



sartorius
mechatronics

Cubis®. The New Benchmark



 **Fisher Scientific**

Cubis®.

The Definition of a New Class.

The Cubis® was developed for users, who expect the best possible performance from a lab balance across the board but only want to invest in what is necessary. For this reason, Sartorius has gone far beyond simply further developing what already exists. The new Cubis® represents a groundbreaking new concept:

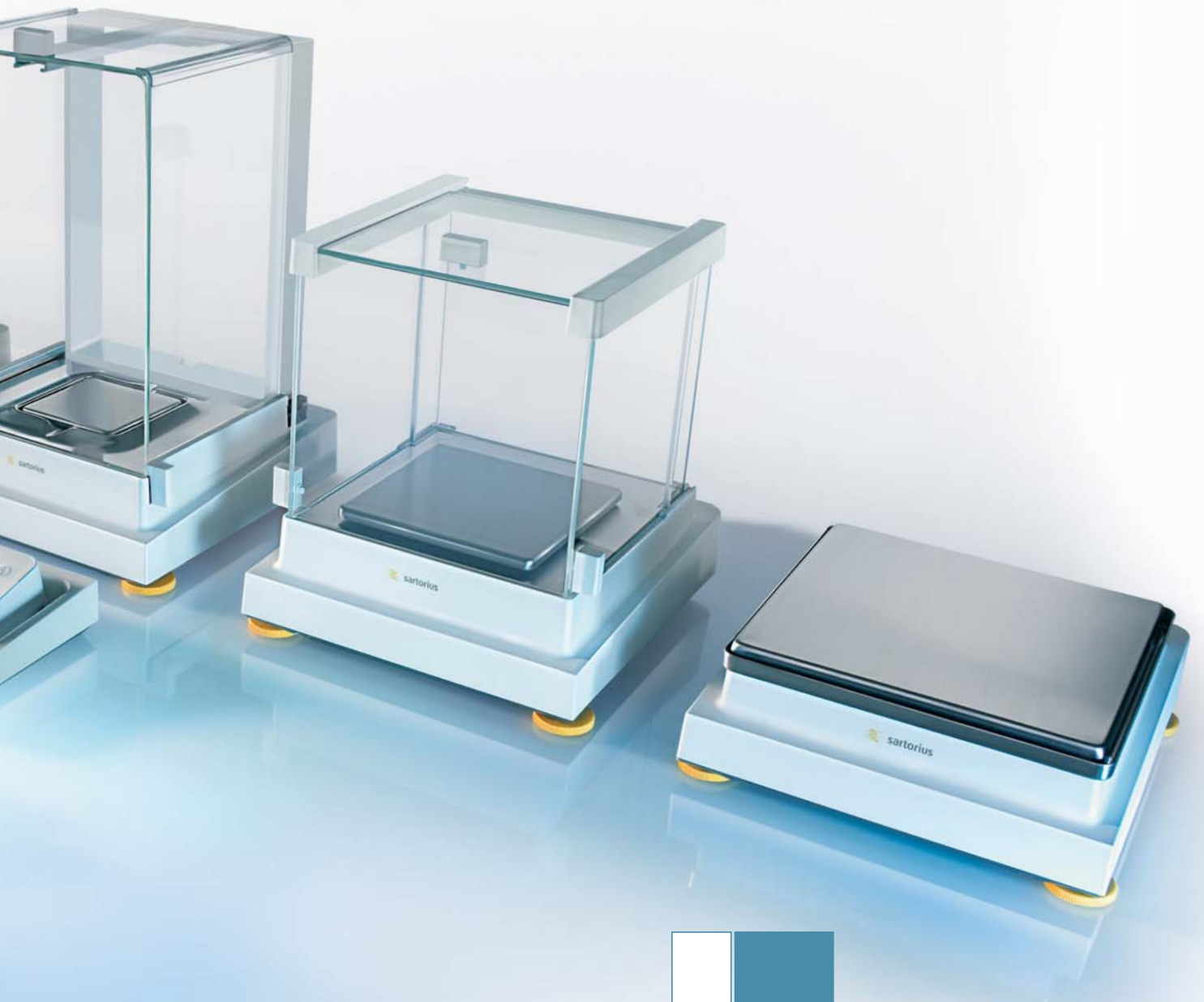
Cubis® is the first lab balance of an entirely modular design which means that display and control units, weighing models, draft shield models, interfaces, and much more can be freely combined.

But it doesn't end there. Even the technological innovations and features included in this lab balance for the first time place the Cubis® far beyond the current standards for premium lab balances.

It offers the user never before seen freedom of choice. The user can configure his or her lab balance to suit his or her individual needs.

This makes every Cubis® a unique and unrivaled balance because every Cubis® is tailored to an individual profile of specifications without compromising a thing.





| | |
|-------|-------------------|
| CUBIS | MODULAR DESIGN |
|-------|-------------------|

Safe and Easy to Use with Q-Guide

In addition to aspects strictly involving metrological specifications, preparing for and performing a weighing procedure and meeting the relevant regulatory standards are gaining ever-increasing importance.

With the Q-Guide user interface, work tasks are not only faster but Q-Guide eliminates the need for the user to follow time-consuming working steps.

The Q-Guide is designed so that the user only ever sees what is needed for carrying out the task in hand. Once a task has been defined, Q-Guide prompts the user interactively through the settings and hides information that is not relevant.



MSU – Classic and Universal

- High-resolution, generously sized, monochrome graphic display.
- Keys that feature positive click action and precise activation of functions.
- For users who wish to combine classic key-operated control with the widest possible range of performance features.



MSA – The Ultimate Solution

- Top-of-the-line technology and information design.
- Touch screen featuring high-resolution color TFT for brilliant reproduction of text and graphics.
- Outstanding ease of use and display quality, especially for complex applications.



MSE – Weighing Pure and Simple

- Large, high-contrast liquid crystal display.
- Easy-to-understand menu guidance with short text prompts.
- Clearly structured keys for precise activation of functions.

Consistently Precise Leveling with the Automatic Q-Level Function

Exact leveling of a lab balance is the key element in inspection equipment monitoring and is essential for reliable readings. This is where Q-Level can provide valuable support because with Q-Level the user can define which tasks the balance should carry out and which the user will perform himself/herself. This is possible regardless of which of the three display | control units is chosen.

Cubis® is the first lab balance that automatically checks, performs and documents its exact leveling. There's no easier way to ensure that a lab balance is set up properly. This lifts the burden on the user and allows more time for the actual tasks as well as being safer.

In pharmaceutical laboratories balances are often installed into safety weighing cabinets or workbenches to protect the user and prevent the sample from being contaminated. With conventional balances leveling often presents the problem that the mechanical level indicator is poorly visible or cannot be seen at all and the protective compartment must not be opened. With Q-Level this is no longer a problem. With the touch of a button, the Cubis® balance is leveled, quickly, safely and with a significantly reduced risk of contamination for the user.

Monitoring Leveling

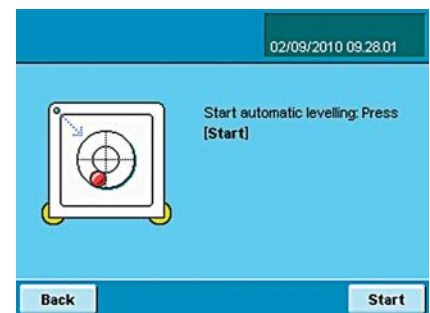
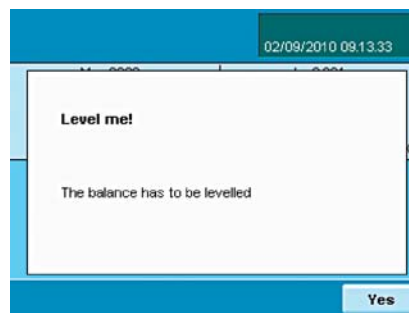
Alongside manual leveling as standard with operator guidance, Cubis® offers the option of automatic leveling at the touch of a button²⁾. If the Cubis® balance's constant monitoring function detects that it is no longer leveled, an alert message will appear and the user will be prompted to start the leveling process. Once started, internal motors level the balance in a matter of seconds.

²⁾ not available on models with weighing capacity > 6.2 kg and models with readabilities ≤ 0.001 mg

| Leveling Procedure | Check | Alert message | Leveling |
|------------------------------------|-------------------------------------|-------------------------------------|---|
| Automatic | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> ¹⁾ |
| Automatic once started by the user | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> ¹⁾ |
| Manual with operator guidance | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

¹⁾ motorized leveling feet

- Automatic
- By pressing a button
- Manual, with guidance via the display






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Automatic levelling is in progress.
Please wait or press [Cancel] to abort.

Cancel

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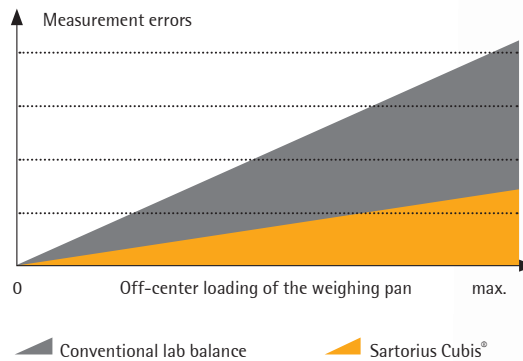
The balance has been levelled.
Press [OK] to exit levelling.

OK

More Safety, More Application Possibilities

The first lab balance with Q-Pan off-center load compensation

The Cubis® is the first lab balance that compensates for off-center loading of the weighing pan. Q-Pan simultaneously offers the user two advantages: A significant reduction in the off-center load error and consequently the use of larger weighing pans.



Q-Grid

The Q-Grid grid pan (accessory 14-557-553) is available for all Cubis® models with a readability of 10 or 100 mg (apart from model 5202S). Foremost it allows the use of a balance with a larger pan with the same laminar flow as safety weighing cabinets, workbenches, or even laboratory hoods without restricting the performance of the balance. As a result, an application often encountered in pharmaceutical labs is made easier.

Q-Grip

Q-Grip (accessory 14-557-554) is a flexible and adaptable "one-size-fits-all" holder for bottles, test tubes, reaction containers or filters (up to 120 mm) for all Cubis® semi-microbalances and analytical balances. Simply use it in place of the original weighing pan of the balance. Its individually adjustable angle always ensures ergonomic work during filling processes or using pipettes to transfer samples into various containers.





The Right Draft Shield for Any Task

All draft shield models for the Cubis® offer noticeable, practical advantages over conventional lab balances. Despite their high mechanical stability, the draft shields of the Cubis® run very smoothly thanks to their new materials. They allow outstanding visibility over the entire weighing chamber and protect it against external impact factors. Contrary to conventional lab balances, where an electrostatically charged draft shield can lead to measuring errors, the Cubis® eliminates these potential sources for error through a conductive coating on the glass panels.



DM Draft Shield

Automatic ultramicrobalance and microbalance draft shield with learning capability; for models with 0.001 mg, 0.0001 mg readability (weighing modules 6.6S, 3.6P, 2.7S)

DF Filter Balance Draft Shield

Manual stainless-steel draft shield specially for weighing of filters; for models with 0.001 mg, 0.0001 mg readability (weighing modules 6.6S, 2.7S; not for 3.6P)

DR Draft Shield

Removable, flat draft shield made of stainless steel for all models with 1 mg readability and for model 5202S



Cleaning

For cleaning purposes, all doors of the draft shield can be disassembled in just a few steps, without compromising the stability of the unit as a whole.



Opening the Draft Shield

The motorized draft shield can be opened and closed without being touched simply by using the infrared switch (YHS01MS). This offers additional safety, especially for applications involving toxic substances.



Q-Stat

At the touch of a button, the Q-Stat ionizer integrated into the DI draft shield can quickly dissipate electrostatic charges on sample containers and substances, which would affect the weighing principle of four ion jets achieves this without disruptive air streams. As a result, stable and accurate weighing results can be guaranteed regardless of external influences.



DE Draft Shield

Manual draft shield for all models with 1 mg readability and for model 5202S



DU Draft Shield

Manual analytical balance draft shield for all models with 0.01 mg, 0.1 mg, and 1 mg readability and for model 5202S



DA Draft Shield

Automatic analytical balance draft shield for all models with 0.01 mg, 0.1 mg, and 1 mg readability and for model 5202S



DI Draft Shield

Automatic analytical balance draft shield with an integrated ionizer for all models with 0.01 mg, 0.1 mg, and 1 mg readability and for model 5202S

The Highest Precision for the Smallest Sample Sizes

The high precision requirements in analytical testing and quantitative analyses in the pharmaceutical industry make the use of high-resolution balances indispensable. FDA-compliant working is only possible with laboratory balances that meet the minimum accuracy requirements of the US Pharmacopeia. This leads to the fact that, for weighing-in of less than 10 mg, microbalances or even ultramicrobalances often need to be used.

In addition, the substances to be analyzed are often available only in very small quantities and are correspondingly expensive. Alternatively, they are so potently effective that only minimum quantities can be worked with, so as not to endanger the user. Cubis microbalances and ultramicrobalances fulfill the most stringent requirements. They offer the user the highest level of safety in terms of result reliability and standard conformity.

Short measurement times result in time gained – for every single measurement. In particular, the motorized 100% glass draft shield means that working with minimum sample sizes is fast and effortless. An intelligent learning capability allows adaptation to every workflow.



Efficient Cleaning

Easy and fast cleaning is especially important when working with minute sample sizes so as to prevent cross-contamination. All parts of the draft shield can be removed easily. After cleaning, the balance is ready to be used again just as quickly.





Making High-end Balances Easy to Use
 If the user does not have any complex application requirements, but nevertheless requires uncompromising reliability in the weighing results, the MSE control head in conjunction with the weighing modules of the microbalances and ultramicrobalances offers a perfect and cost-effective solution.

Filter Weighing
 The special DF stainless-steel filter draft shield is optimized for ultraprecise weighing of filters. This filter draft shield minimizes electrostatic effects. Different weighing pan diameters are available for different filter sizes (50 mm as standard | 75 mm and 90 mm optional).



Optional Accessories
 Weighing boats (quantity: 50): 6566-50
 (FS Cat. No. 14-557-537)

Q-Com for Unlimited Communication

Ready to Use in Seconds

All data, such as the user's master data or tasks, can be transferred easily and safely from one Cubis® to another using an SD card (not on the MSE). The time needed for configuration, especially when many un-networked balances are in use, is therefore significantly reduced.



GLP-compliant, Configurable Printout

When Cubis® is used in contaminated areas (enclosed protected areas), a wireless transmission option (Bluetooth®) is also available.



Interface Options

Three fixed (USB, RS232C, Ethernet [not for MSE]) and three optional interface ports make almost all forms of bidirectional communication possible. Up to four interface ports can be used simultaneously.



Web Communication

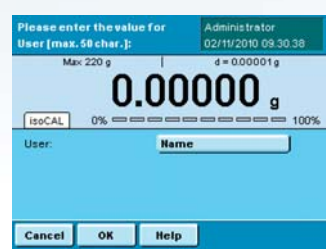
Web services offer a new communication platform that allows external software systems to directly show and use information, entry fields, menus, or complex operations on the touch screen of the MSA display and control unit. This eliminates the need for installing PCs, laptops, or terminals in the area directly around the balance.





Communication with External Software

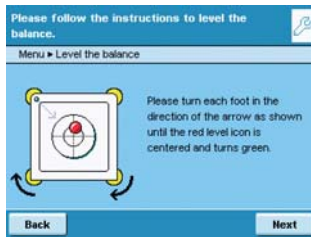
It is possible to connect Cubis® to external software systems. Using the balance's default standardized SICS communication protocol, it is also possible to communicate with software from other manufacturers.



Advanced Pharma Compliance for Use in Regulated Sectors

Balance Monitoring

The first balance with automatic leveling: Q-Level



Q-Level combines novel sensors with the most advanced display technology, making it easier and faster to level the balance accurately. A standard feature of Cubis MSA and MSU display and control units is interactive prompting, which guides you during manual leveling. The display provides all the necessary information: the position of the air bubble and instructions regarding which

leveling foot must be turned in which direction (with MSE there are only symbols).

Q-Level offers the option for automatic motorized leveling at the touch of a button. This means that Cubis® can always check that balance leveling is perfect and informs the user immediately if any corrections are needed.

Process Monitoring

User Management



Username | password management for tamper-proof security.

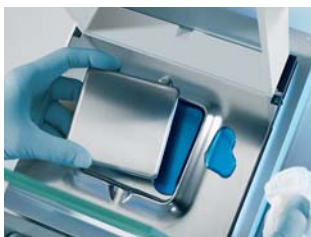
Action Hierarchy



Cubis® has warning and reminder functions with a configurable action hierarchy for leveling, minimum initial weighing, and calibration | adjustment.

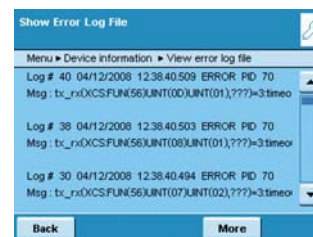
Compatibility and Retraceability

Cleaning Validation



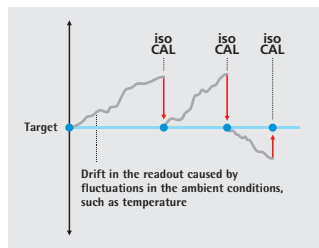
It is easy to clean Cubis® quickly and thoroughly. Only high-grade materials with smooth, structure-free surfaces are used.

Audit Trail



The audit trail function logs major changes to the device. For critical | validated weighing, this feature insures only accurate, reliable results.

Fully Automatic Calibration | Adjustment with isoCAL



The isoCAL calibration and adjustment function will activate after a preset or configurable time period. Exceeding a preset or configurable temperature difference triggers a recalibration | re-adjustment.

Linearity

Linearity errors occur when there are deviations from the theoretical linear path of the balance's characteristic curve. Optimal linearization is a requirement for the balance to fulfill its high accuracy criteria. Cubis® corrects linearity errors automatically.

Reproducibility Test

Cubis® allows the user to measure the reproducibility of the balance directly at the place of installation with just the press of a button. With reproTEST it is possible to quickly establish if the environment at the place of installation is suitable, so that the balance consistently provides optimal, reliable weighing results.

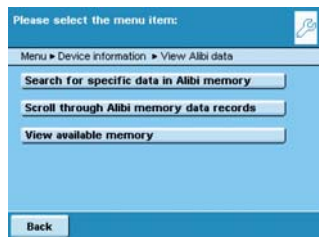
SQmin Function

During the weighing process, Cubis® monitors compliance of the mandatory minimum initial weight set by the FDA according to USP. Once the minimum initial weight has been set at the place of installation, Cubis® warns the user when the value falls below this level and identifies unacceptable weight measurements.

Task Management

With task management, Cubis® allows application processes to be shown and defined by the user during weighing. Once the task has been set up, the user is interactively guided through the weighing process. Information that is not relevant is hidden, minimizing potential errors in the work process and step-by-step user defined workflow.

Alibi Memory



An integrated Alibi memory for traceable transfer of weighing data to a PC.

GLP Certificate

As an example, for many models in the Cubis® series with an MSA display and control unit the usability in GLP areas was tested and evaluated by an independent institution. Usability could be fully certified.

Risk Analysis

As a basis for the GLP suitability review and cleaning validation, many models with MSA display and control units, for example, had a risk analysis according to the methods set by the Failure Mode and Effect Analysis (FMEA). The analysis is available on request.

Systematic Personnel Safety and Result Reliability

Safety in weighing toxic, powdery substances and accuracy of weighing-in are requirements that have become inseparably linked in modern laboratory environments.

The Sartorius Safety PowderHood, consisting of the safety weighing cabinet SPH and Cubis® lab balance, is the professional solution to both of these requirements.

The safety weighing cabinet creates a contained area around the lab balance which prevents any air or fine powder particulates from escaping into the breathing zone of the user. At the same time, due to the constant inlet air velocity of the air current and the low-turbulence flow within the cabinet, consistent and reproducible weighing results are guaranteed.

The balance and weighing cabinet are a coordinated system that meets both requirements – maximum user protection and secure weighing results.



Sartorius guarantees that balances used inside the SPH will fulfill their technical specifications such as reproducibility and USP minimum weighing-in.





The application-oriented performance features of Cubis lab balances make the entire system even more safe:

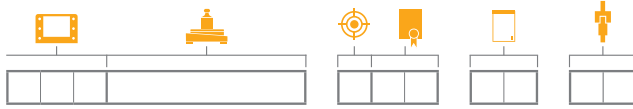
- The mechanical level indicator of a balance is often difficult or even impossible to see inside a cabinet. This leads to parallax errors in leveling and ultimately to incorrect measurement results. With automatic Q-Level (optional, only for models with weighing capacity ≤ 6.2 kg and readability > 0.001 mg), leveling can be performed automatically in the cabinet with motorized, leveling feet.
- With the optional infrared sensor YHS01MS, the draft shield can be opened contactlessly without touching the keypad, and the balance can be tared as well. This reduces the risk of contamination.
- With the Bluetooth interface module, the printer YDP10BT can be operated wirelessly outside the cabinet, which limits the use of possibly contaminated cables.
- With the optional Q-Stat ionizer (DI) integrated into the draft shield, not only electrostatic influences on the weighing results are reduced. The "stubborn" behavior of the sample during handling with a spatula is reduced and contamination due to spilled samples is prevented.
- With the Q-Grip sample holder YFH01MS, you ensure the best ergonomics for weighing-in under the difficult conditions in the cabinet.
- With the grid weighing balance YWP03MS, even lab balances without draft shields (readability of 0.01 g or 0.1 g) can be operated in the air flow of the cabinet without any problems.

Sartorius Safety Powder Hoods are available in two different sizes:

SPH32 FS Cat. No. 14-557-182
W 30 × D 32 × H 32.5"
(W 762 × D 813 × H 826 mm)

SPH48 FS Cat. No. 14-557-186
W 30 × D 48 × H 32.5"
(W 762 × D 1219 × H 826 mm)

Technical Specifications



Please use the adjacent fields to enter the selection made with the icon.



Cubis® Display and Control Units

Select the display and control unit and enter it in the field marked with the icon.

| Types | MSA | MSU | MSE |
|--|---|---|--|
| Operation | Touch screen, keys for central basic functions | Keys | Keys |
| Display | High-resolution color TFT, 5.7" graphic display | High-resolution black white 5.7" graphic display | Liquid crystal display, black white |
| Adaptation of the display and control unit | Tilttable display, removable display and control unit | Tilttable display, removable display and control unit | Removable display and control unit |
| Standard data interfaces and options | <ul style="list-style-type: none"> - USB (integrated into weighing module) - RS232C accessory interface, 25-pin (integrated into weighing module) - Ethernet (integrated into display and control unit) - Optional wireless bluetooth interface (integrated into weighing module) | | <ul style="list-style-type: none"> - USB (integrated into weighing module) - RS232C accessory interface, 25-pin (integrated into weighing module) - Optional wireless bluetooth interface (integrated into weighing module) |
| SD card reader | Integrated as standard into display and control unit | Integrated as standard into display and control unit | - not available |
| Applications | Unit conversion, SQmin function for minimum initial weight according to USP, isoCAL automatic calibration adjustment function, individual identifiers, density determination, statistics, calculations, averaging, formulation, weighing in percent, time-controlled functions, totalizing, DKD measurement uncertainty, second tare memory, counting, checkweighing, Alibi memory, audit trail | Unit conversion, SQmin function for minimum initial weight according to USP, isoCAL automatic calibration adjustment function, individual identifiers, density determination, statistics, calculations, averaging, formulation, weighing in percent, time-controlled functions, totalizing, DKD measurement uncertainty, second tare memory, counting, checkweighing, Alibi memory, audit trail | Unit conversion, isoCAL automatic calibration adjustment function, density determination (buoyancy method only), calculations, averaging, net total formulation, weighing in percent, counting |



Cubis® Weighing Modules

Please enter the model name, starting from the left, in the field identified by the icon.

| | Readability [mg] | Weighing Capacity [g] | Weighing Pan (W × D) [inches] | Typical Stabiliza- tion Time [≤s] | Typical Measure- ment Time [≤s] | Repeatability [≤±mg] | Linearity [≤±mg] | Mini- mum- Initial Weight |
|---------------------|--------------------------|-----------------------------|-------------------------------------|--|--|--------------------------------------|---------------------|------------------------------------|
| Ultramicrobalances | | | | | | | | |
| 0.0001 mg | | | | | | | | |
| 2.7S | 0.0001 | 2.1 | ∅ 0.79 | 7 | 10 | 0.00025 | 0.0009 | 0,001 |
| Microbalances | | | | | | | | |
| 0.001 mg | | | | | | | | |
| 6.6S | 0.001 | 6.1 | ∅ 1.18 | 5 | 8 | 0.001 | 0.004 | 0,002 |
| 3.6P | 0.001 0.002 0.005 | 1.1 2.1 3.1 | ∅ 1.18 | 5 | 8 | 0.003 0.004 0.005 | 0.004 | 0,004 |
| Semi-microbalances | | | | | | | | |
| 0.01 mg | | | | | | | | |
| 225S | 0.01 | 220 | 3.35 × 3.35 | 2 | 6 | 0...60 g: 0.015 60...220 g: 0.025 | 0.1 | 0.02 |
| 225P | 0.01 0.02 0.05 | 60 120 220 | 3.35 × 3.35 | 2 | 6 | 0...60 g: 0.015 60...220 g: 0.04 | 0.15 | 0.02 |
| 125P | 0.01 0.1 | 60 120 | 3.35 × 3.35 | 2 | 6 | 0...60 g: 0.015 60...120 g: 0.06 | 0.15 | 0.02 |
| Analytical Balances | | | | | | | | |
| 0.1 mg | | | | | | | | |
| 524S | 0.1 | 520 | 3.35 × 3.35 | 1 | 3 | 0.1 | 0.4 | 0.12 |
| 524P | 0.1 0.2 0.5 | 120 240 520 | 3.35 × 3.35 | 1 | 3 | 0.15 0.2 0.4 | 0.5 | 0.12 |
| 324S | 0.1 | 320 | 3.35 × 3.35 | 1 | 3 | 0.1 | 0.3 | 0.12 |
| 324P | 0.1 0.2 0.5 | 80 160 320 | 3.35 × 3.35 | 1 | 3 | 0.1 0.2 0.4 | 0.5 | 0.12 |
| 224S | 0.1 | 220 | 3.35 × 3.35 | 1 | 3 | 0.07 | 0.2 | 0.12 |
| 124S | 0.1 | 120 | 3.35 × 3.35 | 1 | 3 | 0.1 | 0.2 | 0.12 |

* Typical minimum initial weight according to USP (United States Pharmacopeia), USP31-NF26



Cubis® Weighing Modules

Please enter the model name, starting from the left, in the field identified by the icon.

| | Readability [g] | Weighing Capacity [g] | Weighing Pan (W × D) [inches] | Typical Stabiliza- tion Time [s] | Typical Measure- ment Time [s] | Repeatability [±g] | Linearity [±g] | Mini- mum- Initial Weight [g]* |
|--------------------|-----------------------|--------------------------|--|---|---|-----------------------|-------------------|--|
| Precision Balances | | | | | | | | |
| 5203S | 0.001 | 5,200 | 5.5 × 5.5 | 1 | 2 | 0.001 | 0.005 | 1.5 |
| 5203P | 0.001 0.002 0.005 | 1,200 2,400 5,200 | 5.5 × 5.5 | 1 | 2 | 0.001 | 0.005 | 1.5 |
| 3203S | 0.001 | 3,200 | 5.5 × 5.5 | 1 | 2 | 0.001 | 0.005 | 1.5 |
| 2203S | 0.001 | 2,200 | 5.5 × 5.5 | 1 | 1.5 | 0.001 | 0.003 | 1.5 |
| 2203P | 0.001 0.01 | 1,010 2,200 | 5.5 × 5.5 | 1 | 1.5 | 0.001 0.006 | 0.005 | 1.5 |
| 1203S | 0.001 | 1200 | 5.5 × 5.5 | 1 | 1.5 | 0.0007 | 0.002 | 1.5 |
| 623S | 0.001 | 620 | 5.5 × 5.5 | 0.8 | 1 | 0.0007 | 0.002 | 1.5 |
| 623P | 0.001 0.002 0.005 | 150 300 620 | 5.5 × 5.5 | 0.8 | 1 | 0.001 0.002 0.004 | 0.005 | 1.5 |
| 323S | 0.001 | 320 | 5.5 × 5.5 | 0.8 | 1 | 0.0007 | 0.002 | 1.5 |
| 14202S | 0.01 | 14,200 | 8.1 × 8.1 | 1 | 1.5 | 0.01 | 0.03 | 15 |
| 14202P | 0.01 0.02 0.05 | 3,500 7,000 14,200 | 8.1 × 8.1 | 1 | 1.5 | 0.01 0.02 0.04 | 0.05 | 15 |
| 10202S | 0.01 | 10,200 | 8.1 × 8.1 | 1 | 1.5 | 0.007 | 0.02 | 12 |
| 8202S | 0.01 | 8,200 | 8.1 × 8.1 | 1 | 1.5 | 0.007 | 0.02 | 12 |
| 6202S | 0.01 | 6,200 | 8.1 × 8.1 | 1 | 1.5 | 0.007 | 0.02 | 12 |
| 6202P | 0.01 0.02 0.05 | 1,500 3,000 6,200 | 8.1 × 8.1 | 1 | 1.5 | 0.007 0.02 0.04 | 0.05 | 12 |
| 5202S | 0.01 | 5,200 | 5.5 × 5.5 | 0.8 | 1 | 0.006 | 0.01 | 10 |
| 4202S | 0.01 | 4,200 | 8.1 × 8.1 | 0.8 | 1 | 0.007 | 0.02 | 12 |
| 2202S | 0.01 | 2,200 | 8.1 × 8.1 | 0.8 | 1 | 0.007 | 0.02 | 12 |
| 1202S | 0.01 | 1,200 | 8.1 × 8.1 | 0.8 | 1 | 0.007 | 0.02 | 12 |
| 12201S | 0.1 | 12,200 | 8.1 × 8.1 | 0.8 | 1 | 0.05 | 0.1 | 100 |
| 8201S | 0.1 | 8,200 | 8.1 × 8.1 | 0.8 | 1 | 0.05 | 0.1 | 100 |
| 5201S | 0.1 | 5,200 | 8.1 × 8.1 | 0.8 | 1 | 0.05 | 0.1 | 100 |

* Typical minimum initial weight according to USP (United States Pharmacopeia), USP31-NF26



Cubis® Leveling

Select the type of leveling and enter the identifier "Ø" or "1" in the field marked by the icon.

- Ø Cubis® shows the level indicator on the display and provides support for rapid leveling (a standard feature on MSA and MSU display and control units; for MSE units, only symbols are provided as an aid for manual leveling)

- 1 Fully automatic, motorized Q-Level leveling at the touch of a button (available for all Cubis® weighing modules with a weighing capacity > 6.1 g and ≤ 6,200 g).with a weighing capacity > 6.1 g and ≤ 6,200 g).



Test Certificates and Permits

Select a test certificate | permit and enter the identifier in the field marked with the icon.

- ØØ Standard certificate of conformity to specifications

- TR Certificate of conformity, plus detailed test protocol



Cubis® Draft Shields

Select a draft shield and enter the corresponding identifier in the field marked with the icon.

- DO No draft shield. Please always enter this identifier for weighing modules with the weighing pan size 206 + 206 mm.

- DR Flat stainless-steel weighing pan draft shield (removable, without glass components) for all precision balances with a readability of 1 mg and weighing module 5202s.

- DE Manual glass draft shield for precision balances with a readability of 1 mg and weighing module 5202S.

- DU Manual analytical balance draft shield with smooth-running, wide-opening doors, unimpeded access to the weighing chamber without interfering braces. For all models with 0.01 mg, 0.1 mg and 1 mg readability and weighing module 5202S.

- DA Automatic, motorized draft shield with learning capability for ergonomic working and individual adaptation to different applications. For all models with 0.01 mg, 0.1 mg and 1 mg readability and weighing module 5202S.

- DI Like the DA draft shield, but with the addition of an integrated ionizer to eliminate the impact of electrostatic charges in samples and containers.

- DM Automatic, motorized, round 100% glass draft shield with learning capability for ultramicrobalances and microbalances with a readability of 0.0001 mg and 0.001 mg (2.7S, 6.6S and 3.6P weighing modules).

- DF Manual draft shield for weighing filters with diameters of up to 50 mm (75 mm and 90 mm optionally) made



Optional Interface Modules

Depending on the balance, it may be possible to select an additional interface module.

- IR RS232 interface, 25-pin

- IB Wireless Bluetooth® interface

- IP RS232 interface, 9-pin, incl. PS/2 interface

| CUBIS ULTRA-MICRO Balances | | |
|--|--|-------------------|
| Model | Description | FS Cat.No. |
| MSA2.7S0TRDM | Preconfigured Cubis Ultra-Microbalance with Touch Screen, Automatic motorized round glass draft shield (2.1 g x 0.1 µg) with Certificate | 14-557-804 |
| MSA2.7S-000-DM | Cubis Ultra-Microbalance with Touch Screen, Automatic motorized round glass draft shield (2.1 g x 0.1 µg) | 14-557-801 |
| MSA2.7S-000-DF | Cubis Ultra-Microbalance with Touch Screen, Stainless steel manual draft shield for weighing filters with diameters of up to 50 mm (75 mm & 90 mm optionally available) (2.1 g x 0.1 µg) | 14-557-807 |
| MSU2.7S-000-DM | Cubis Ultra-Microbalance with High Resolution Black & White Display Automatic motorized round glass draft shield (2.1 g x 0.1 µg) | 14-557-805 |
| MSU2.7S-000-DF | Cubis Ultra-Microbalance with High Resolution Black & White Display, Stainless steel manual draft shield for weighing filters with diameters of up to 50 mm, 75 mm & 90 mm optionally available (2.1 g x 0.1 µg) | 14-557-808 |
| MSE2.7S-000-DM | Cubis Ultra-Microbalance with LCD Black & White Display, Automatic motorized round glass draft shield (2.1 g x 0.1 µg) | 14-557-806 |
| MSE2.7S-000-DF | Cubis Ultra-Micro Balance with LCD Black & White Display, Stainless steel manual draft shield for weighing filters with diameters of up to 50 mm, 75 mm & 90 mm optionally available (2.1 g x 0.1 µg) | 14-557-809 |
| CUBIS MICRO Series Balances | | |
| MSA6.6S0TRDM | Preconfigured Cubis Microbalance with Touch Screen, Automatic motorized round glass draft shield (6.1 g x 1.0 µg) with Certificate | 14-557-811 |
| MSA3.6P0TRDM | Preconfigured Cubis Polyrange Microbalance with Touch Screen, Automatic motorized round glass draft shield with learning capability for ultra-micro & micro balances (1.1/2.1/3.1 g x 1/2/5 µg) with Certificate | 14-557-818 |
| MSA3.6P-000-DM | Cubis Polyrange Microbalance with Touch Screen, Automatic motorized round glass draft shield (1.1/2.1/3.1 g x 1/2/5 µg) | 14-557-817 |
| MSA6.6S-000-DM | Cubis Microbalance with Touch Screen, Automatic motorized round glass draft shield (6.1 g x 1.0 µg) | 14-557-810 |
| MSA6.6S-000-DF | Cubis Microbalance with Touch Screen, Stainless steel manual draft shield for weighing filters with diameters of up to 50 mm, 75 mm & 90 mm optionally available (6.1 g x 1.0 µg) | 14-557-814 |
| MSU3.6P-000-DM | Cubis Polyrange Microbalance with High Resolution Black and White, Automatic motorized round glass draft shield (1.1/2.1/3.1 g x 1/2/5 µg) | 14-557-820 |
| MSU6.6S-000-DM | Cubis Microbalance filter weighing with High Resolution Black & White Display Automatic motorized round glass draft shield (6.1 g x 1.0 µg) | 14-557-812 |
| MSU6.6S-000-DF | Cubis Microbalance with High Resolution Black & White Display, Stainless steel manual draft shield for weighing filters with diameters of up to 50 mm, 75 mm & 90 mm optionally available (6.1 g x 1.0 µg) | 14-557-815 |
| MSE3.6P-000-DM | Cubis Polyrange Microbalance with LCD display, Automatic motorized round glass draft shield (0.5/1/2 g x 1/2/5 µg) | 14-557-819 |
| MSE6.6S-000-DM | Cubis Microbalance filter weighing with LCD Black & White Display, Automatic motorized round glass draft shield (6.1 g x 1.0 µg) | 14-557-813 |
| MSE6.6S-000-DF | Cubis Microbalance with LCD Black & White Display, Stainless steel manual draft shield for weighing filters with diameters of up to 50 mm, 75 mm & 90 mm optionally available (6.1 g x 1.0 µg) | 14-557-816 |
| CUBIS (pre-configured) SEMI-MICRO with Automatic Doors & Ionizer | | |
| MSA225S000DI | Cubis Semi-Microbalance with Touch Screen, Auto Doors, Ionizer (220 g x 0.01 mg) | 14-557-009 |
| MSA225S100DI | Cubis Semi-Microbalance with Touch Screen, Auto Doors, Ionizer & Auto level (220 g x 0.01 mg) | 14-557-010 |
| MSA225P000DI | Cubis Semi-Microbalance with Touch Screen, Auto Doors, Ionizer (60/120/220 g x 0.01/0.02/0.05 mg) | 14-557-011 |
| MSA225P100DI | Cubis Semi-Microbalance with Touch Screen, Auto Doors, Ionizer & Auto Level (60/120/220 g x 0.01/0.02/0.05 mg) | 14-557-012 |
| CUBIS (pre-configured) Analyticals with Automatic Doors & Ionizer | | |
| MSA224S000DI | Cubis Analytical balance with Touch Screen, Auto Doors, Ionizer (220 g x 0.1 mg) | 14-557-013 |
| MSA224S100DI | Cubis Analytical balance with Touch Screen, Auto Doors, Ionizer & Auto Level (220 g x 0.1 mg) | 14-557-014 |
| MSA324S000DI | Cubis Analytical balance with Touch Screen, Auto Doors, Ionizer (320 g x 0.1 mg) | 14-557-015 |
| MSA324S100DI | Cubis Analytical balance with Touch Screen, Auto Doors, Ionizer & Auto Level (320 g x 0.1 mg) | 14-557-016 |
| MSA524S000DI | Cubis Analytical balance with Touch Screen, Auto Doors, Ionizer (520 g x 0.1 mg) | 14-557-017 |
| MSA524S100DI | Cubis Analytical balance with Touch Screen, Auto Doors, Ionizer & Auto Level (520 g x 0.1 mg) | 14-557-018 |

| Cubis (pre-configured) Analyticals, Precision and Toploaders | | |
|--|---|---------------------------|
| Model | Description | FS Cat.No. |
| MSA225S000DU | Cubis Semi-Microbalance with Touch Screen (220 g x 0.01 mg) | 14-557-019 |
| MSA124S000DU | Cubis Analytical balance with Touch Screen (120 g x 0.1 mg) | 14-557-254 |
| MSA224S000DU | Cubis Analytical balance with Touch Screen (220 g x 0.1 mg) | 14-557-021 |
| MSA324S000DU | Cubis Analytical balance with Touch Screen (320 g x 0.1 mg) | 14-557-022 |
| MSA623S000DE | Cubis Milligram balance with Touch Screen (620 g x 0.001 g) | 14-557-023 |
| MSA1203S000DE | Cubis High Capacity Milligram balance with Touch Screen (1200 g x 0.001 g) | 14-557-024 |
| MSA3203S000DE | Cubis High Capacity dual range Milligram balance with Touch Screen (1010/3200 g x 0.001/0.01 g) | 14-557-025 |
| MSA2202S000D0 | Cubis Toploader balance with Touch Screen (2200 g x 0.01 g) | 14-557-026 |
| MSA4202S000D0 | Cubis Toploader balance with Touch Screen (4200 g x 0.01 g) | 14-557-027 |
| MSA6202S000D0 | Cubis Toploader balance with Touch Screen (6200 g x 0.01 g) | 14-557-028 |
| MSA8202S000D0 | Cubis High Capacity Toploader balance with Touch Screen (8200 g x 0.01 g) | 14-557-029 |
| MSA8201S000D0 | Cubis Toploader balance with Touch Screen (8200 g x 0.1 g) | 14-557-030 |
| Cubis Semi-Micro & Analytical Balances with Touch Screen Display (MSA) & Automatic Motorized Doors (DA) | | |
| MSA225S-000-DA | Cubis Semi-Microbalance with Touch Screen Display and Automatic Doors (220 g x 0.01 mg) | 14-557-238 |
| MSA225P-000-DA | Cubis Semi-Microbalance with Touch Screen Display and Automatic Doors (60/120/220 g x 0.01/0.02/0.05 mg) | 14-557-239 |
| MSA125P-000-DA | Cubis Semi-Microbalance with Touch Screen Display and Automatic Doors (60/120 g x 0.01/0.02mg) | 14-557-240 |
| MSA524S-000-DA | Cubis Analytical balance with Touch Screen Display, Automatic Doors (520 g x 0.1 mg) | 14-557-241 |
| MSA524P-000-DA | Cubis Analytical balance with Touch Screen Display, Automatic Doors (120/240/520 g x 0.1/0.2/0.5mg) | 14-557-242 |
| MSA324S-000-DA | Cubis Analytical balance with Touch Screen Display, Automatic Doors (320 g x 0.1 mg) | 14-557-243 |
| MSA324P-000-DA | Cubis Analytical balance with Touch Screen Display, Automatic Doors (80/160/320 g x 0.1/0.2/0.5mg) | 14-557-244 |
| MSA124S-000-DA | Cubis Analytical balance with Touch Screen Display, Automatic Doors (120 g x 0.1 mg) | 14-557-245 |
| MSA224S-000-DA | Cubis Analytical balance with Touch Screen Display, Automatic Doors (220 g x 0.1 mg) | 14-557-246 |
| Cubis Semi-Micro & Analytical Balances with Touch Screen Display (MSA) & Manual Doors (DU) | | |
| MSA225S-000-DU | Cubis Semi-Microbalance with Touch Screen, Manual Doors, Large Draft Chamber (220 g x 0.01 mg) | See pre-configured models |
| MSA225P-000-DU | Cubis Semi-Microbalance with Touch Screen, Manual Doors, Large Draft Chamber (60/120/220 g x 0.01/0.02/0.05 mg) | 14-557-248 |
| MSA125P-000-DU | Cubis Semi-Microbalance with Touch Screen, Manual Doors, Large Draft Chamber (60/120 g x 0.01/0.02 mg) | 14-557-249 |
| MSA524S-000-DU | Cubis Analytical balance with Touch Screen, Manual Doors, Large Draft Chamber (520 g x 0.1 mg) | 14-557-250 |
| MSA524P-000-DU | Cubis Analytical balance with Touch Screen, Manual Doors, Large Draft Chamber (120/240/520 g x 0.1/0.2/0.5 mg) | 14-557-251 |
| MSA324S-000-DU | Cubis Analytical balance with Touch Screen, Manual Doors, Large Draft Chamber (320 g x 0.1 mg) | See pre-configured models |
| MSA324P-000-DU | Cubis Analytical balance with Touch Screen, Manual Doors, Large Draft Chamber (80/160/320 g x 0.1/0.2/0.5 mg) | 14-557-253 |
| MSA124S-000-DU | Cubis Analytical balance with Touch Screen, Manual Doors, Large Draft Chamber (120 g x 0.1 mg) | 14-557-254 |
| MSA224S-000-DU | Cubis Analytical balance with Touch Screen, Manual Doors, Large Draft Chamber (220 g x 0.1 mg) | See pre-configured models |

| Cubis Milligram with Touch Screen Display (MSA) & Glass Draft Shield (DE) | | |
|--|---|---------------------------|
| Model | Description | FS Cat.No. |
| MSA5203S-000-DE | Cubis Milligram balance with Touch Screen, Manual Doors, Standard Draft Chamber (5200 g x 0.001 g) | 14-557-256 |
| MSA5203P-000-DE | Cubis Milligram balance with Touch Screen, Manual Doors, Standard Draft Chamber (1200/2400/5200 g x 1/2/5 mg) | 14-557-257 |
| MSA3203S-000-DE | Cubis Milligram balance with Touch Screen, Manual Doors, Standard Draft Chamber (3200 g x 0.001 g) | See pre-configured models |
| MSA2203S-000-DE | Cubis Milligram balance with Touch Screen, Manual Doors, Standard Draft Chamber (2200 g x 0.001 g) | 14-557-259 |
| MSA2203P-000-DE | Cubis Milligram balance with Touch Screen, Manual Doors, Standard Draft Chamber (1010/2200 g x 1/10 mg) | 14-557-260 |
| MSA1203S-000-DE | Cubis Milligram balance with Touch Screen, Manual Doors, Standard Draft Chamber (1200 g x 0.001 g) | See pre-configured models |
| MSA623S-000-DE | Cubis Milligram balance with Touch Screen, Manual Doors, Standard Draft Chamber (620 g x 0.001 g) | See pre-configured models |
| MSA623P-000-DE | Cubis Milligram balance with Touch Screen, Manual Doors, Standard Draft Chamber (150/300/620 g x 1/2/5 mg) | 14-557-263 |
| MSA323S-000-DE | Cubis Milligram balance with Touch Screen, Manual Doors, Standard Draft Chamber (320 g x 0.001 g) | 14-557-264 |
| Cubis Milligram with Touch Screen Display (MSA) & Stainless Steel Draft Shield (DR) | | |
| MSA5203S-000-DR | Cubis Milligram balance with Touch Screen, Stainless Steel Draft Shield (5200 g x 0.001 g) | 14-557-265 |
| MSA5203P-000-DR | Cubis Milligram balance with Touch Screen, Stainless Steel Draft Shield (1200/2400/5200 g x 1/2/5 mg) | 14-557-266 |
| MSA3203S-000-DR | Cubis Milligram balance with Touch Screen, Stainless Steel Draft Shield (3200 g x 0.001 g) | 14-557-267 |
| MSA2203S-000-DR | Cubis Milligram balance with Touch Screen, Stainless Steel Draft Shield (2200 g x 0.001 g) | 14-557-268 |
| MSA2203P-000-DR | Cubis Milligram balance with Touch Screen, Stainless Steel Draft Shield (1010/2200 g x 1/10 mg) | 14-557-269 |
| MSA1203S-000-DR | Cubis Milligram balance with Touch Screen, Stainless Steel Draft Shield (1200 g x 0.001 g) | 14-557-270 |
| MSA623S-000-DR | Cubis Milligram balance with Touch Screen, Stainless Steel Draft Shield (620 g x 0.001 g) | 14-557-271 |
| MSA623P-000-DR | Cubis Milligram balance with Touch Screen, Stainless Steel Draft Shield (150/300/620 g x 1/2/5 mg) | 14-557-272 |
| MSA323S-000-DR | Cubis Milligram balance with Touch Screen, Stainless Steel Draft Shield (320 g x 0.001 g) | 14-557-273 |
| Cubis Precision Toploaders with Touch Screen Display (MSA) | | |
| MSA14202S-000-D0 | Cubis Toploader balance with Touch Screen (14200 g x 0.01 g) | 14-557-274 |
| MSA14202P-000-D0 | Cubis Toploader balance with Touch Screen (3000/6200/14200 g x .01/0.02 /0.05 g) | 14-557-275 |
| MSA10202S-000-D0 | Cubis Toploader balance with Touch Screen (10200 g x 0.01 g) | 14-557-276 |
| MSA8202S-000-D0 | Cubis Toploader balance with Touch Screen (8200 g x 0.01 g) | See pre-configured models |
| MSA6202S-000-D0 | Cubis Toploader balance with Touch Screen (6200 g x 0.01 g) | See FS Cat.No. 14-557-028 |
| MSA6202P-000-D0 | Cubis Toploader balance with Touch Screen (1500/3000/6200 g x.01/.02/.05 mg) | 14-557-279 |
| MSA5202S-000-D0 | Cubis Toploader balance with Touch Screen (5200 g x 0.01 g) | 14-557-280 |
| MSA5202S-000-DR* | Cubis Toploader balance with Touch Screen, Stainless Steel Draft Shield (5200 g x 0.01 g) | 14-557-281 |
| MSA4202S-000-D0 | Cubis Toploader balance with Touch Screen (4200 g x 0.01 g) | See pre-configured models |
| MSA2202S-000-D0 | Cubis Toploader balance with Touch Screen (2200 g x 0.01 g) | 14-557-283 |
| MSA1202S-000-D0 | Cubis Toploader balance with Touch Screen (1200 g x 0.01 g) | 14-557-284 |
| MSA12201S-000-D0 | Cubis Toploader balance with Touch Screen (12200 g x 0.1 g) | 14-557-285 |
| MSA8201S-000-D0 | Cubis Toploader balance with Touch Screen (8200 g x 0.1 g) | See pre-configured models |
| MSA5201S-000-D0 | Cubis Toploader balance with Touch Screen (5200 g x 0.1g) | 14-557-287 |

Cubis Semi-Micro & Analytical Balances with High Res. Black & White Graphics Display (MSU) & Automatic Motorized Doors (DA)

| Model | Description | FS Cat.No. |
|----------------|--|------------|
| MSU225S-000-DA | Cubis Semi-Microbalance w/ High Res. Black & White Display, and Automatic Doors (220 g x 0.01 mg) | 14-557-288 |
| MSU225P-000-DA | Cubis Semi-Microbalance w/ High Res. Black & White Display, and Automatic Doors (60/120/220 g x 0.01/0.02/0.05 mg) | 14-557-289 |
| MSU125P-000-DA | Cubis Semi-Microbalance w/ High Res. Black & White Display, and Automatic Doors (60/120 g x 0.01/0.1 mg) | 14-557-290 |
| MSU524S-000-DA | Cubis Analytical balance w/ High Res. Black & White Display, Automatic Doors (520 g x 0.1 mg) | 14-557-291 |
| MSU524P-000-DA | Cubis Analytical balance w/ High Res. Black & White Display, Automatic Doors (120/240/520 g x 0.1/0.2/0.5 mg) | 14-557-292 |
| MSU324S-000-DA | Cubis Analytical balance w/ High Res. Black & White Display, Automatic Doors (320 g x 0.1 mg) | 14-557-293 |
| MSU324P-000-DA | Cubis Analytical balance w/ High Res. Black & White Display, Automatic Doors (80/160/320 g x 0.1/0.2/0.5 mg) | 14-557-294 |
| MSU124S-000-DA | Cubis Analytical balance w/ High Res. Black & White Display, Automatic Doors (120 g x 0.1 mg) | 14-557-295 |
| MSU224S-000-DA | Cubis Analytical balance w/ High Res. Black & White Display, Automatic Doors (220 g x 0.1 mg) | 14-557-296 |

Cubis Semi-Micro & Analytical Balances with High Res. Black & White Graphics Display (MSU) & Manual Doors (DU)

| | | |
|----------------|--|------------|
| MSU225S-000-DU | Cubis Semi-Microbalance w/ High Res. Black & White Display, Manual Doors, Large Draft Chamber (220 g x 0.01 mg) | 14-557-297 |
| MSU225P-000-DU | Cubis Semi-Microbalance w/ High Res. Black & White Display, Manual Doors, Large Draft Chamber (60/120/220 g x 0.01/0.02/0.05 mg) | 14-557-298 |
| MSU125P-000-DU | Cubis Semi-Microbalance w/ Touch Screen, Manual Doors, Large Draft Chamber (60/120 g x 0.01/0.02 mg) | 14-557-299 |
| MSU524S-000-DU | Cubis Analytical balance w/ High Res. Black & White Display, Manual Doors, Large Draft Chamber (520 g x 0.1 mg) | 14-557-300 |
| MSU524P-000-DU | Cubis Analytical balance w/ High Res. Black & White Display, Manual Doors, Large Draft Chamber (120/240/520 g x 0.1/0.2/0.5 mg) | 14-557-301 |
| MSU324S-000-DU | Cubis Analytical balance w/ High Res. Black & White Display, Manual Doors, Large Draft Chamber (320 g x 0.1 mg) | 14-557-302 |
| MSU324P-000-DU | Cubis Analytical balance w/ High Res. Black & White Display, Manual Doors, Large Draft Chamber (80/160/320 g x 0.1/0.2/0.5 mg) | 14-557-303 |
| MSU124S-000-DU | Cubis Analytical balance w/ High Res. Black & White Display, Manual Doors, Large Draft Chamber (120 g x 0.1 mg) | 14-557-304 |
| MSU224S-000-DU | Cubis Analytical balance w/ High Res. Black & White Display, Manual Doors, Large Draft Chamber (220 g x 0.1 mg) | 14-557-305 |

Cubis Milligram with High Resolution Black & White Display Graphics (MSU) & Glass Draft Shield (DE)

| | | |
|-----------------|--|------------|
| MSU5203S-000-DE | Cubis Milligram balance w/ High Res. Black & White Display, Manual Doors, Std. Draft Chamber (5200 g x 0.001 g) | 14-557-306 |
| MSU5203P-000-DE | Cubis Milligram balance w/ High Res. Black & White Display, Manual Doors, Std. Draft Chamber (1200/2400/5200 g x 1/2/5 mg) | 14-557-307 |
| MSU3203S-000-DE | Cubis Milligram balance w/ High Res. Black & White Display, Manual Doors, Std. Draft Chamber (3200 g x 0.001 g) | 14-557-308 |
| MSU2203S-000-DE | Cubis Milligram balance w/ High Res. Black & White Display, Manual Doors, Std. Draft Chamber (2200 g x 0.001 g) | 14-557-309 |
| MSU2203P-000-DE | Cubis Milligram balance w/ High Res. Black & White Display, Manual Doors, Std. Draft Chamber (1010/2200 g x 1/10 mg) | 14-557-310 |
| MSU1203S-000-DE | Cubis Milligram balance w/ High Res. Black & White Display, Manual Doors, Std. Draft Chamber (1200 g x 0.001g) | 14-557-311 |
| MSU623S-000-DE | Cubis Milligram balance w/ High Res. Black & White Display, Manual Doors, Std. Draft Chamber (620 g x 0.001g) | 14-557-312 |
| MSU623P-000-DE | Cubis Milligram balance w/ High Res. Black & White Display, Manual Doors, Std. Draft Chamber (150/300/620 g x 1/2/5 mg) | 14-557-313 |
| MSU323S-000-DE | Cubis Milligram balance w/ High Res. Black & White Display, Manual Doors, Std. Draft Chamber (320 g x 0.001g) | 14-557-314 |

Cubis Milligram with High Resolution Black & White Graphics Display (MSU) & Stainless Steel Draft Shield (DR)

| | | |
|-----------------|--|------------|
| MSU5203S-000-DR | Cubis Milligram balance w/ High Res. Black & White Display, Stainless Steel Draft Shield (5200 g x 0.001 g) | 14-557-315 |
| MSU5203P-000-DR | Cubis Milligram balance w/ High Res. Black & White Display, Stainless Steel Draft Shield (1200/2400/5200 g x 1/2/5 mg) | 14-557-316 |
| MSU3203S-000-DR | Cubis Milligram balance w/ High Res. Black & White Display, Stainless Steel Draft Shield (3200 g x 0.001 g) | 14-557-317 |
| MSU2203S-000-DR | Cubis Milligram balance w/ High Res. Black & White Display, Stainless Steel Draft Shield (2200 g x 0.001 g) | 14-557-318 |
| MSU2203P-000-DR | Cubis Milligram balance w/ High Res. Black & White Display, Stainless Steel Draft Shield (1010/2200 g x 1/10 mg) | 14-557-319 |
| MSU1203S-000-DR | Cubis Milligram balance w/ High Res. Black & White Display, Stainless Steel Draft Shield (1200 g x 0.001g) | 14-557-320 |
| MSU623S-000-DR | Cubis Milligram balance w/ High Res. Black & White Display, Stainless Steel Draft Shield (620 g x 0.001g) | 14-557-321 |
| MSU623P-000-DR | Cubis Milligram balance w/ High Res. Black & White Display, Stainless Steel Draft Shield (150/300/620 g x 1/2/5 mg) | 14-557-322 |
| MSU323S-000-DR | Cubis Milligram balance w/ High Res. Black & White Display, Stainless Steel Draft Shield (320 g x 0.001g) | 14-557-323 |

| Cubis Precision Toploaders with High Resolution Black & White Graphics Display (MSU) | | |
|--|--|-------------------|
| MSU14202S-000-D0 | Cubis Toploader balance w/ High Res. Black & White Display (14200 g x 0.01 g) | 14-557-324 |
| MSU14202P-000-D0 | Cubis Toploader balance w/ High Res. Black & White Display (3000/6200/14200 g x .01/0.02 /0.05 g) | 14-557-325 |
| MSU10202S-000-D0 | Cubis Toploader balance w/ High Res. Black & White Display (10200 g x 0.01 g) | 14-557-326 |
| MSU8202S-000-D0 | Cubis Toploader balance w/ High Res. Black & White Display (8200 g x 0.01 g) | 14-557-327 |
| MSU6202S-000-D0 | Cubis Toploader balance w/ High Res. Black & White Display (6200 g x 0.01 g) | 14-557-328 |
| MSU6202P-000-D0 | Cubis Toploader balance w/ High Res. Black & White Display (1500/3000/6200 g x.01/.02/.05 mg) | 14-557-329 |
| MSU5202S-000-D0 | Cubis Toploader balance w/ High Res. Black & White Display (5200 g x 0.01 g) | 14-557-330 |
| MSU5202S-000-DR* | Cubis Toploader balance w/ High Res. Black & White Display, Stainless Steel Draft Shield (5200 g x 0.01 g) | 14-557-331 |
| MSU4202S-000-D0 | Cubis Toploader balance w/ High Res. Black & White Display (4200 g x 0.01 g) | 14-557-332 |
| MSU2202S-000-D0 | Cubis Toploader balance w/ High Res. Black & White Display (2200 g x 0.01 g) | 14-557-333 |
| MSU1202S-000-D0 | Cubis Toploader balance w/ High Res. Black & White Display (1200 g x 0.01 g) | 14-557-334 |
| MSU12201S-000-D0 | Cubis Toploader balance w/ High Res. Black & White Display (12200 g x 0.1 g) | 14-557-335 |
| MSU8201S-000-D0 | Cubis Toploader balance w/ High Res. Black & White Display (8200 g x 0.1 g) | 14-557-336 |
| MSU5201S-000-D0 | Cubis Toploader balance w/ High Res. Black & White Display (5200 g x 0.1g) | 14-557-337 |
| Cubis Semi-Micro & Analytical Balances with LCD Black & White Display (MSE) | | |
| MSE225S-000-DA | Cubis Semi-Microbalance with LCD Black & White Display, Automatic Doors (220 g x 0.01 mg) | 14-557-338 |
| MSE225P-000-DA | Cubis Semi-Microbalance with LCD Black & White Display, Automatic Doors (60/120/220 g x 0.01/0.02/0.05 mg) | 14-557-339 |
| MSE125P-000-DA | Cubis Semi-Microbalance with LCD Black & White Display, Automatic Doors (60/120 g x 0.01/0.1mg) | 14-557-340 |
| MSE524S-000-DA | Cubis Analytical balance with LCD Black & White Display, Automatic Doors (520 g x 0.1 mg) | 14-557-341 |
| MSE524P-000-DA | Cubis Analytical balance with LCD Black & White Display, Automatic Doors (120/240/520 g x 0.1/0.2/0.5 mg) | 14-557-342 |
| MSE324S-000-DA | Cubis Analytical balance with LCD Black & White Display, Automatic Doors (320 g x 0.1 mg) | 14-557-343 |
| MSE324P-000-DA | Cubis Analytical balance with LCD Black & White Display, Automatic Doors (80/160/320 g x 0.1/0.2/0.5 mg) | 14-557-344 |
| MSE124S-000-DA | Cubis Analytical balance with LCD Black & White Display, Automatic Doors (120 g x 0.1 mg) | 14-557-345 |
| MSE224S-000-DA | Cubis Analytical balance with LCD Black & White Display, Automatic Doors (220 g x 0.1 mg) | 14-557-346 |
| Cubis Semi-Micro & Analytical Balances with high contrast LCD Display (MSE) & Manual Doors (DU) | | |
| Model | Description | FS Cat.No. |
| MSE225S-000-DU | Cubis Semi-Microbalance with LCD Black & White Display, Manual Doors, Large Draft Chamber (220 g x 0.01 mg) | 14-557-347 |
| MSE225P-000-DU | Cubis Semi-Microbalance with LCD Black & White Display, Manual Doors, Large Draft Chamber (60/120/220 g x 0.01/0.02/0.05 mg) | 14-557-348 |
| MSE125P-000-DU | Cubis Semi-Microbalance with LCD Black & White Display, Manual Doors, Large Draft Chamber (60/120 g x 0.01/0.1mg) | 14-557-349 |
| MSE524S-000-DU | Cubis Analytical balance with LCD Black & White Display, Manual Doors, Large Draft Chamber (520 g x 0.1 mg) | 14-557-350 |
| MSE524P-000-DU | Cubis Analytical balance with LCD Black & White Display, Manual Doors, Large Draft Chamber (120/240/520g x 0.1/0.2/0.5mg) | 14-557-351 |
| MSE324S-000-DU | Cubis Analytical balance with LCD Black & White Display, Manual Doors, Large Draft Chamber (320 g x 0.1 mg) | 14-557-352 |
| MSE324P-000-DU | Cubis Analytical balance with LCD Black & White Display, Manual Doors, Large Draft Chamber (80/160/320g x 0.1/0.2/0.5mg) | 14-557-353 |
| MSE124S-000-DU | Cubis Analytical balance with LCD Black & White Display, Manual Doors, Large Draft Chamber (120 g x 0.1 mg) | 14-557-354 |
| MSE224S-000-DU | Cubis Analytical balance with LCD Black & White Display, Manual Doors, Large Draft Chamber (220 g x 0.1 mg) | 14-557-355 |

Cubis Milligram with high contrast LCD Display (MSE) & Glass Draft Shield (DE)

| | | |
|-----------------|--|------------|
| MSE5203S-000-DE | Cubis Milligram balance with LCD Black & White Display, Manual Doors, Standard Draft Chamber (5200 g x 0.001 g) | 14-557-356 |
| MSE5203P-000-DE | Cubis Milligram balance with LCD Black & White Display, Manual Doors, Standard Draft Chamber (1200/2400/5200 g x 1/2/5 mg) | 14-557-357 |
| MSE3203S-000-DE | Cubis Milligram balance with LCD Black & White Display, Manual Doors, Standard Draft Chamber (3200 g x 0.001 g) | 14-557-358 |
| MSE2203S-000-DE | Cubis Milligram balance with LCD Black & White Display, Manual Doors, Standard Draft Chamber (2200 g x 0.001 g) | 14-557-359 |
| MSE2203P-000-DE | Cubis Milligram balance with LCD Black & White Display, Manual Doors, Standard Draft Chamber (1010/2200 g x 1/10 mg) | 14-557-360 |
| MSE1203S-000-DE | Cubis Milligram balance with LCD Black & White Display, Manual Doors, Standard Draft Chamber (1200 g x 0.001 g) | 14-557-361 |
| MSE623S-000-DE | Cubis Milligram balance with LCD Black & White Display, Manual Doors, Standard Draft Chamber (620 g x 0.001 g) | 14-557-362 |
| MSE623P-000-DE | Cubis Milligram balance with LCD Black & White Display, Manual Doors, Std. Draft Chamber (150/300/620 g x 1/2/5 mg) | 14-557-363 |
| MSE323S-000-DE | Cubis Milligram balance with LCD Black & White Display, Manual Doors, Standard Draft Chamber (320 g x 0.001 g) | 14-557-364 |

Cubis Milligram with high contrast LCD Display (MSE) & Stainless Steel Draft Shield (DR)

| Model | Description | FS Cat.No. |
|-----------------|--|------------|
| MSE5203S-000-DR | Cubis Milligram balance with LCD Black & White Display, Stainless Steel Draft Shield (5200 g x 0.001 g) | 14-557-365 |
| MSE5203P-000-DR | Cubis Milligram balance with LCD Black & White Display, Stainless Steel Draft Shield (1200/2400/5200 g x 1/2/5 mg) | 14-557-366 |
| MSE3203S-000-DR | Cubis Milligram balance with LCD Black & White Display, Stainless Steel Draft Shield (3200 g x 0.001 g) | 14-557-367 |
| MSE2203S-000-DR | Cubis Milligram balance with LCD Black & White Display, Stainless Steel Draft Shield (2200 g x 0.001 g) | 14-557-368 |
| MSE2203P-000-DR | Cubis Milligram balance with LCD Black & White Display, Stainless Steel Draft Shield (1010/2200 g x 1/10 mg) | 14-557-369 |
| MSE1203S-000-DR | Cubis Milligram balance with LCD Black & White Display, Stainless Steel Draft Shield (1200 g x 0.001 g) | 14-557-370 |
| MSE623S-000-DR | Cubis Milligram balance with LCD Black & White Display, Stainless Steel Draft Shield (620 g x 0.001 g) | 14-557-371 |
| MSE623P-000-DR | Cubis Milligram balance with LCD Black & White Display, Stainless Steel Draft Shield (150/300/620 g x 1/2/5 mg) | 14-557-372 |
| MSE323S-000-DR | Cubis Milligram balance with LCD Black & White Display, Stainless Steel Draft Shield (320 g x 0.001 g) | 14-557-373 |

Cubis Precision Toploaders with LCD Display (MSE) & Automatic Motorized Doors (DA)

| | | |
|------------------|--|------------|
| MSE14202S-000-D0 | Cubis Toploader balance with LCD Black & White Display (14200 g x 0.01 g) | 14-557-374 |
| MSE14202P-000-D0 | Cubis Toploader balance with LCD Black & White Display (3000/6200/14200 g x .01/0.02 /0.05 g) | 14-557-375 |
| MSE10202S-000-D0 | Cubis Toploader balance with LCD Black & White Display (10200 g x 0.01 g) | 14-557-376 |
| MSE8202S-000-D0 | Cubis Toploader balance with LCD Black & White Display (8200 g x 0.01 g) | 14-557-377 |
| MSE6202S-000-D0 | Cubis Toploader balance with LCD Black & White Display (6200 g x 0.01 g) | 14-557-378 |
| MSE6202P-000-D0 | Cubis Toploader balance with LCD Black & White Display (1500/3000/6200 g x .01/.02/.05 mg) | 14-557-379 |
| MSE5202S-000-D0 | Cubis Toploader balance with LCD Black & White Display (5200 g x 0.01 g) | 14-557-380 |
| MSE5202S-000-DR | Cubis Toploader balance with LCD Black & White Display, Stainless Steel Draft Shield (5200 g x 0.01 g) | 14-5573-81 |
| MSE4202S-000-D0 | Cubis Toploader balance with LCD Black & White Display (4200 g x 0.01 g) | 14-557-382 |
| MSE2202S-000-D0 | Cubis Toploader balance with LCD Black & White Display (2200 g x 0.01 g) | 14-557-383 |
| MSE1202S-000-D0 | Cubis Toploader balance with LCD Black & White Display (1200 g x 0.01 g) | 14-557-384 |
| MSE12201S-000-D0 | Cubis Toploader balance with LCD Black & White Display (12200 g x 0.1 g) | 14-557-385 |
| MSE8201S-000-D0 | Cubis Toploader balance with LCD Black & White Display (8200 g x 0.1 g) | 14-557-386 |
| MSE5201S-000-D0 | Cubis Toploader balance with LCD Black & White Display (5200 g x 0.1 g) | 14-557-387 |

Cubis® Optional Accessories

| Printers and Communication | Model | FS Cat. No. |
|---|--------------|--------------------|
| Verifiable data printer for connection to RS-232, 25-pin accessory interface | YDP10-OCE | TBD |
| Verifiable data printer with <i>Bluetooth</i> ® data transmission (with YD001MS-B or IB option only) | YDP10BT-OCE | 14-557-542 |
| Ink ribbon cartridge for YDP10-OCE and YDP10BT-OCE | 6906918 | 14-557-502 |
| Paper rolls for printer YDP10-OCE; 5 rolls 165 ft. each | 6906937 | 14-557-503 |
| <i>Bluetooth</i> ® data interface for wireless connection of data printer YDP10BT | YD001MS-B | 14-557-549 |
| RS232C data interface, 9-pin including PS/2 for connecting a PC or keyboard | YD001MS-P | 14-557-550 |
| RS232C data interface, 25-pin for connection of Cubis® accessories | YD001MS-R | 14-557-548 |
| Display cable 9 ft. for Cubis® MSA and MSU models, for separate setup of display and weighing unit (Installation by Sartorius Service or in factory [order VF4016]) | YCC01-MSD3 | TBD |
| Display cable 9 ft. for Cubis® MSE models, for separate setup of display and weighing unit (Installation by Sartorius Service or ex works [order VF4016]) | YCC01-MSED3 | TBD |
| Cable 9 ft. between weighing module and electronics module for Cubis® models with 0.01 mg 0.001 mg 0.0001 mg readability | YCC01-MSM3 | TBD |
| Installation display cable 3 m for Cubis® models, for separate setup of display and weighing unit | VF4016 | TBD |
| RS232C connection cable to connect PC with 9-pin COM interface, length 5 ft. | 7357314 | TBD |
| SartoCollect software for data communication between balance and PC | YSC02 | TBD |
| Sartorius OPC Server for connecting all Sartorius Cubis® balances Requires 32-bit Microsoft Windows 2000 or XP with current service packs. (free download of a 30-day trial version from the Sartorius website) | | |
| – Initial license | 62890PC | TBD |
| – Each additional license within an order | 62890PC-L | TBD |
| Displays and Input Output Elements | | |
| MSA control unit with color TFT graphic display and touch screen | YAC01MSA | 14-557-558 |
| MSE display unit with backlit LC display and tactile keys | YAC01MSE | 14-557-556 |
| MSU control unit with backlit b w graphic display and tactile navigation keys | YAC01MSU | 14-557-557 |
| Barcode reader with connection cable, 4.7 inch eading range | YBR03PS2 | 14-557-547 |
| Foot switch for printing, taring, or using function keys, selection via menu, incl. T connector | YFS01 | 14-557-533 |
| Infrared sensor for touch-free activation of functions (e.g., draft shield control) | YHS01MS | 14-557-544 |
| Hand switch for printing, taring, or using function keys, selection via menu, incl. T connector | YHS02 | 14-557-534 |
| Foot switch for the draft shield OPEN CLOSED functions (only in combination with DA and DI draft shield), taring and printing | YPE01RC | 14-557-535 |
| Additional display, LCD, figure size 0.5 inch, backlit | YRD03Z | 14-557-570 |
| 3-segment control display, red – green – red, for plus minus measurements, incl. T connector | YRD11Z | 14-557-531 |

| Pipette Calibration Hardware and Software | Model | FS Cat.No. |
|--|--------------|-------------------|
| Pipette calibration kit (hardware) for models with 0.1 mg and 0.01 mg readability Consists of moisture trap and all required adapters | YCP04MS | 14-557-509 |
| Pipette calibration kit (hardware) for microbalance weighing modules 6.6S and 3.6P Consists of moisture trap and all required adapters | VF988 | TBD |
| Pipette Tracker pipette calibration software. Software and user manual in English only. | YCP04-PT | 14-557-504 |
| Pipette Tracker Pro pipette calibration software, for use in regulated areas, networkable and validatable, according to the 21 CFR Part 11 regulations. Software and user manual in English only. | YCP04-PTPro | 14-557-505 |
| Documentation basis for validation (IQ, OQ) of Pipette Tracker PRO version. All documents are in English only. | YCP04-VTK | 14-557-507 |
| Filter Weighing and Anti-static Accessories | | |
| Anti-static weighing pan, diameter 127 mm, for weighing modules with a readability of 0.1 mg or 0.01 mg | YWP01MS | 14-557-551 |
| Filter weighing pan Ø 76 mm, for ultra-micro balance or micro balance models (weighing modules 6.6S, 2.7S; only together with DF draft shield) | VF2562 | TBD |
| Filter weighing pan Ø 89 mm, for ultramicrobalance or microbalance models (weighing modules 6.6S, 2.7S; only together with DF draft shield) | VF2880 | TBD |
| Ionization blower to eliminate electrostatic charges on sample containers and samples | YIB01-ODR | TBD |
| Stat-Pen ionization probe for discharging electrostatically charged samples and filters | YSTP01 | 14-557-540 |
| Special Applications | | |
| Density determination kit for solids and liquids for weighing modules with a readability < 1 mg | YDK01MS | 14-557-545 |
| Density determination kit for solids and liquids for weighing modules with a readability of 1 mg | YDK02MS | 14-557-546 |
| Q-Grip, flexible holder for weigh-in containers and filters up to 119 mm diameter (replaces the original weighing pan, for Cubis® models with 0.01 and 0.1 mg readability) | YFH01MS | 14-557-554 |
| Q-Grid grid weighing pan for Cubis® models with a readability of 10 mg or 100 mg for weighing in laboratory hoods, safety weighing cabinets or workbenches (reduced wind attack surface of the weighing pan; replaces the standard weighing pan) | YWP03MS | 14-557-553 |
| Weighing Accessories | | |
| Aluminum weighing boats, 4.5 mg (250 pieces) for ultra-micro balance and microbalance models | 6565-250 | 14-557-536 |
| Aluminum weighing boats, 52 mg (50 pieces) for ultra-micro balance and microbalance models | 6566-50 | 14-557-537 |
| Support arm for 10/100 mg precision weighing modules for raising the control units MSE, MSU, MSA | YDH01MS | 14-557-555 |

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