

Device Concept of the Cubis® MCA Balance

This description provides an overview of the device and usage concepts for the Sartorius Cubis® MCA laboratory balance. It contains an explanation of the basics, menu structures and the concept of combining profiles.



Executive Summary

The Cubis® MCA laboratory scale meets the specific conditions and requirements for both everyday laboratory use and the stricter standards of the pharmaceutical industry through its intuitive operation and configuration concept. All settings can be quickly accessed and easily modified via the menu. Additionally, combining profiles enables the efficient reuse of various settings.

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1 Device Concept

Here you will find an overview of the following topics:

- Device operation
- Operating concept and operating elements
- Device menu
- Profiles

1.1 Device operation

Operate the device with one finger over the screen. The following actions are possible:

1. Short tap: A short tap on a control element is used to make a selection or trigger an action. This action is used for buttons, icons or menu items.
2. Long tap: A long tap can open additional options or a context menu.
This interaction is often used for controls that offer advanced functions or settings.
3. Swipe: By swiping with your finger, you can scroll through lists, change pages or move elements. This action is useful for scroll bars, galleries or for switching between screens.

1.2 Operating concept

1.2.1 Operating elements Main menu

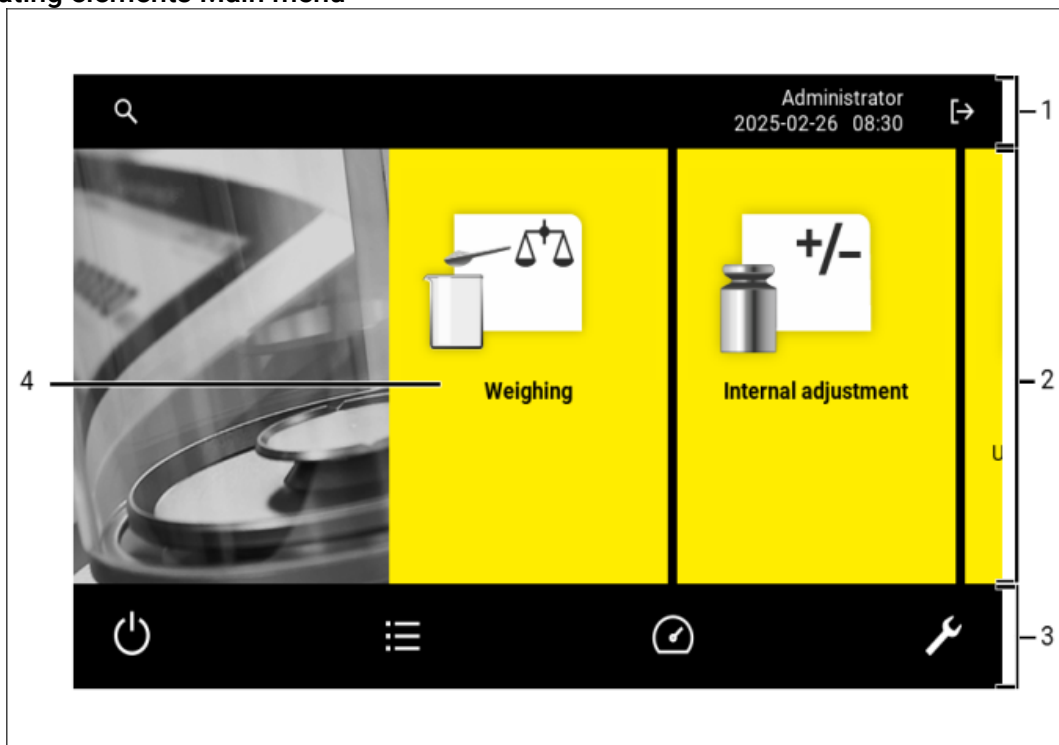


Fig. 1: Control elements in the task management (example)

Pos.	Name	Description
1	Navigation and toolbar	-Allows you to navigate and search in menus and lists.-In the menu "Settings": Displays the name of the menu.
2	Available tasks	Displays all tasks available for the logged-in user.
3	Function bar	Shows available submenus and operating functions for the current display and the current user.

4	Task	Starts the described task
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1.2.2 Control elements in the task management

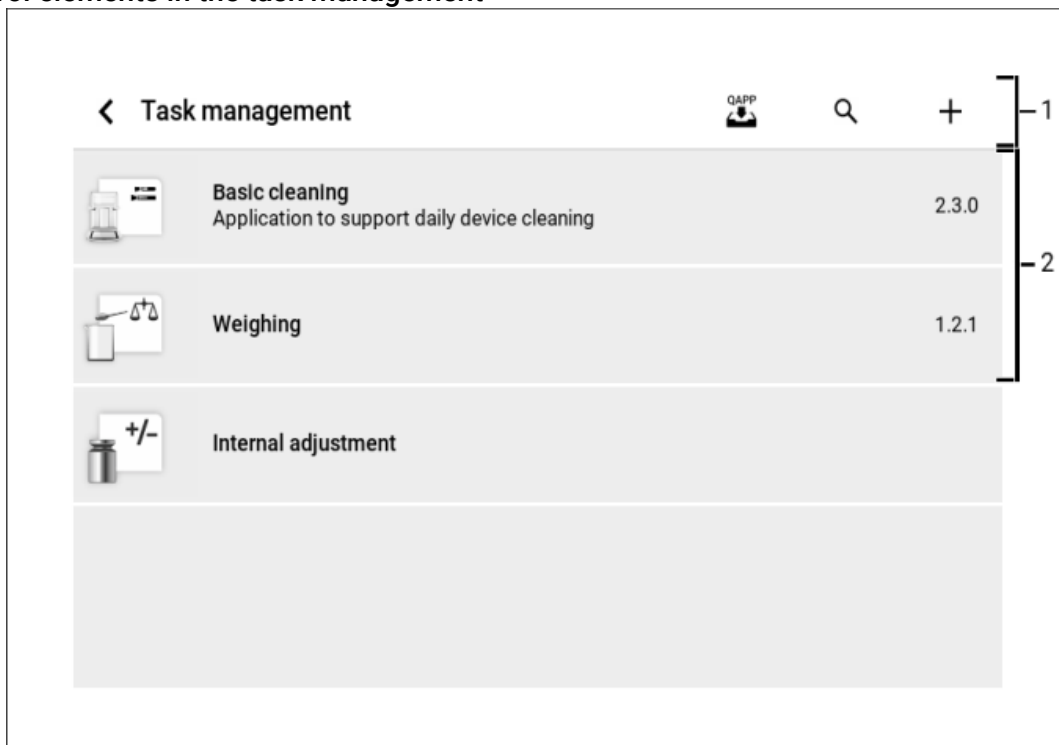


Fig. 2: Control elements in the task management (example)

Pos.	Name	Description
1	Navigation and function bar	-Enables you to navigate and search in menus and lists -Enables you to add tasks -Opens the QAPP Center -Shows the name of the menu
2	Available tasks	Displays all tasks available for the logged-in user.

1.2.3 Operating elements in the weighing display

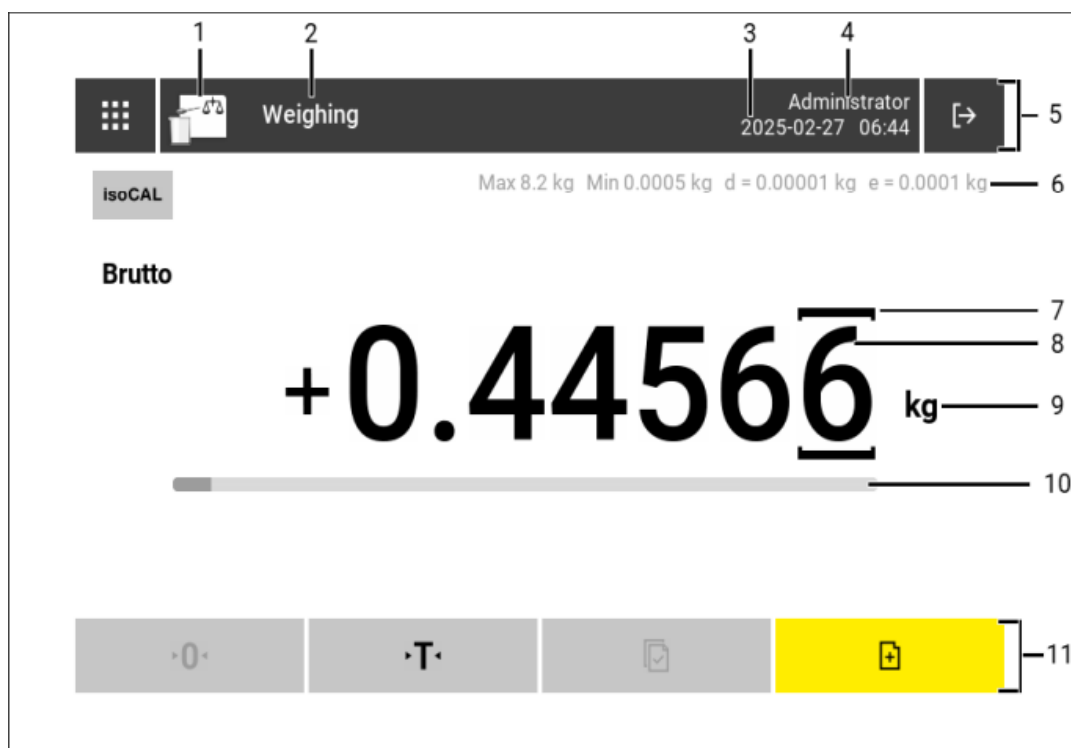


Fig. 3: Weighing display (example)

Pos.	Name	Description
1	Application symbol	Displays the icon of the active application.
2	Task name	Displays the name of the active application.
3	Date and time display	Displays the current date and time.
4	User name	Displays the name of the active user.
5	Navigation bar	Enables navigation in menus.
6	Metrological data	
7	Marked digits	Indicates the differentiated position.
8	Weight value display	Weight value in the selected unit and resolution.
9	Weighing unit	-Shows the selected unit, e.g. milligram, [mg]. - Allows you to select the unit and resolution.
10	Bar graph	Shows the measured value as a percentage utilization of the weighing range.
11	Function bar	Shows available operating functions for the current display.

2 Device menu

Device settings can be made in the settings menu (wrench symbol). Certain role rights are required to change settings. Without the necessary role rights, a user symbol (person symbol) appears instead.

Some settings and information views can also be accessed in other ways. This applies, for example, to service information, the audit trail or task management.

Menu entries on the topmost and selected lower levels can be configured to be protected against unauthorized user access. This is achieved by adjusting the access rights of the respective user roles. It must be ensured that access to a function on a subordinate level also requires that the corresponding parent level is unlocked. Protected menu entries are displayed in the user interface as disabled items (shown in grey) and are additionally visualized with a

lock symbol on the right side of the entry.

2.1 Menu structure

The following documentation explains the menu structure and details on which menu level specific device settings can be configured. It should be noted that the menu supports a maximum depth of three levels.

From any menu level, holding down the back button (upper left arrow key) allows a direct return to the device's main window. If changes have been made in a menu, a corresponding security prompt will appear before exiting. A brief press of the back button instead navigates to the previous menu, i.e., one level higher.

Level 1	Level 2
Device information	General device information Displays general device information, e.g. model name, serial number, QAPP Center version.
	Service Displays service and contact information
	Display data memory Displays the memory of the recorded weighing values
	Display audit trail (licensable extension) Displays the memory of the recorded device actions
Access management	Software licenses Displays the licenses of the third-party software used
	User administration Creating, changing and deleting users
	Role management Create, change and delete user roles and rights
	Logon / logoff rules Configuration for automatic logon and logoff on the device
	Local password rules Configuration of password rules for local users
Task management	LDAP/S server configuration Configuration of the connection to an LDAP/S server
	Weighing settings and profiles
	Weighing profiles Configuration of the weighing environment in the form of profiles
	Safe weighing Configuration of isoCAL and safety levels for weighing
	Preload Setting, displaying and deleting the preload
	Minimum sample weight (licensable extension) Parameters of the minimum sample weight
	Measurement uncertainty (licensable extension) Parameters of the measurement uncertainty
	Print settings and profiles
	Report profiles Configuration of the contents of the reports
	Calibration/adjustment report Configuration of the calibration or adjustment report
	Report logo configuration Settings for an individual report logo
	Number of cached reports

	Measurement uncertainty (licensable extension) Parameters of the measurement uncertainty
Connections	Connectors
	Network
	Website / web services
	Certificates
	Interfaces
	SBI protocol
	Climate modules (if connected)
	Connected devices
Timer-controlled actions	
Device settings	Date and time Configuration of the device date and time and NTP server
	Identifiers Configuration of device identifiers and device group names
	Switch-on behavior Configuration of the device behavior after switch-on
	Device cleaning Configuration of the cleaning conditions
	Display properties Configuration of the device display, behavior during inactivity and standby
	Sound (loudspeaker) Configuration of system sounds
	Update firmware Enables the firmware to be updated when the safety switch is open
	Install QAPP Center Updating the QAPP Center
	Install individual QAPP Installation of customer-specific applications outside the QAPP Center
	Creating a data backup Creating a complete data backup
Device maintenance	Restore data Restore a complete data backup
	Export device settings
	Import device settings Import individual device settings
	Reset to factory settings Resets the device to factory settings (exception: data memory and audit trail)
	Create diagnostic file Creates a diagnostic file for the Sartorius service

<i>Further menu structures are reserved exclusively for factory settings and service users.</i>

3 QAPPs

Various weighing applications can be carried out on the Cubis laboratory balance. A corresponding QAPP is

available for each application.

QAPPs are combined in QAPP packages and can be activated in the QAPP Center.

The "Essentials" QAPP package is already available when the laboratory balance is delivered. It contains the most important applications, e.g. weighing and calibration.

Additional applications can be activated in the QAPP Center for a fee. These applications contain additional or specific functions, e.g. user management or specific weighing functions.

By updating the QAPP Center, the QAPPs can also be updated to a newer (or older) version. Updating the QAPP Center is described in the chapter Updating the QAPP Center in the document "Device maintenance".

Existing tasks are retained in the originally created QAPP version when the QAPP Center is updated. A new task must be created for updating.

The QAPPs consist of a configuration and sequence program and must be configured once before use.

The configuration comprises two types of settings:

- Application-dependent settings
- Cross-application settings

With application-dependent settings can be used to control the respective process.

Cross-application settings are available in every QAPP and are configured via profiles.

4 Profiles

The Cubis® MCA laboratory scale utilizes profiles to configure specific settings. These profiles are reused at various locations within the device – for example, as weighing profiles, pressure profiles, or connectors. To configure a weighing application, these profiles are required and are linked to the application. This ensures that identical settings are consistently applied across different areas. Moreover, any changes made to a profile are automatically updated at all locations where it is used.

A weighing application (task) therefore consists of the desired QAPP, a weighing profile and usually at least one print profile. If the print profile generates a file, e.g. a PDF, this in turn requires a connector, i.e. a profile for the target specification.

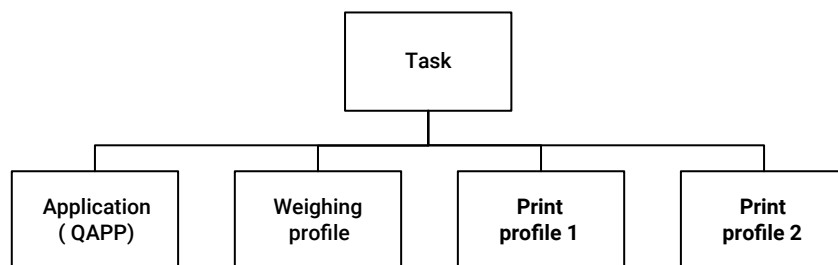


Figure 1: Components of a task