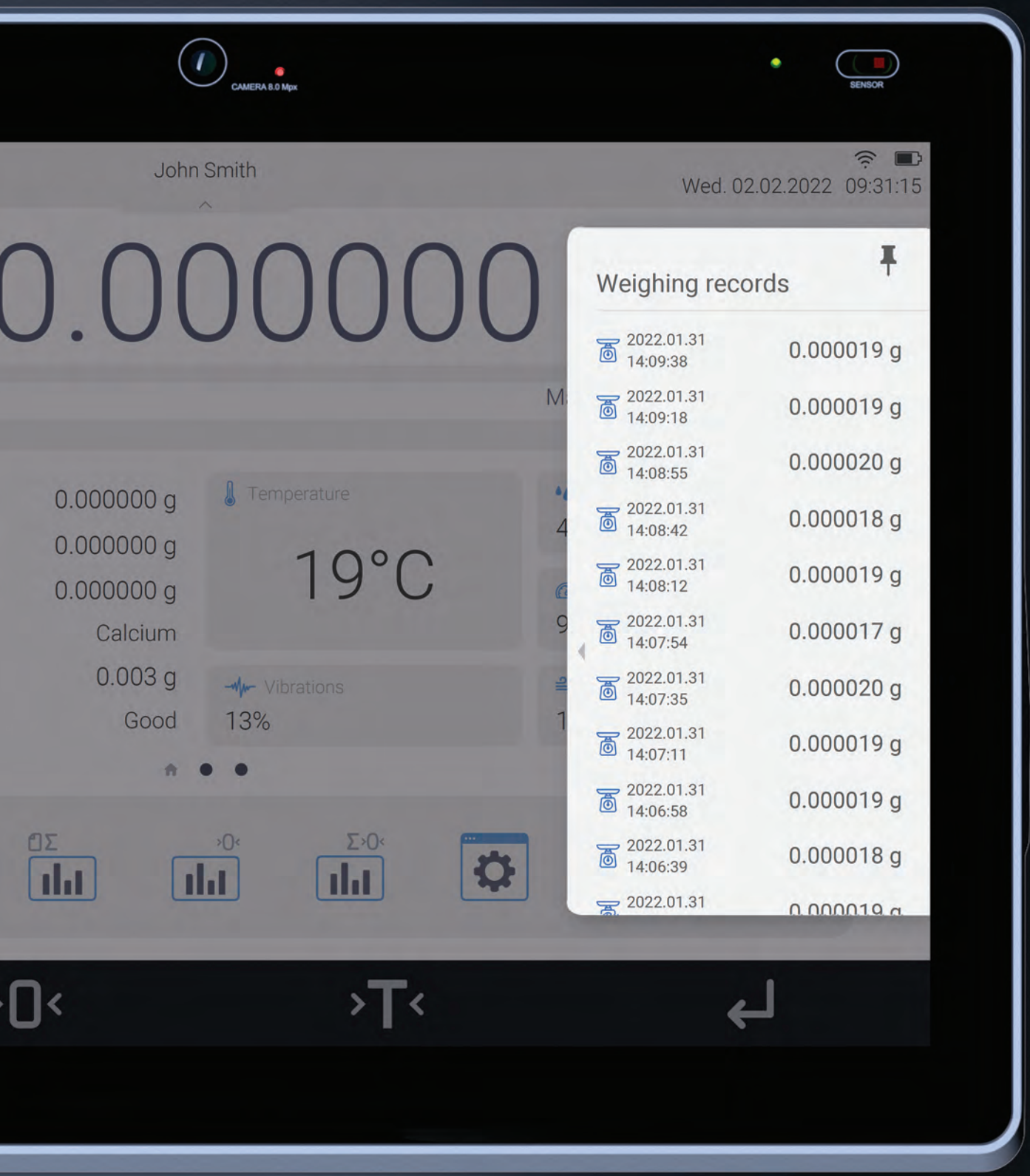
● DWA

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?


lations
orts
E-signed documents (21 CFR Part 11)
Pipettes
Weight adjustment reports
Ambient conditions
Series
Mass controls
Minimum weight
Average tares
Comparison reports
Pipette calibration reports
Universal variables
Printouts

Don’t Take Our Word for It?

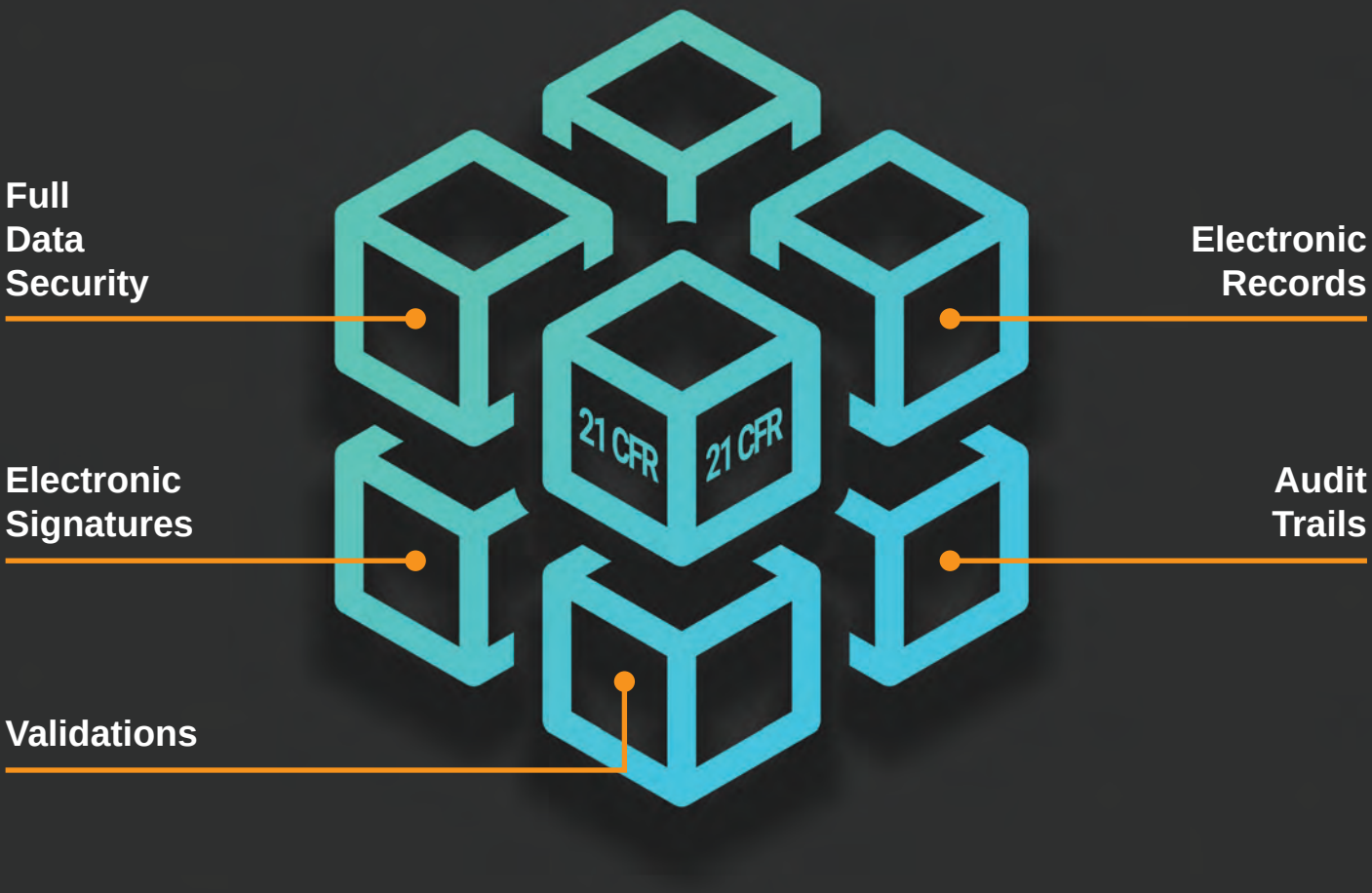
With ELLIPSIS, you can get:

- 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


RADWAG
John Smith
Weighing
Fast Dosing
0.00000 g
Max
Net - I -
0
Supplementary unit
Tare
Gross
Product
0.00000 g
0.00000 g
Temperature
19° C
45%
Vibrations
3%
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

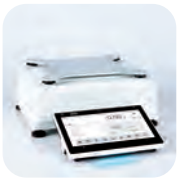
Filters

Technical Specification



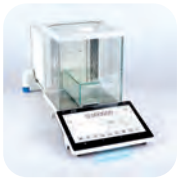

	UYA 5Y	UYA 5Y.F	MYA 5Y	MYA 5Y.F
Maximum capacity [Max]	2.1-6.1 g	2.1 g	0.8-52 g	5.1 g
Readability [d]	0.1 µg	0.1 µg	1-10 µg	1 µg
Standard repeatability (5% Max)*	0.15-0.2 µg	0.15 µg	0.41-1.5 µg	0.6 µg
Minimum weight (USP)	0.3-0.4 mg	0.3 mg	1.2-3 mg	1.2 mg
Linearity	±1.5 µg	±1.5 µg	±3-30 µg	±5 µg
Stabilization time	10-20 s	10-20 s	8-10 s	max 8 s
Adjustment	Internal	Internal	Internal	Internal
Weighing pan dmiensions	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
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






	AS 5Y	PS 5Y	5Y PM	AP-12.5Y
Maximum capacity [Max]	60-3100 g	200-10100 g	10-120 kg	18-52 g
Readability [d]	0.01-0.1 mg	1-10 mg	0.01-0.2 g	1-10 µg
Standard repeatability (5% Max)*	0.01-0.5 mg	0.5-5 mg	0.004-0.082 g	2.8-5 µg
Minimum weight (USP)	20-1000 mg	1-10 mg	0.82-12 g	2-10 µg
Linearity	±0.05-4 mg	±2-20 mg	±0.025-0.6 mg	±0.01-0.03 mg
Stabilization time	2-3 s	1.5-3 s	max 3 s	4-10 s
Adjustment	Internal	Internal	Internal	Internal
Weighing pan dmiensions	ø 90 mm ø 100 mm ø 85mm (option)	128×128 mm 195×195 mm	200 × 185 mm 350 × 260 mm 400 × 500 mm	12-channel and 1-channel case with evaporation ring
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



MYA 5Y.P	XA 5Y.M.A	XA 5Y.M.A.P	XA 5Y.M.A.S	XA 5Y.A	XA 5Y.F
21 g	6.1 - 53 g	6 - 53 g	6 g	52-520 g	52-110 g
1 µg	1-5 µg	1-5 µg	1 µg	0.01-0.1 mg	0.01 mg
1 µg	0.8-2.2 µg	1.3-2.2 µg	1.3 µg	0.005-0.07 mg	0.007 mg
2 mg	1.6-4.4 mg	2.6-4.4 mg	2.6 mg	10-140 mg	14 mg
±7 µg	±7-20 µg	±9-20 µg	±9 µg	±0.03-0.5 mg	±0.03-0.06 mg
~5 s	~3.5 s	~3.5 s	~3.5 s	1.3-4 s	5 s
Internal	Internal	Internal	Internal	Internal	Internal
ø 26 mm	ø 30 mm	ø 26 mm	Intended for stents	ø 90 mm + ø 85mm ø 100 mm	210×254 mm for filters ø90 mm ø85 mm
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


	MA 5Y	PMV 50.5Y
Maximum capacity [Max]	50-210 g	50 g
Readability [d]	0.1-1 mg	0.1 mg
Moisture content readability	0.0001%	0.0001%
Heating module power	450 W	800 W
Finish mode	4 modes	4 modes
Maximum sample weight	50-210 g	50 g
Adjustment	Internal	External
Weighing pan dimensions	ø 90 mm	ø 90 mm
Communication interfaces	USB-A × 2 USB-C HDMI Ethernet Wi-Fi® Hotspot	USB-A × 2 USB-C HDMI Ethernet Wi-Fi® Hotspot

**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 full RADWAG offer


RADWAG
2024.01.10 09:07:54
DWA
Admin
96.34983 g
Max
Weighing
Precision
Humidity
28 %
Pressure
1002 hPa
Temperature
23.06 °C
Density
1.172 kg/m³
128.45007 g
32.10024 g
Liquid 01
Vibrations
16.5 %
Supplementary unit
Tare
Gross
Product