

# Cubis® II MCA1005MC

## Manual Mass Comparator



### User Benefits

- Integrated workflow control for efficient and error-free mass comparison
- Fast measurement cycles according to the ABA, ABBA or AB<sub>1</sub>...B<sub>n</sub>A method

### Highlighted Features

- Cubis® II MCA color touch screen for fast and simple configuration of parameters and workflows
- Integrated calibration workflows for ABA, ABBA, AB<sub>1</sub>...B<sub>n</sub>A cycles to ensure efficient, error-free mass comparison
- Fully integrated function for determining the measurement uncertainty in accordance with OIML and ASTM recommendations
- Filters for optimal adaptation of the mass comparator to ambient conditions
- Additional applications for density determination, statistics and individual identifiers are integrated as standard programs
- Automatic Motorized Leveling
- Easy logging of reference weight data

# Technical Specifications

## Metrological Specifications

Maximum capacity	1110 g
Application range	0 - 1110 g
Electronic weighing range and tare range	610 g
Automatic substitution weight	500 g
Readability	10 µg
Repeatability, typical	15 µg
Repeatability, at nominal load (5 × ABA)	20 µg (1000 g)
Repeatability, at low load (5 × ABA)	15 µg (100g)
Linearity, tolerance	100 µg
Eccentric load deviation, typical	11.11 µg/mm (500 g)
Stabilization time, typical	3.5 s

## Basic Equipment

Interfaces	USB-A, USB-B and USB-C
isoCAL	Yes
Below-comparator weighing port	Yes
PC connection cable	USB-A
Hight reducing panel	Yes

## Ambient Conditions

Permissible operating temperature	5 - 40 °C
Recommended operating temperature	22 °C
Temperature fluctuations	0.3 °C/h   0.5 °C/12 h
Max. air current	<0.2 m/s
Humidity range	40 - 80%
Humidity fluctuations	5%   4 h
Power supply	100 - 240 V; 50 - 60 Hz
Power consumption	64.5 W

## Dimensions

Weighing pan diameter	90 mm
Dimensions (L × W × H)	501 × 240 × 301 mm
Dimensions (L × W × H) with control unit removed	376.5 × 240 × 301 mm
Weight (approx.)	16 kg
Optimal height for setup	80 cm

## Applications

OIML calibration range RS	1000 g
OIML calibration range E1	200 g - 1000 g
OIML calibration range E2	20 g - 1000 g
OIML calibration range F1	500 mg - 1000 g
OIML calibration range F2	50 mg - 1000 g
OIML calibration range M1	1 mg - 1000 g
OIML calibration range M2	100 mg - 1000 g
OIML calibration range M3	1 g - 1000 g
ASTM E617 calibration range Class 000	300 g - 1000 g
ASTM E617 calibration range Class 00	200 g - 1000 g
ASTM E617 calibration range Class 0	50 g - 1000 g
ASTM E617 calibration range Class 1	20 g - 1000 g
ASTM E617 calibration range Class 2	20 g - 1000 g
ASTM E617 calibration range Class 3	500 mg - 1000 g
ASTM E617 calibration range Class 4	200 mg - 1000 g
ASTM E617 calibration range Class 5	20 mg - 1000 g
ASTM E617 calibration range Class 6	2 mg - 1000 g
ASTM E617 calibration range Class 7	10 mg - 1000 g

## Optional Accessories

External calibration weight	500 g   E2 YCW552-02
Climate module, uncalibrated	YCM20MC
Calibration of a YCM20MC climate module with DAkkS calibration certificate	YCM20DAkkS
Climate module with DAkkS calibration certificate	YCM20MC-DAkkS
Tower for climate module, for mounting YCM20MC	YCM20MC-Tower
Weighing table	YWT03

## **Germany**

Sartorius Lab Instruments  
GmbH & Co. KG  
Otto-Brenner-Strasse 20  
37079 Goettingen  
Phone +49 551 308 0

## **USA**

Sartorius Corporation  
565 Johnson Avenue  
Bohemia, NY 11716  
Phone +1 631 254 4249  
Toll-free +1 800 635 2906

 **For further information, visit**  
[sartorius.com](https://www.sartorius.com)