



Sartorius Cubis® Series

Advantages

- Modular design offering the widest variety of customizable versions
- Settings configurable to user-specific requirements
- Customized integration into existing applications by Q-Apps
- Motorized leveling function*
- The highest accuracy, even for the smallest sample quantities

* For all models up to a maximum capacity of 6.2 kg, except for models with a readability of 1 µg or 0.1 µg



Product Description

The Cubis® modular system, consisting of display and control units, weighing modules, draft shields and interface modules and an extensive range of accessories, enables the balance to be customized to any weighing tasks. The metrological specifications and equipment features of Cubis® set it apart from other weighing instruments – far beyond the usual standards of premium laboratory balances. With a finely graduated range of weighing capacities of up to 70 kg and readabilities from 0.1 µg to 1 g, Cubis® offers the ideal choice of model for any application.

Technical Specifications

General Specifications	
Power supply	100–240 V~, –15%/+10%, 50–60 Hz, 1.0 A
Input voltage	15 VDC, ± 5%
Power consumption	7W (max.)
Ambient temperature	Operating temperature +5°C to +40°C
Highest relative humidity	80% for temperatures up to 31°C, decreasing linearly to 50% relative humidity for 40°C
Safety of electrical equipment	According to EN 61010-1:2001: Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 1: General requirements
Electromagnetic compatibility	According to EN 61326-1:2006: Electrical equipment for measurement, control, and laboratory use – EMC requirements – Part 1: General requirements
Defined immunity to interference	Suitable for use in industrial areas

Cubis® Display and Control Units



Type	MSA	MSU	MSE
Operation	Touch screen, keys for main basic functions	Keys	Keys
Display	High-resolution color TFT, 5.7" graphic display	High-resolution black-and-white, 5.7" graphic display	Liquid crystal display, black-and-white
Adaptation of the display and control unit	Tilttable display, removable display and control unit		Removable display and control unit
Standard data interfaces	<ul style="list-style-type: none"> – USB port (integrated into weighing module) – RS-232C accessory interface, 25-pin (integrated into weighing module) – Various data communication protocols available (can also be connected to software designed for external manufacturers) – Ethernet (integrated into display unit) 		<ul style="list-style-type: none"> – USB port (integrated into weighing module) – RS-232C accessory interface, 25-pin (integrated into weighing module)
SD card reader	Integrated as standard into display and control unit		–
Operation of the motorized draft shield (only for DA, DI, DM draft shields)	Activated by side keys or touch-free using IR sensor (optional); learning capability		Activated by key or touch-free using IR sensor (optional); learning capability
Applications	Mass unit conversion, SQmin function for minimum 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		Mass unit conversion, isoCAL automatic calibration adjustment function, density determination (buoyancy method only), calculations, averaging, net total formulation, weighing in percent, counting, totalizing

Cubis® Weighing Modules

Ultra-Micro Balances, 0.0001 mg

Model		2.7S	2.7S (with DF filter draft shield)
Readability	mg	0.0001	0.0001
Weighing capacity	g	2.1	2.1
Tare range (subtractive)	g	– 2.1	– 2.1
Repeatability	≤±mg	0.00025	0.00025
Linearity	≤±mg	0.0009	0.0009
Off-center loading (eccentricity) (test load [g])	mg	0.0025 (1)	0.0025 (1)
Optimal minimum weight*	mg	0.082	–
Sensitivity drift between +10°C to +30°C	±ppm/K	1	1
Typical stabilization time	s	< 7	< 7
Typical response time	s	< 10	< 10
External standard calibration value (min. accuracy class)	g	2 (E2)	2 (E2)
Display update rate (depending on the filter level setting)	s	0.1 – 0.4	0.1 – 0.4
Weighing pan size Ø	mm	20	50
Weighing chamber height	mm	70	15
Type of protection		Protected against dust and water	

* = According to USP (United States Pharmacopeia) Chapter 41, the operating range is defined from 820 d to maximum weighing capacity. The optimal minimum weight is 820 d and, depending on the installation location and environmental conditions, this value may be higher.

Micro Balances, 0.001 mg

Model		6.6S	6.6S (with DF filter draft shield)	3.6P
Readability	mg	0.001	0.001	0.001 0.002 0.005
Weighing capacity	g	6.1	6.1	1.1 2.1 3.1
Tare range (subtractive)	g	- 6.1	- 6.1	- 3.1
Repeatability	≤±mg	0.001	0.001	0.003 0.004 0.005
Linearity	≤±mg	0.004	0.004	0.004
Off-center loading (eccentricity) (test load [g])	mg	0.004 (2)	0.004 (2)**	0.005 (1)
Optimal minimum weight*	mg	0.82	-	0.82
Sensitivity drift between +10°C to +30°C	±ppm/K	1	1	1
Typical stabilization time	s	< 5	< 5	< 5
Typical response time	s	< 8	< 8	< 8
External standard calibration value (min. accuracy class)	g	5 (E2)	5 (E2)	3 (E2)
Display update rate (depending on the filter level setting)	s	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4
Weighing pan size Ø	mm	30	50	30
Weighing chamber height	mm	70	15	70
Type of protection		Protected against dust and water		

High-Capacity Micro Balances, 0.001 mg

Model		66S	66P	36S	36P	116P
Readability	mg	0.001	0.001 0.01	0.001	0.001 0.01	0.002 0.01
Weighing capacity range levels	g	61	12 61	31	6 31	12 111
Tare range (subtractive)	g	61	61	31	31	111
Repeatability (100 g 5 g)	≤±mg	-	-	-	-	0.010 0.004
Repeatability (50 g 2 g)	≤±mg	0.004 0.0015	0.010 0.002	-	-	-
Repeatability (20 g 1 g)	≤±mg	-	-	0.002 0.0015	0.008 0.0015	-
Linearity	≤±mg	0.020	0.020	0.015	0.015	0.02
Off-center loading (eccentricity) (test load [g])	mg	0.020	0.020	0.015	0.015	0.03 (50)
Optimal minimum weight*	mg	0.82	0.82	0.82	0.82	1.64
Sensitivity drift between +10°C to +30°C	±ppm/K	1	1	1	1	1
Typical stabilization time	s	3.5	3.5	3.5	3.5	3.5
Typical response time	s	10	10	10	10	10
External standard calibration value (min. accuracy class)	g	50 (E2)	50 (E2)	20 (E2)	20 (E2)	100 (E2)
Display update rate (depending on the filter level setting)	s	0.2 – 0.4	0.2 – 0.4	0.2 – 0.4	0.2 – 0.4	0.2 – 0.4
Weighing pan size Ø	mm	30 50**	30 50**	30	30	50
Weighing chamber height	mm	181	181	181	181	240
Type of protection		Protected against dust and water				

* = According to USP (United States Pharmacopeia) Chapter 41, the operating range is defined from 820 d to maximum weighing capacity. The optimal minimum weight is 820 d and, depending on the installation location and environmental conditions, this value may be higher.

** = All specifications are based on measurements performed with the 30 mm standard weighing pan (50 mm diameter pan used for 116P).

Semi-Micro Balances, 0.01 mg

Model		225S	225P	125P
Readability	mg	0.01	0.01 0.02 0.05	0.01 0.1
Weighing capacity	g	220	60 120 220	60 120
Tare range (subtractive)	g	- 220	- 220	- 120
Repeatability	≤±mg	0...60 g: 0.015 60...220 g: 0.025	0...60 g: 0.015 60...220 g: 0.04	0...60 g: 0.015 60...120 g: 0.06
Linearity	≤±mg	0.1	0.15	0.15
Off-center loading (eccentricity) (test load [g])	mg	0.15 (100)	0.2 (100)	0.15 (50)
Optimal minimum weight*	mg	8.2	8.2	8.2
Sensitivity drift between +10°C to +30°C	±ppm/K	1	1	1
Typical stabilization time	s	≤ 2	≤ 2	≤ 2
Typical response time	s	≤ 6	≤ 6	≤ 6
External standard calibration value (min. accuracy class)	g	200 (E2)	200 (E2)	100 (E2)
Display update rate (depending on the filter level setting)	s	0.2 – 0.4	0.2 – 0.4	0.2 – 0.4
Weighing pan size (W × D)	mm	85 × 85	85 × 85	85 × 85
Weighing chamber height (DU draft shield)	mm	261	261	261
Type of protection		Protected against dust and water		

Analytical Balances, 0.1 mg

Model		524S	524P	324S	324P	224S	124S
Readability	mg	0.1	0.1 0.2 0.5	0.1	0.1 0.2 0.5	0.1	0.1
Weighing capacity	g	520	120 240 520	320	80 160 320	220	120
Tare range (subtractive)	g	- 520	- 520	- 320	- 320	- 220	- 120
Repeatability	≤±mg	0.1	0.15 0.2 0.4	0.1	0.1 0.2 0.4	0.07	0.1
Linearity	≤±mg	0.4	0.5	0.3	0.5	0.2	0.2
Off-center loading (eccentricity) (test load [g])	mg	0.3 (200)	0.4 (200)	0.3 (200)	0.4 (200)	0.2 (100)	0.2 (50)
Optimal minimum weight*	mg	82	82	82	82	82	82
Sensitivity drift between +10°C to +30°C	±ppm/K	1	1	1	1	1	1
Typical stabilization time	s	< 1	< 1	< 1	< 1	< 1	< 1
Typical response time	s	< 3	< 3	< 3	< 3	< 3	< 3
External standard calibration value (min. accuracy class)	g	500	500	200+100 (E2)	200+100 (E2)	200 (E2)	100 (E2)
Display update rate (depending on the filter level setting)	s	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4
Weighing pan size (W × D)	mm	85 × 85	85 × 85	85 × 85	85 × 85	85 × 85	85 × 85
Weighing chamber height (DU draft shield)	mm	261	261	261	261	261	261
Type of protection		IP54 in accordance with IEC 60529					

* = According to USP (United States Pharmacopeia) Chapter 41, the operating range is defined from 820 d to maximum weighing capacity. The optimal minimum weight is 820 d and, depending on the installation location and environmental conditions, this value may be higher.

Precision Balances, 1 mg

Model		5203S	5203P	3203S	2203S	2203P	1203S
Readability	mg	1	1 2 5	1	1	1 10	1
Weighing capacity	g	5,200	1,200 2,400 5,200	3,200	2,200	1,010 2,200	1,200
Tare range (subtractive)	g	- 5,200	- 5,200	- 3,200	- 2,200	- 2,200	- 1,200
Repeatability	≤±mg	1	1	1	1	1 6	0.7
Linearity	≤±mg	5	5	5	3	5	2
Off-center loading (eccentricity) (test load [g])	mg	2 (2,000)	2 (2,000)	2 (1,000)	2 (1,000)	3 (1,000)	2 (500)
Optimal minimum weight*	g	0.82	0.82	0.82	0.82	0.82	0.82
Sensitivity drift between +10°C to +30°C	±ppm/K	1	1	1	1	1	1.5
Typical stabilization time	s	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1
Typical response time	s	≤ 2	≤ 2	≤ 2	≤ 1.5	≤ 1.5	≤ 1.5
External standard calibration value (min. accuracy class)	g	5,000	5,000	2,000	2,000 (E2)	1,000 (E2)	1,000 (E2)
Display update rate (depending on the filter level setting)	s	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4
Weighing pan size (W × D)	mm	140 × 140	140 × 140	140 × 140	140 × 140	140 × 140	140 × 140
Weighing chamber height (DE draft shield)	mm	172	172	172	172	172	172
Type of protection		Protected against dust and water					

Model		623S	623P	323S
Readability	mg	1	1 2 5	1
Weighing capacity	g	620	150 300 620	320
Tare range (subtractive)	g	- 620	- 620	- 320
Repeatability	≤±mg	0.7	1 2 4	0.7
Linearity	≤±mg	2	5	2
Off-center loading (eccentricity) (test load [g])	mg	2 (200)	4 (200)	2 (200)
Optimal minimum weight*	g	0.82	0.82	0.82
Sensitivity drift between +10°C to +30°C	±ppm/K	2	2	2
Typical stabilization time	s	≤ 0.8	≤ 0.8	≤ 0.8
Typical response time	s	≤ 1	≤ 1	≤ 1
External standard calibration value (min. accuracy class)	g	500 (E2)	500 (F1)	200 (E2)
Display update rate (depending on the filter level setting)	s	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4
Weighing pan size (W × D)	mm	140 × 140	140 × 140	140 × 140
Weighing chamber height (DE draft shield)	mm	172	172	172
Type of protection		Protected against dust and water		

* = According to USP (United States Pharmacopeia) Chapter 41, the operating range is defined from 820 d to maximum weighing capacity. The optimal minimum weight is 820 d and, depending on the installation location and environmental conditions, this value may be higher.

Precision Balances, 10 mg

Model		14202S	14202P	10202S	8202S
Readability	mg	10	10 20 50	10	10
Weighing capacity	g	14,200	3,500 7,000 14,200	10,200	8,200
Tare range (subtractive)	g	- 14,200	- 14,200	- 10,200	- 8,200
Repeatability	≤±mg	10	10 20 40	7	7
Linearity	≤±mg	30	50	20	20
Off-center loading (eccentricity) (test load [g])	mg	20 (5,000)	40 (5,000)	20 (5,000)	20 (5,000)
Optimal minimum weight*	g	8.2	8.2	8.2	8.2
Sensitivity drift between +10°C to +30°C	±ppm/K	1.5	1.5	2	2
Typical stabilization time	s	1	1	1	1
Typical response time	s	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5
External standard calibration value (min. accuracy class)	kg	10 (E2)	10 (E2)	10 (E2)	5 (E2)
Display update rate (depending on the filter level setting)	s	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4
Weighing pan size (W × D)	mm	206 × 206	206 × 206	206 × 206	206 × 206
Type of protection		IP54 in accordance with IEC 60529			

Model		6202S	6202P	5202S	4202S
Readability	mg	10	10 20 50	10	10
Weighing capacity	g	6,200	1,500 3,000 6,200	5,200	4,200
Tare range (subtractive)	g	- 6,200	- 6,200	- 5,200	- 4,200
Repeatability	≤±mg	7	7 20 40	6	7
Linearity	≤±mg	20	50	10	20
Off-center loading (eccentricity) (test load [g])	mg	20 (2,000)	50 (2,000)	10 (2,000)	30 (2,000)
Optimal minimum weight*	g	8.2	8.2	8.2	8.2
Sensitivity drift between +10°C to +30°C	±ppm/K	2	2	2	2
Typical stabilization time	s	1	1	0.8	0.8
Typical response time	s	≤ 1.5	≤ 1.5	≤ 1	≤ 1
External standard calibration value (min. accuracy class)	kg	5 (E2)	5 (F1)	5	2 (E2)
Display update rate (depending on the filter level setting)	s	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4
Weighing pan size (W × D)	mm	206 × 206	206 × 206	140 × 140	206 × 206
Type of protection		IP54 in accordance with IEC 60529			

* = According to USP (United States Pharmacopeia) Chapter 41, the operating range is defined from 820 d to maximum weighing capacity. The optimal minimum weight is 820 d and, depending on the installation location and environmental conditions, this value may be higher.

Precision Balances, 10 and 100 mg

Model		2202S	1202S	12201S	8201S	5201S
Readability	mg	10	10	100	100	100
Weighing capacity	g	2,200	1,200	12,200	8,200	5,200
Tare range (subtractive)	g	- 2,200	- 1,200	- 12,200	- 8,200	- 5,200
Repeatability	≤±mg	7	7	50	50	50
Linearity	≤±mg	20	20	100	100	100
Off-center loading (eccentricity) (test load [g])	mg	20 (1,000)	20 (500)	200 (5,000)	200 (5,000)	200 (2,000)
Optimal minimum weight*	g	8.2	8.2	82	82	82
Sensitivity drift between +10°C to +30°C	±ppm/K	2	2	4	4	4
Typical stabilization time	s	0.8	0.8	0.8	0.8	0.8
Typical response time	s	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1
External standard calibration value (min. accuracy class)	kg	2 (F1)	1 (F1)	10 (F1)	5 (F2)	5 (F2)
Display update rate (depending on the filter level setting)	s	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4
Weighing pan size (W × D)	mm	206 × 206	206 × 206	206 × 206	206 × 206	206 × 206
Type of protection		IP54 in accordance with IEC 60529				

* = According to USP (United States Pharmacopeia) Chapter 41, the operating range is defined from 820 d to maximum weighing capacity. The optimal minimum weight is 820 d and, depending on the installation location and environmental conditions, this value may be higher.

High-Capacity Precision Balances, 100 mg and 1,000 mg

Model		70201S	36201S	36201P	20201S
Readability	mg	100	100	100 1,000	100
Weighing capacity	g	70,200	36,200	10,200 36,200	20,200
Tare range (subtractive)	g	- 70,200	- 36,200	- 36,200	- 20,200
Repeatability	≤±mg	100	100	100 500	100
Linearity	≤±mg	500	200	200	200
Off-center loading (eccentricity) (test load [g])	mg	500 (20,000)	300 (10,000)	300 (10,000)	300 (5,000)
Optimal minimum weight*	g	82	82	82	82
Sensitivity drift between +10°C to +30°C	±ppm/K	3	2	2	2
Typical response time	s	1.5	1.5	1.5	1.5
External standard calibration value (min. accuracy class)	kg	20 (F1)	10 (F1)	10 (F1)	10 (F1)
Display update rate (depending on the filter level setting)	s	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4
Weighing pan size (W × D)	mm	400 × 300	400 × 300	400 × 300	400 × 300
Type of protection		IP54 in accordance with IEC 60529			

Model		70200S	36200S
Readability	mg	1,000	1,000
Weighing capacity	g	70,200	36,200
Tare range (subtractive)	g	- 70,200	- 36,200
Repeatability	≤±mg	500	500
Linearity	≤±mg	1,000	1,000
Off-center loading (eccentricity) (test load [g])	mg	1,000 (20,000)	1,000 (10,000)
Optimal minimum weight*	g	820	820
Sensitivity drift between +10°C to +30°C	±ppm/K	2	3
Typical response time	s	1	1
External standard calibration value (min. accuracy class)	kg	20 (F1)	10 (F1)
Display update rate (depending on the filter level setting)	s	0.1 – 0.4	0.1 – 0.4
Weighing pan size (W × D)	mm	400 × 300	400 × 300
Type of protection		IP54 in accordance with IEC 60529	

* = According to USP (United States Pharmacopeia) Chapter 41, the operating range is defined from 820 d to maximum weighing capacity. The optimal minimum weight is 820 d and, depending on the installation location and environmental conditions, this value may be higher.

Verified Models with EC Type Approval Certificate for Use in Legal Metrology: Micro and Ultra-Micro Balances, 0.001 mg and 0.0001 mg

Model		6.6S-xCE	2.7S-xCE	3.6P-xCE
Accuracy class*	mg	I	I	I
For verified models: EC Type Approval Certificate D09-09-015, type: MSX				
Scale interval, d*	mg	0.001	0.0001	0.001
Maximum capacity, Max*	g	6.1	2.1	3.1
Verification scale interval, e*	mg	1	1	1
Minimum capacity, Min*	mg	0.1	0.01	0.1
Tare-balancing range (subtractive)	g	≤ 100% of max. weighing capacity		
Application range according to DIR*	g	0.001 – 6.1	0.001 – 2.1	0.001 – 3.1
Optimal minimum weight**	mg	0.82	0.082	0.82
Typical stabilization time	s	≤ 5	≤ 7	≤ 5
Typical response time	s	≤ 8	≤ 10	≤ 8
External standard calibration value (min. accuracy class)	g	5 (E2)	2 (E2)	3 (E2)
Application range (temperature)		With "isoCAL" function: +5°C to +40°C Without "isoCAL" function: +15°C to +25°C		
Display update rate (depending on the filter level setting)	s	By selection of 1 of 4 optimized filter levels		
Weighing pan size Ø	mm	30	20	30
Weighing chamber height (DM draft shield)	mm	70	70	70
Type of protection		Protected against dust and water		

* DIR = Directive 2014/31/EU on non-automatic weighing instruments used within the European Economic Area

** = According to USP (United States Pharmacopeia) Chapter 41, the operating range is defined from 820 d to maximum weighing capacity. The optimal minimum weight is 820 d and, depending on the installation location and environmental conditions, this value may be higher.

Verified Models with EC Type Approval Certificate: High-Capacity Micro Balances****

Model		66S-OCE	66P-OCE	36S-OCE	36P-OCE	116P-OCE
Accuracy class*		I	I	I	I	I
For conformity-assessed (verified) models		type: MSY				
Scale interval, d*	mg	0.001	0.001 0.01	0.001	0.001 0.01	0.002 0.01
Maximum capacity, Max*	g	61	12 61	31	6 31	12 111
Verification scale interval, e*	mg	1	1	1	1	1
Minimum capacity, Min*	≤±mg	0.1	0.1	0.1	0.1	0.2
Tare-balancing range (subtractive)		< 100% of max. weighing capacity				
Application range according to DIR*	g	0.0001 – 61	0.0001 – 61	0.0001 – 31	0.0001 – 31	0.0002 – 61
Optimal minimum weight**	mg	0.82	0.82	0.82	0.82	1.64
Typical stabilization time	s	3.5	3.5	3.5	3.5	3.5
Typical response time	s	10	10	10	10	10
Application range (temperature)		With "isoCAL" function: +10°C to +30°C Without "isoCAL" function: +15°C to +25°C				
Display update rate (depending on the filter level setting)	s	0.2 – 0.4	0.2 – 0.4	0.2 – 0.4	0.2 – 0.4	0.2 – 0.4
Weighing pan size Ø	mm	30 50**	30 50**	30	30	50 90**
Weighing chamber height	mm	181	181	181	181	240
Type of protection		Protected against dust and water				

* DIR = Directive 2014/31/EU on non-automatic weighing instruments used within the European Economic Area

** = According to USP (United States Pharmacopeia) Chapter 41, the operating range is defined from 820 d to maximum weighing capacity.

The optimal minimum weight is 820 d and, depending on the installation location and environmental conditions, this value may be higher.

*** = The metrological specifications refer to a pan diameter Ø size = 30 mm (= 50 mm Ø for weighing module 116P-OCE).

**** = All verified balance models will be available as of December 2017.

Verified Models with EC Type Approval Certificate for Use in Legal Metrology: Semi-Micro Balances, 0.01 mg

Model		225S-xCE	225P-xCE	125P-xCE
Accuracy class*	mg	I	I	I
For verified models: EC Type Approval Certificate D09-09-015, type: MSX				
Scale interval, d*	mg	0.01	0.01 0.02 0.05	0.01 0.1
Maximum capacity, Max*	g	220	60 120 220	60 120
Verification scale interval, e*	mg	1	1	1
Minimum capacity, Min*	mg	1	1	1
Tare-balancing range (subtractive)		≤ 100% of max. weighing capacity		
Application range according to DIR*	g	0.001 – 220	0.001 – 220	0.001 – 120
Optimal minimum weight**	mg	8.2	8.2	8.2
Typical stabilization time	s	≤ 2	≤ 2	≤ 2
Typical response time	s	≤ 6	≤ 6	≤ 6
External standard calibration value (min. accuracy class)	g	200 (E2)	200 (E2)	100 (E2)
Application range (temperature)		With "isoCAL" function: +5°C to +40°C Without "isoCAL" function: +15°C to +25°C		
Adaptation to ambient conditions		By selection of 1 of 4 optimized filter levels		
Display update rate (depending on the filter level setting)	s	0.2 – 0.4	0.2 – 0.4	0.2 – 0.4
Weighing pan size (W × D)	mm	85 × 85	85 × 85	85 × 85
Weighing chamber height (DU draft shield)	mm	261	261	261
Type of protection		Protected against dust and water		

* DIR = Directive 2014/31/EU on non-automatic weighing instruments used within the European Economic Area

** = According to USP (United States Pharmacopeia) Chapter 41, the operating range is defined from 820 d to maximum weighing capacity. The optimal minimum weight is 820 d and, depending on the installation location and environmental conditions, this value may be higher.

Verified Models with EC Type Approval Certificate for Use in Legal Metrology: Analytical Balances, 0.1 mg

Model		524S-xCE	524P-xCE	324S-xCE	224S-xCE	324P-xCE	124S-xCE
Accuracy class*		I	I	I	I	I	I
For verified models: EC Type Approval Certificate D09-09-015, type: MSX							
Scale interval, d*	mg	0.1	0.1 0.2 0.5	0.1	0.1	0.1 0.2 0.5	0.1
Maximum capacity, Max*	g	520	120 240 520	320	220	80 160 320	120
Verification scale interval, e*	mg	1	1	1	1	1	1
Minimum capacity, Min*	mg	10	10	10	10	10	10
Tare-balancing range (subtractive)	g	≤ 100% from max. weighing capacity					
Application range according to DIR*	g	0.01–520	0.01–520	0.01–320	0.01–220	0.01–320	0.01–120
Optimal minimum weight**	mg	82	82	82	82	82	82
Typical stabilization time	s	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1
Typical response time	s	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3
External standard calibration value (min. accuracy class)	g	500	500 (E2)	200+100 (E2)	200 (E2)	200+100 (E2)	100
Application range (temperature)		With "isoCAL" function: +5°C to +40°C Without "isoCAL" function: +15°C to +25°C					
Display update rate (depending on the filter level setting)	s	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4
Weighing pan size (W × D)	mm	85 × 85	85 × 85	85 × 85	85 × 85	85 × 85	85 × 85
Weighing chamber height (DU draft shield)	mm	261	261	261	261	261	261
Type of protection		IP54 in accordance with IEC 60529					

Verified Models with EC Type Approval Certificate for Use in Legal Metrology: Precision Balances

Model		5203S-xCE	5203P-xCE	3203S-xCE	2203S-xCE	2203P-xCE	1203S-xCE
Accuracy class*		I	I	I	I	I	I
For verified models: EC Type Approval Certificate D09-09-015, type: MSX							
Scale interval, d*	mg	1	1 2 5	1	1	1 10	1
Maximum capacity, Max*	g	5,200	1,200 2,400 5,200	3,200	2,200	1,010 2,200	1,200
Verification scale interval, e*	mg	10	10	10	10	10	10
Minimum capacity, Min*	mg	100	100	100	100	100	100
Tare-balancing range (subtractive)	g	≤ 100% of max. weighing capacity					
Application range according to DIR*	g	0.1 – 5,200	0.1 – 5,200	0.1 – 3,200	0.1 – 2,200	0.1 – 2,200	0.1 – 1,200
Optimal minimum weight**	g	0.82	0.82	0.82	0.82	0.82	0.82
Typical stabilization time	s	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1
Typical response time	s	≤ 2	≤ 2	≤ 2	≤ 1.5	≤ 1.5	≤ 1.5
External standard calibration value (min. accuracy class)	g	5,000	5,000	2,000	2,000 (E2)	1,000 (E2)	1,000 (E2)
Application range (temperature)		With "isoCAL" function: +5°C to +40°C Without "isoCAL" function: +15°C to +25°C					
Display update rate (depending on the filter level setting)	s	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4
Weighing pan size (W × D)	mm	140 × 140	140 × 140	140 × 140	140 × 140	140 × 140	140 × 140
Weighing chamber height (DE draft shield)	mm	172	172	172	172	172	172
Type of protection		Protected against dust and water					

* DIR = Directive 2014/31/EU on non-automatic weighing instruments used within the European Economic Area

** = According to USP (United States Pharmacopeia) Chapter 41, the operating range is defined from 820 d to maximum weighing capacity. The optimal minimum weight is 820 d and, depending on the installation location and environmental conditions, this value may be higher.

Verified Models with EC Type Approval Certificate for Use in Legal Metrology: Precision Balances

Model		623S-xCE	623P-xCE	323S-xCE
Accuracy class*	mg	Ⓔ	Ⓔ	Ⓔ
For verified models: EC Type Approval Certificate D09-09-015, type: MSX				
Scale interval, d*	mg	1	1 2 5	1
Maximum capacity, Max*	g	620	150 300 620	320
Verification scale interval, e*	mg	10	10	10
Minimum capacity, Min*	mg	20	20	20
Tare-balancing range (subtractive)		≤ 100% of max. weighing capacity		
Application range according to DIR*	g	0.02 – 620	0.02 – 620	0.02 – 320
Optimal minimum weight**	g	0.82	0.82	0.82
Typical stabilization time	s	≤ 0.8	≤ 0.8	≤ 0.8
Typical response time	s	≤ 1	≤ 1	≤ 1
Application range (temperature)		With "isoCAL" function: +5°C to +40°C Without "isoCAL" function: +10°C to +30°C		
Display update rate (depending on the filter level setting)	s	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4
Weighing pan size (W × D)	mm	140 × 140	140 × 140	140 × 140
Weighing chamber height (DE draft shield)	mm	172	172	172
Type of protection		Protected against dust and water		

Model		14202S-xCE	14202P-xCE	10202S-xCE	8202S-xCE
Accuracy class*		Ⓘ	Ⓘ	Ⓘ	Ⓔ
For verified models: EC Type Approval Certificate D09-09-015, type: MSX					
Scale interval, d*	g	0.01	0.01 0.02 0.05	0.01	0.01
Maximum capacity, Max*	g	14,200	3,500 7,000 14,200	10,200	8,200
Verification scale interval, e*	g	0.1	0.1	0.1	0.1
Minimum capacity, Min*	g	1	1	1	0.5
Tare-balancing range (subtractive)		≤ 100% of max. weighing capacity			
Application range according to DIR*	g	1 – 14,200	1 – 14,200	1 – 10,200	0.5 – 8,200
Optimal minimum weight**	g	8.2	8.2	8.2	8.2
Typical response time	s	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5
Application range (temperature):					
With "isoCAL" function		+5°C to +40°C	+5°C to +40°C	+5°C to +40°C	+5°C to +40°C
Without "isoCAL" function		+15°C to +25°C	+15°C to +25°C	+15°C to +25°C	+10°C to +30°C
Display update rate (depending on the filter level setting)	s	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4
Weighing pan size (W × D)	mm	206 × 206	206 × 206	206 × 206	206 × 206
Type of protection		IP54 in accordance with IEC 60529			

* DIR = Directive 2014/31/EU on non-automatic weighing instruments used within the European Economic Area

** = According to USP (United States Pharmacopeia) Chapter 41, the operating range is defined from 820 d to maximum weighing capacity. The optimal minimum weight is 820 d and, depending on the installation location and environmental conditions, this value may be higher.

Verified Models with EC Type Approval Certificate for Use in Legal Metrology: Precision Balances

Model		6202S-xCE	6202P-xCE	5202S-xCE	4202S-xCE
Accuracy class*		Ⓐ	Ⓐ	Ⓐ	Ⓐ
For verified models: EC Type Approval Certificate D09-09-015, type: MSX					
Scale interval, d*	g	0.01	0.01 0.02 0.05	0.01	0.01
Maximum capacity, Max*	g	6,200	1,500 3,000 6,200	5,200	4,200
Verification scale interval, e*	g	0.1	0.1	0.1	0.1
Minimum capacity, Min*	g	0.5	0.5	1	0.5
Tare-balancing range (subtractive)		≤ 100% of max. weighing capacity			
Application range according to DIR*	g	0.5 – 6,200	0.5 – 6,200	1 – 5,200	0.5 – 4,200
Optimal minimum weight**	g	8.2	8.2	8.2	8.2
Typical stabilization time	s	≤ 1	≤ 1	≤ 0.8	≤ 0.8
Typical response time	s	≤ 1.5	≤ 1.5	≤ 1	≤ 1
Application range (temperature):					
With "isoCAL" function		+5°C to +40°C	+5°C to +40°C		+5°C to +40°C
Without "isoCAL" function		+10°C to +30°C	+10°C to +30°C		+10°C to +30°C
Display update rate (depending on the filter level setting)	s	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4
Weighing pan size (W × D)	mm	206 × 206	206 × 206	206 × 206	206 × 206
Type of protection		IP54 in accordance with IEC 60529			

Model		2202S-xCE	1202S-xCE	12201S-xCE	8201S-xCE	5201S-xCE
Accuracy class*		Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ
For verified models: EC Type Approval Certificate D09-09-015, type: MSX						
Scale interval, d*	mg	10	10	100	100	100
Maximum capacity, Max*	g	2,200	1,200	12,200	8,200	5,200
Verification scale interval, e*	g	0.1	0.1	1	1	1
Minimum capacity, Min*	g	0.5	0.5	5	5	5
Tare-balancing range (subtractive)		≤ 100% of max. weighing capacity				
Application range according to DIR*	g	0.5 – 2,200	0.5 – 1,200	5 – 12,200	5 – 8,200	5 – 5,200
Optimal minimum weight**	g	8.2	8.2	82	82	82
Typical stabilization time	s	≤ 0.8	≤ 0.8	≤ 0.8	≤ 0.8	≤ 0.8
Typical response time	s	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1
External standard calibration value (min. accuracy class)	kg	2 (F1)	1 (F1)	10 (F1)	5 (F2)	5 (F2)
Application range (temperature)						
With "isoCAL" function: +5°C to +40°C Without "isoCAL" function: +10°C to +30°C						
Display update rate (depending on the filter level setting)	s	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4
Weighing pan size (W × D)	mm	206 × 206	206 × 206	206 × 206	206 × 206	206 × 206
Type of protection		IP54 in accordance with IEC 60529				

* DIR = Directive 2014/31/EU on non-automatic weighing instruments used within the European Economic Area

** = According to USP (United States Pharmacopeia) Chapter 41, the operating range is defined from 820 d to maximum weighing capacity. The optimal minimum weight is 820 d and, depending on the installation location and environmental conditions, this value may be higher.

Verified models with EC Type Approval Certificate for Use in Legal Metrology: High-Capacity Balances

Model		36201S-OCE	36201P-OCE	20201S-OCE
Accuracy class*		Ⓔ	Ⓔ	Ⓔ
For verified models: EC Type Approval Certificate D09-09-015, type: MSX				
Scale interval, d*	mg	100	100 1.000	100
Maximum capacity, Max*	g	36,200	10,200 36,200	20,200
Verification scale interval, e*	g	1	1	1
Minimum capacity, Min*	g	5	5	5
Tare-balancing range (subtractive)		≤ 100% of max. weighing capacity		
Application range according to DIR*	g	5 – 36,200	5 – 36,200	5 – 20,200
Optimal minimum weight**	g	82	82	82
Typical stabilization time	s	≤ 1.5	≤ 1.5	≤ 1.5
Typical response time	s	≤ 2	≤ 2	≤ 2
Application range (temperature)		With "isoCAL" function: +5°C to +40°C Without "isoCAL" function: +10°C to +30°C		
Display update rate (depending on the filter level setting)	s	0.1 – 0.4	0.1 – 0.4	0.1 – 0.4
Weighing pan size (W × D)	mm	400 × 300	400 × 300	400 × 300
IP protection		IP54		
Weighing chamber height (DM draft shield)	mm	70	70	70
Type of protection		Protected against dust and water		

Model		70200S-OCE	36200S-OCE
Accuracy class*		Ⓔ	Ⓔ
For verified models: EC Type-Approval Certificate D09-09-015, type: MSX			
Scale interval, d*	mg	1,000	1,000
Maximum capacity, Max*	g	70,200	36,200
Verification scale interval, e*	g	10	1
Minimum capacity, Min*	g	50	50
Tare-balancing range (subtractive)		≤ 100% of max. weighing capacity	
Application range according to DIR*	g	50 – 70,200	50 – 36,200
Optimal minimum weight**	g	820	820
Typical stabilization time	s	≤ 1	≤ 1
Typical response time	s	≤ 1.2	≤ 1.2
Application range (temperature)		With "isoCAL" function: +5°C to +40°C Without "isoCAL" function: +10°C to +30°C	
Display update rate (depending on the filter level setting)	s	0.1 – 0.4	0.1 – 0.4
Weighing pan size (W × D)	mm	400 × 300	400 × 300
Type of protection (IP rating)		IP54	

* DIR = Directive 2014/31/EU on non-automatic weighing instruments used within the European Economic Area

** = According to USP (United States Pharmacopeia) Chapter 41, the operating range is defined from 820 d to maximum weighing capacity. The optimal minimum weight is 820 d and, depending on the installation location and environmental conditions, this value may be higher.

Cubis® Leveling

- Ø** The Cubis® shows the level indicator on the display and provides support for rapid leveling (a standard feature on the display and control units MSA and MSU; on the MSE there are only symbols to support manual leveling).
- 1** Fully automatic, motorized Q-Level leveling at the touch of a button (available on all Cubis® weighing modules with a weighing capacity of > 6.1 g and ≤ 6,200 g).

Test Certificates and Approvals

- ØØ** Standard certificate of conformity to specifications
- TR** Like ØØ, but with a detailed test report
- CE** Factory-calibrated with European verification approval certificate (not for models with a DF draft shield)

Cubis® Draft Shields

- DØ** Flat, stainless steel weighing pan without a draft shield; for weighing modules with a pan size of 206 × 206 mm and 400 × 300 mm.
- DE** Manual, glass draft shield for precision balances with a readability of 1 mg and for weighing module 5202S.
- DR** Flat, stainless steel weighing pan draft shield (removable, with no glass components) for precision balances with a readability of 1 mg and for weighing module 5202S.
- DU** Manual, glass analytical balance draft shield with smooth-action doors that open wide and provide unimpeded access to the weighing chamber without interfering braces. For models with 0.01 mg, 0.1 mg and 1 mg readability and for weighing module 5202S.
- DA** Automatic, glass motorized draft shield with learning capability for user-friendly operation and easy customization to the changing requirements of different applications. For models with 0.01 mg, 0.1 mg and 1 mg readability and for weighing module 5202S.
- DI** Automatic, glass motorized draft shield with integrated ionizer to eliminate the interfering electrostatic charges on samples and sample containers; learning capability for user-friendly operation and easy customization to the changing requirements of different applications. For models with 0.01 mg, 0.1 mg and 1 mg readability and for weighing module 5202S.
- DM** Automatic, motorized, round all-glass draft shield with learning capability for ultra-micro and micro balances with a readability of 0.0001 mg and 0.001 mg (2.7S, 6.6S and 3.6P weighing modules).
- DF** Manual, stainless steel draft shield for weighing filters with a diameter of up to 50 mm (75 mm and 90 mm pans are optional) on ultra-micro and micro balances with a readability of 0.0001 mg and 0.001 mg (not for weighing module 3.6P). Designed to minimize the effects of static electricity.
- DH** Automatic, motorized glass draft shield with learning capability for user-friendly operation and easy customization to the changing requirements of different applications. For weighing modules 66S, 66P, 36S, 36P

Interface Module Options

- IR** RS-232 interface, 25-pin
- IB** *Bluetooth*® interface
- IP** RS-232 interface, 9-pin, incl. PS/2 port

Cubis® Optional Accessories

Printers and Communication	
Data printer verifiable for legal metrology; for connection to RS-232, 25-pin, accessory interface	YDP10-OCE
Thermal transfer direct thermal printer (order paper separately)	YDP30
Standard paper and ink ribbon set for YDP30 (fade-resistant)	69Y03285
Self-adhesive paper and ink ribbon set for YDP30 (fade-resistant)	69Y03286
Self-adhesive labels for Q-App YAPP11 and YDP30, 58 × 100 mm (qty. of 350)	69Y03094
Self-adhesive labels for Q-App YAPP11 and YDP30, 58 × 76 mm (qty. of 500)	69Y03093
Self-adhesive labels for Q-App YAPP11 and YDP30, 58 × 30 mm (qty. of 1,000)	69Y03092
Standard paper for direct thermal printing on YDP30, set of 5 rolls	69Y03287
Self-adhesive paper for direct thermal printing on YDP30, set of 5 rolls	69Y03288
Data printer verifiable for legal metrology; with <i>Bluetooth</i> ® data transmission (with YD001MS-B or IB option only)*	YDP10BT-OCE
Ink ribbon for YDP10-OCE, YDP10BT-OCE and YDP20-OCE	6906918
Paper rolls for printer YDP10-OCE, YDP10BT-OCE and YDP20-OCE; 5 rolls, each with 50 m	6906937
<i>Bluetooth</i> ® data interface for wireless connection of data printer YDP10BT*	YD001MS-B
RS-232C data interface, 9-pin including PS/2 for connecting a computer or keyboard*	YD001MS-P
RS-232C data interface, 25-pin for connection of Cubis® accessories*	YD001MS-R
Display cable, 3 m, for Cubis® MSA and MSU models for detached setup of display and weighing unit (installation by Sartorius Service or in factory [order VF4016])	YCC01-MSD3
Display cable, 3 m, for Cubis® MSE models, for detached setup of display and weighing unit (installation by Sartorius Service or in factory [order VF4016])	YCC01-MSED3
Cable, 3 m, between weighing module and electronics module for Cubis® models with 0.01 mg 0.001 mg 0.0001 mg readability	YCC01-MSM3
Installation display cable, 3 m, for Cubis® models, for separate setup of display and weighing unit	VF4016
RS-232C interface cable to connect a computer with 9-pin; COM interface, length 1.5 m	7357314
Sartorius Wedge for Windows, software for data communication via USB and Ethernet (does not include cable)	YSW02
Displays and Input Output Elements	
MSA control unit with color TFT graphic display and touch screen	YAC01MSA
MSE display unit with backlit LC display and tactile keys (not for weighing modules 66S, 66P, 36S, 36P)	YAC01MSE
MSU display and control unit with backlit black-and-white graphic display and tactile navigation keys	YAC01MSU
Barcode scanner with connecting cable for PS2, 120 mm reading range	YBR03PS2
QR barcode reader with connecting cable	YBR04PS2
Foot switch for printing, taring, or using a different function key; key function selectable by menu code; incl. T-connector	YFS01
Infrared sensor for touch-free activation of functions (e.g., draft shield control)	YHS01MS
Hand switch for printing, taring, or using a different function key; key function selectable by menu code; incl. T-connector	YHS02
Foot switch for draft shield functions: OPEN CLOSED (in combination with DA and DI draft shields only), tare and print	YPE01RC
Additional display, LCD, digit height 13 mm, backlit	YRD03Z
3-segment checkweighing display, red – green – red, for plus minus measurements, incl. T-connector	YRD11Z
Installation display cable, 3 m, for Cubis® models, for separate setup of display and weighing unit	VF4016
RS-232C interface cable to connect PC with 9-pin COM interface, length 1.5 m	7357314
Sartorius Wedge for Windows, software for data communication via USB and Ethernet (does not include cable)	YSW02

* Not available for high-capacity precision models with a weighing capacity of $\geq 20,200$ g.

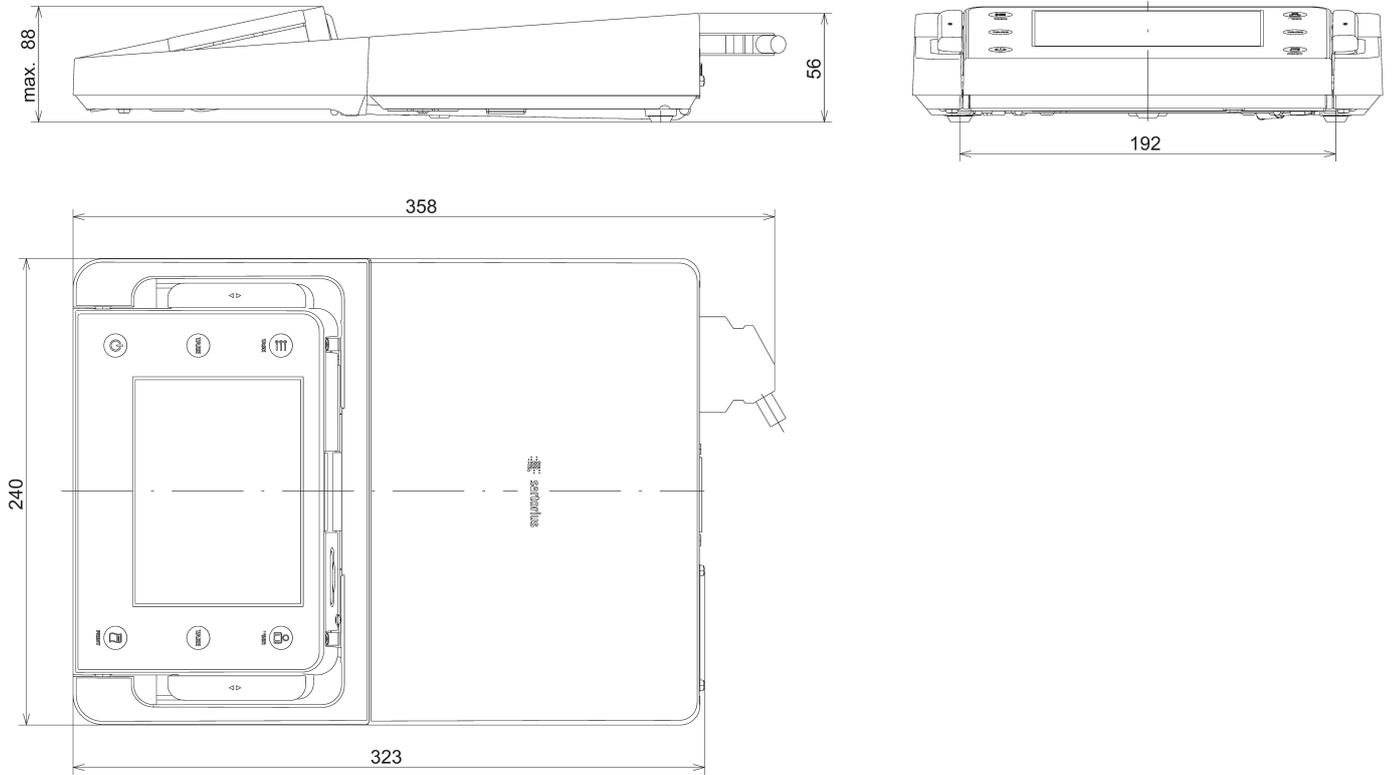
The brand name and logo for *Bluetooth*® wireless technology are owned by Bluetooth SIG Inc. The use of this brand name and trademark by Sartorius AG is under license. Other brand names and trademarks are the property of their respective owners.

Software for Dosing	
Q-App for preparing stock solutions (only for MSA display and control unit)	YAPP16
Pipette Calibration Hardware and Software	
Pipette calibration kit (hardware) for models with 0.1 mg and 0.01 mg readability Consists of moisture trap and all required adapters	YCP04MS
Pipette calibration kit (hardware) for micro balance weighing modules 6.6S and 3.6P Consists of moisture trap and all required adapters	VF988
Pipette Check light V1. Pipette testing according to ISO 8655 for MSA display	YAPP04
Pipette Check Advanced. Pipette testing according to ISO 8655, with pipette database and analysis of the last test series via HTML for MSA display	YAPP42
Filter Weighing and Anti-static Accessories	
Anti-static weighing pan, 130 mm diameter, for weighing modules with a readability of 0.1 mg or 0.01 mg	YWP01MS
Filter weighing pan, 75 mm diameter, for ultra-micro or micro balance models (weighing modules 6.6S, 2.7S; only for use with DF draft shield)	VF2562
Filter weighing pan, 90 mm diameter, for ultra-micro or micro balance models (weighing modules 6.6S, 2.7S; only for use with DF draft shield)	VF2880
Ionization blower to eliminate electrostatic charges on sample containers and samples	YIB01-ODR
Stat-Pen ionization probe for discharging electrostatically charged samples and filters	YSTP01
Ionizer with U-shaped electrode manufactured by HAUG, incl. power supply for 230 V	YIB02-230V
Ionizer with U-shaped electrode manufactured by HAUG, incl. power supply for 115 V	YIB02-115V
Special Applications	
Density determination kit for solids and liquids for weighing modules with a readability of 0.01 mg and 0.1 mg	YDK01MS
Density determination kit for solids and liquids for weighing modules with a readability of 1 mg	YDK02MS
Q-Grip, universal holder for containers used for weighing and for filters of up to 120 mm diameters (replaces the original weighing pan; for Cubis® models with 0.01 and 0.1 mg readability)	YFH01MS
Q-Grid grid weighing pan for Cubis® models with 10 mg or 100 mg readability for weighing under laboratory fume hoods, safety weighing cabinets or workbenches (reduces exposure of the weighing pan to lift by strong air current; replaces the standard weighing pan)	YWP03MS
Climate module, uncalibrated, for high-capacity micro balances (only for weighing modules 66S, 66P, 36S, 36P)	YCM20MC
Climate module for high-capacity micro balances (only for weighing modules 66S, 66P, 36S, 36P) with DAkKS calibration certificate	YCM20MC- DAkKS
Calibration of climate module YCM20MC with DAkKS calibration certificate	YCM20DAkKS
Titanium sample holder for flexibility in accommodating different container sizes comes standard for 66S, 66P, 36S, 36P and 116P weighing modules	YSH02
Slotted titanium weighing pan with 50 mm diameter (standard on weighing modules 66S, 66P, 116P) for large sample containers	YWP09
Slotted titanium weighing pan with 90 mm diameter (only for 116P weighing module)	YWP10

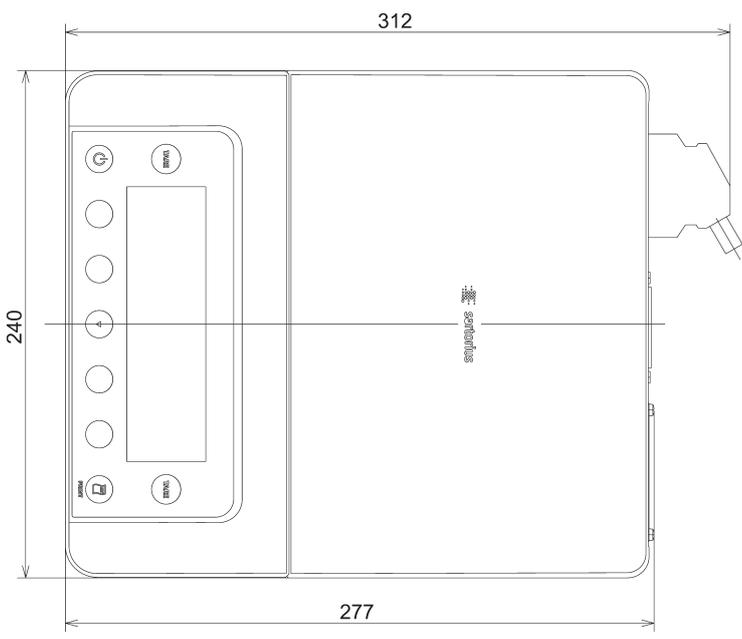
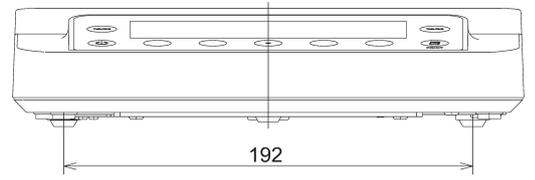
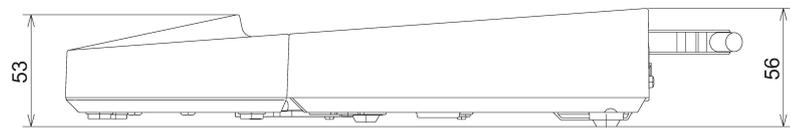
Weighing Tables	
Balance table made of granite, for weighing with vibration dampening	YWT03
Wall console	YWT04
Weighing table made of wood, with decoupled centered granite plate for precise, reliable measurements	YWT09
Weighing Accessories	
Weighing scoop made of chrome nickel steel, 90 × 32 × 8 mm	641214
Aluminum weighing boats, 4.5 mg (qty. of 250) for ultra-micro and micro balance models	6565-250
Aluminum weighing boats, 52 mg (qty. of 50) for ultra-micro and micro balance models	6566-50
Support arm for 10 100 mg precision weighing modules for raised mounting of MSE, MSU, and MSA display and control units	YDH01MS
Support arm for precision weighing modules with 100 mg 1 g readability and a weighing capacity > 20 kg for raised mounting of MSE, MSU, and MSA display and control units	YDH02MS
Hook for below-balance weighing for precision weighing modules with 100 mg 1 g readability and weighing capacity > 20 kg (not for verified models, CE mark)	69EA0040

Balance Dimensions

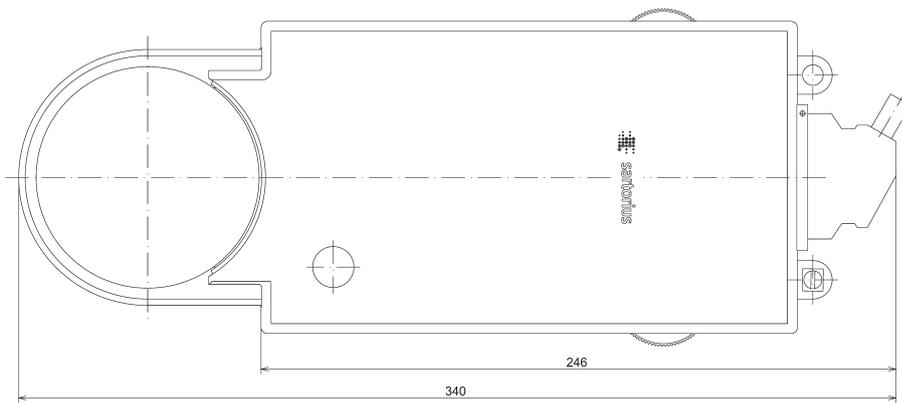
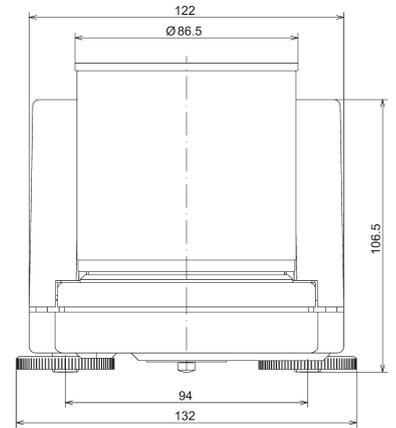
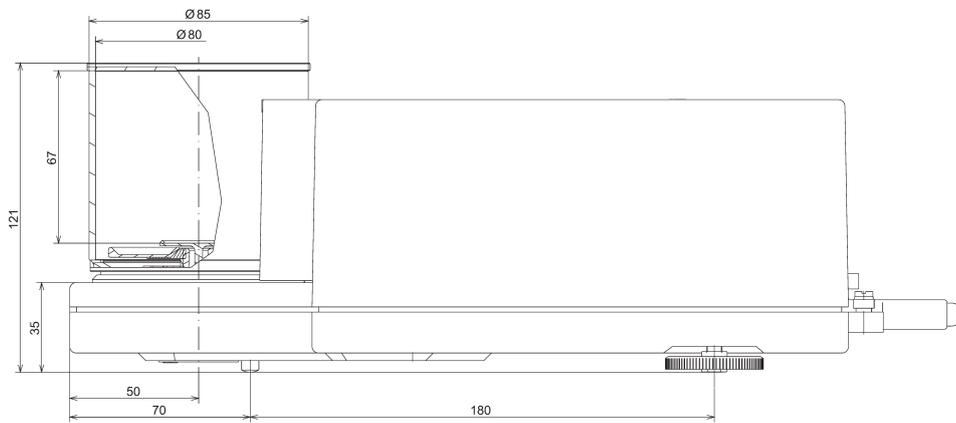
Ultra-Micro Balance | Micro Balance – MSA|MSU Display and Control Unit with Electronics Module
All dimensions are given in millimeters



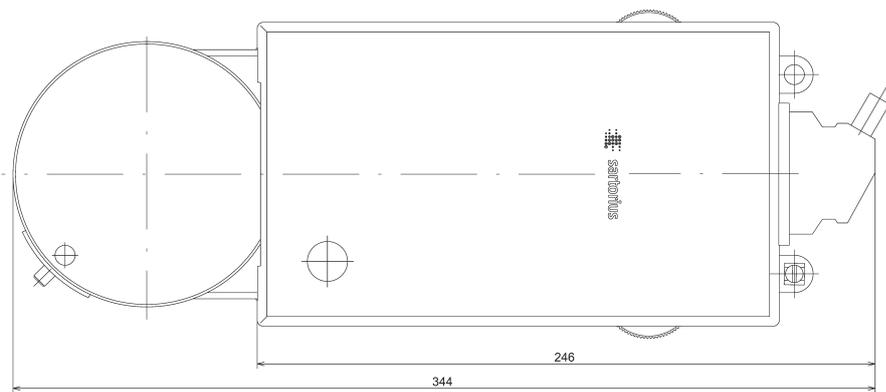
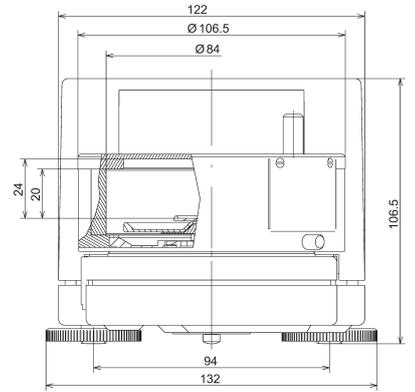
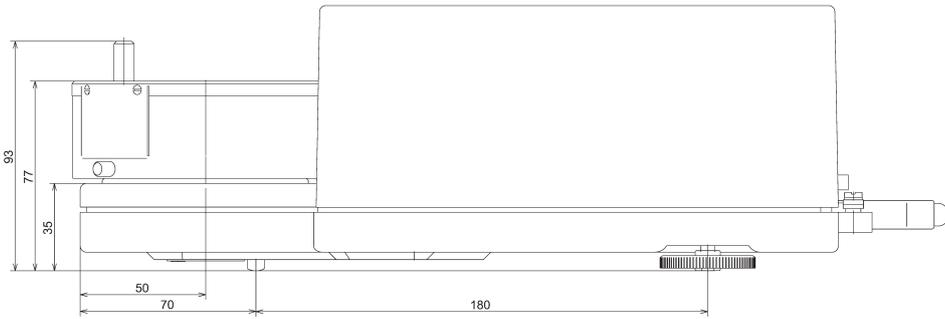
Ultra-Micro Balance | Micro Balance – MSE Display and Control Unit with Electronics Module
All dimensions are given in millimeters



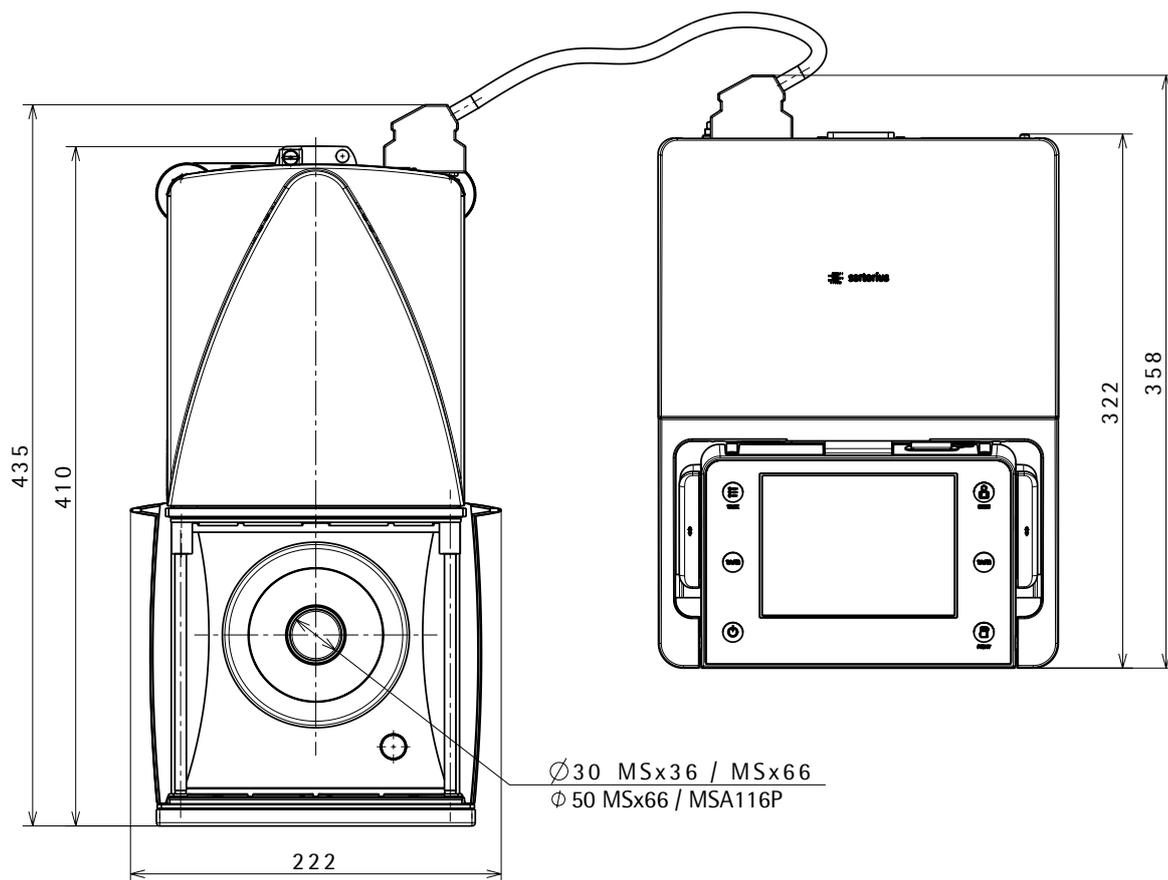
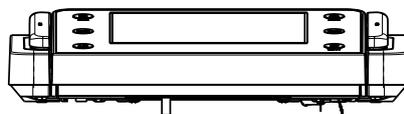
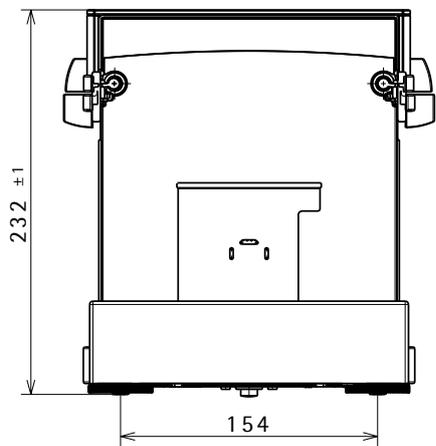
Ultra-Micro Balance | Micro Balance Weighing Module with DM Draft Shield
All dimensions are given in millimeters

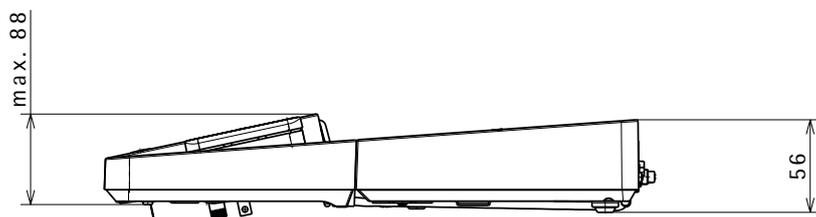
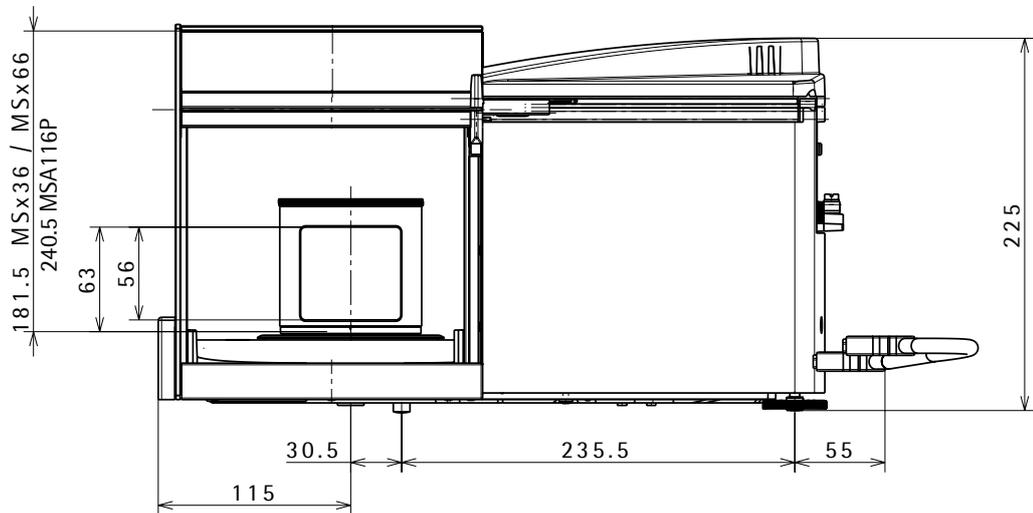


Ultra-Micro Balance | Micro Balance Weighing Module with DF Draft Shield
All dimensions are given in millimeters

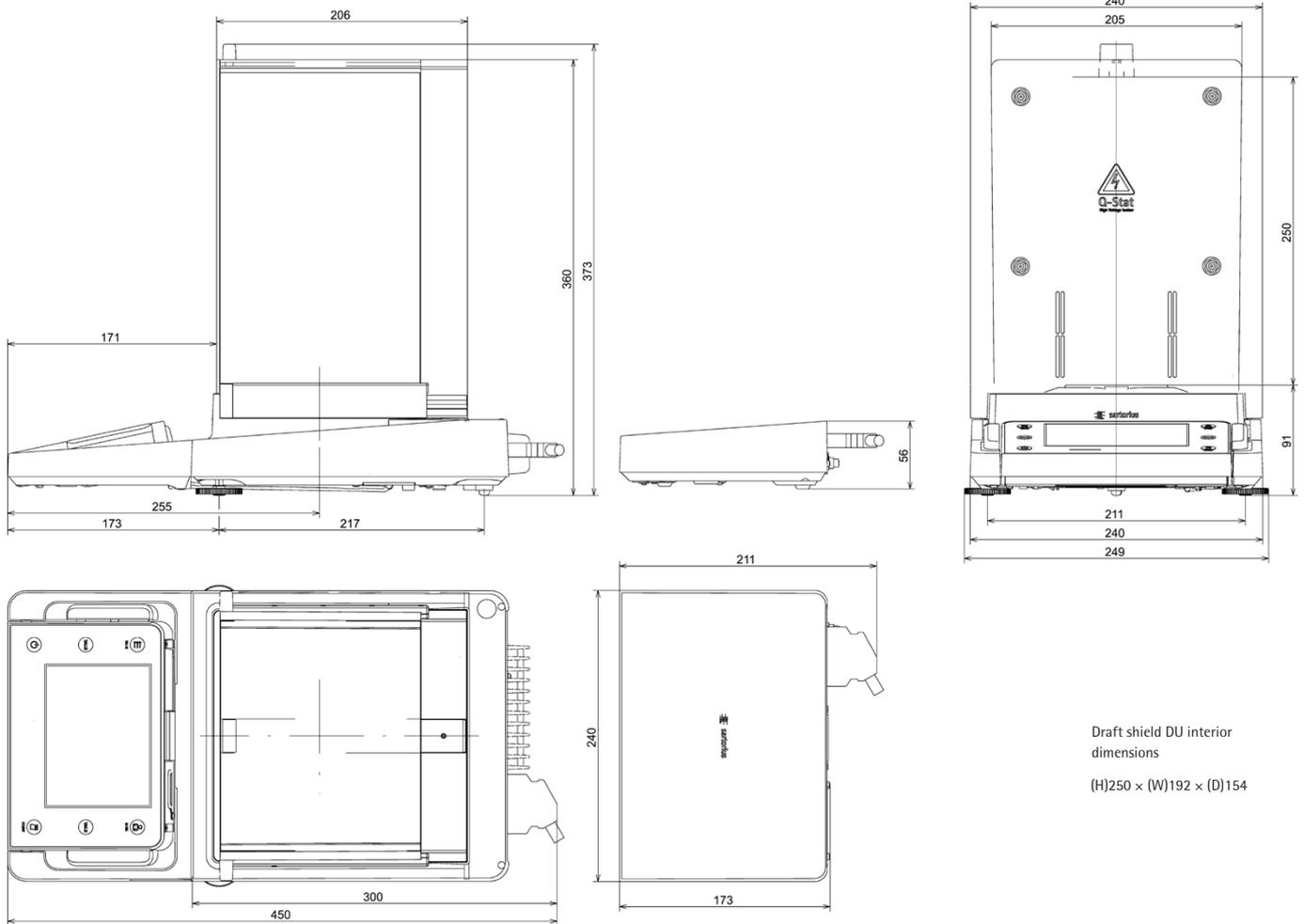


High-Capacity Micro Balances with DH Draft Shield
All dimensions are given in millimeters



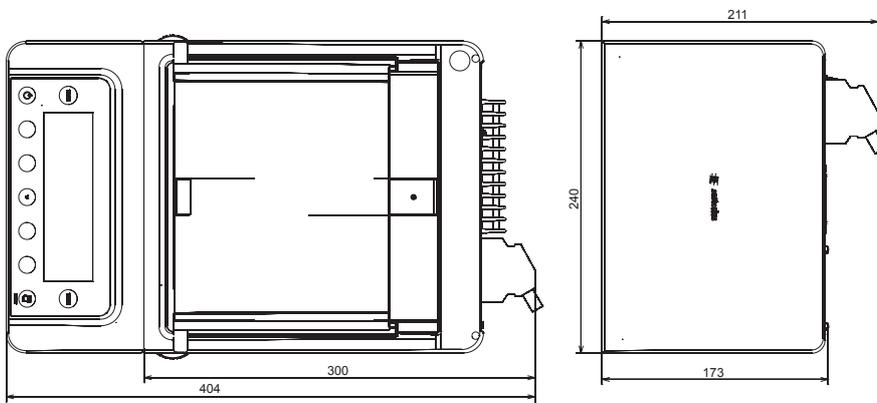
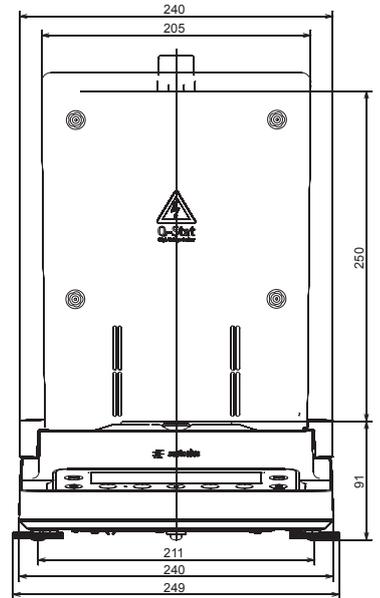
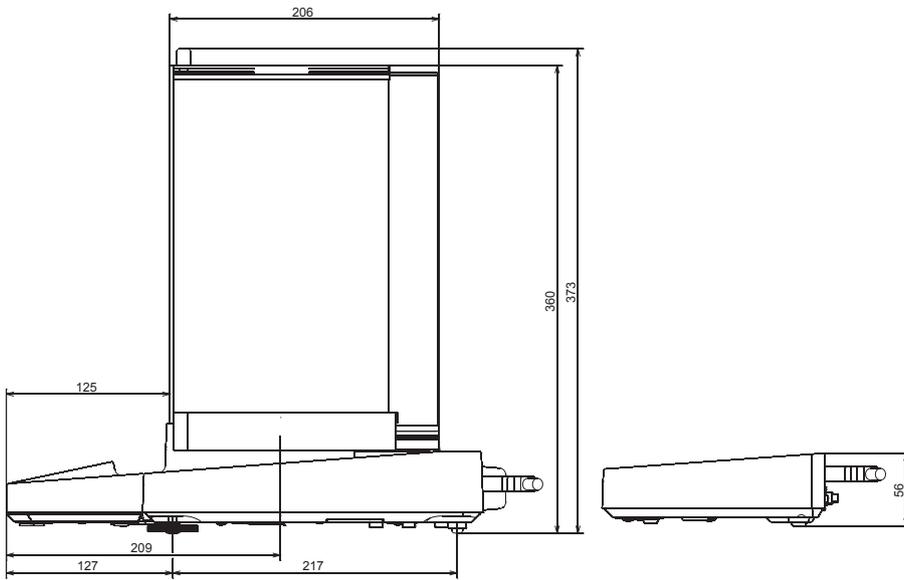


Semi-Micro Balances with Motorized Draft Shield – MSA | MSU Display and Control with Electronics Module
 All dimensions are given in millimeters



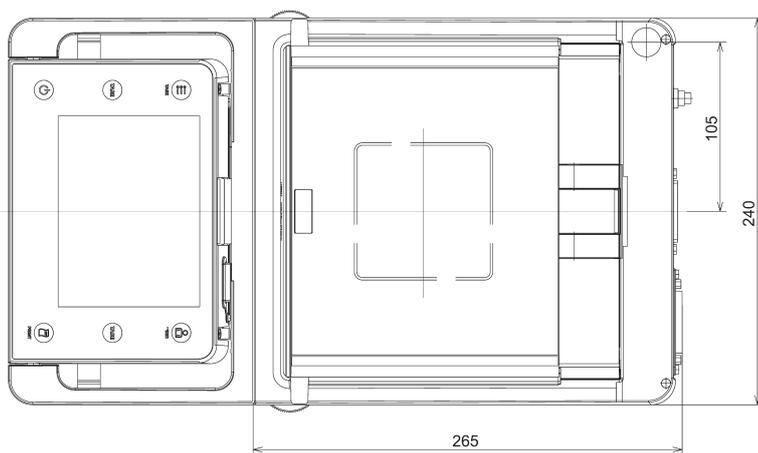
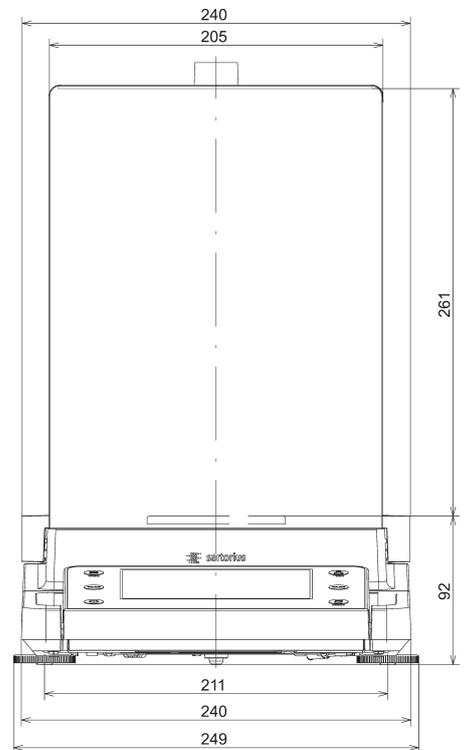
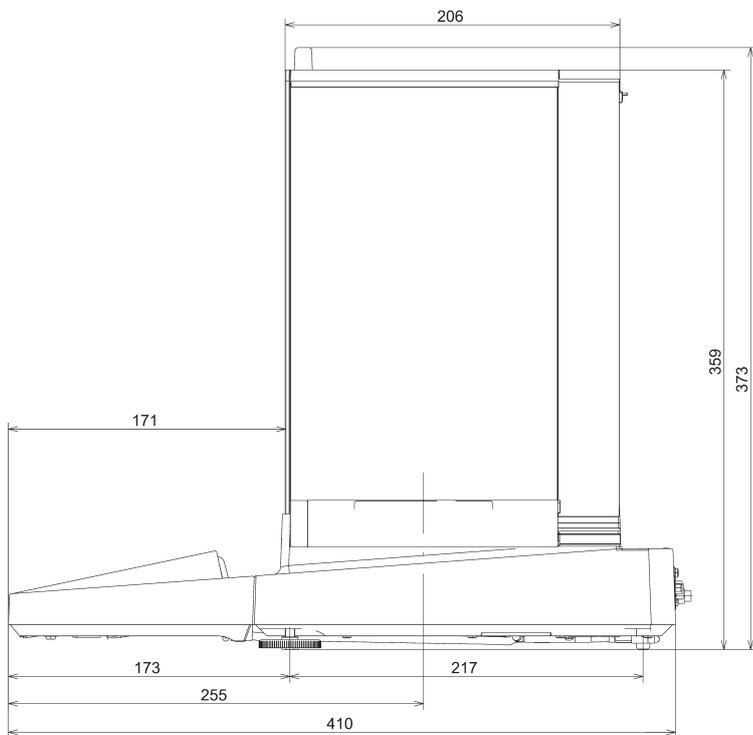
Draft shield DU interior dimensions
 (H)250 x (W)192 x (D)154

Semi-Micro Balances with Motorized Draft Shield – MSE Display and Control Unit with Electronics Module
 All dimensions are given in millimeters



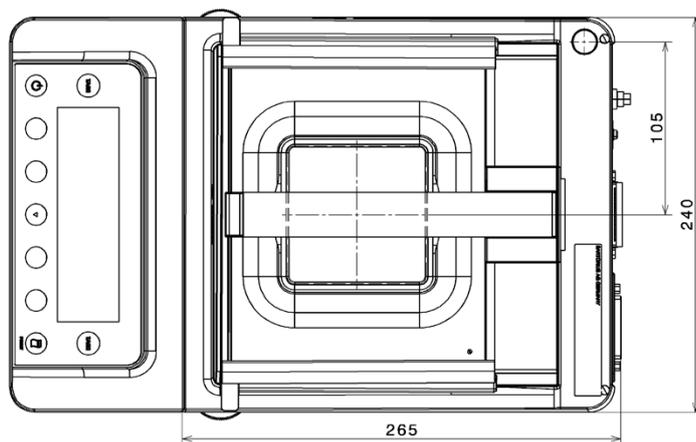
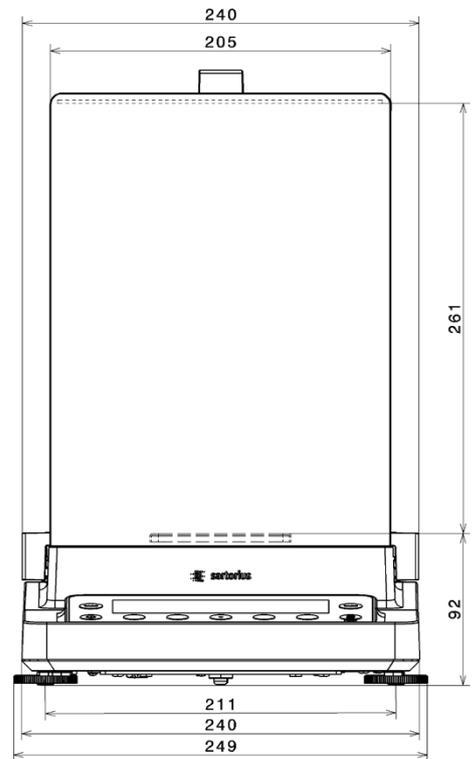
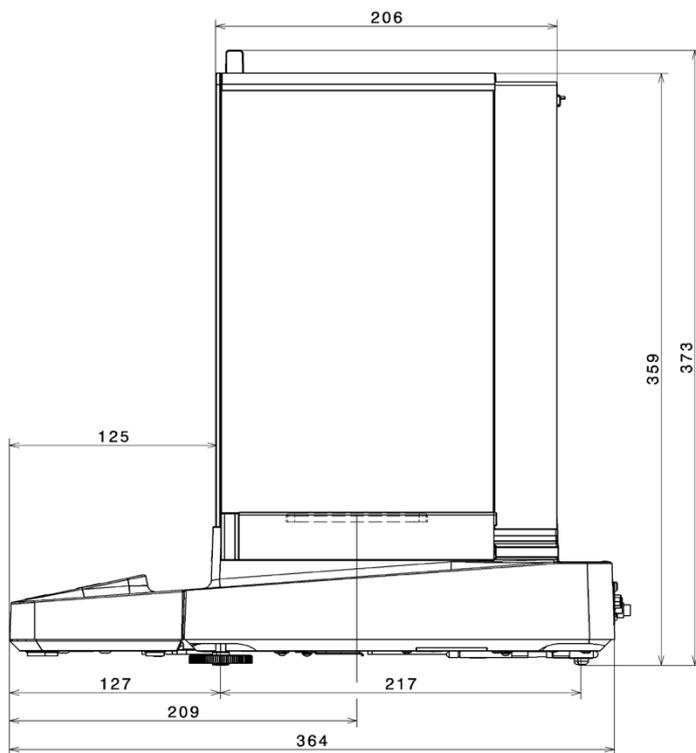
Windshield inside dimensions
 (H)250 × (W)192 × (D)154

Analytical Balances with Manual DU Draft Shield – MSA | MSU Display and Control Unit
All dimensions are given in millimeters



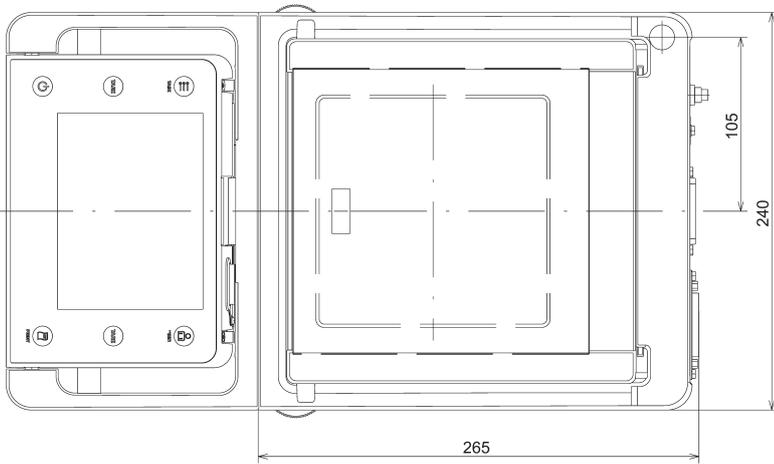
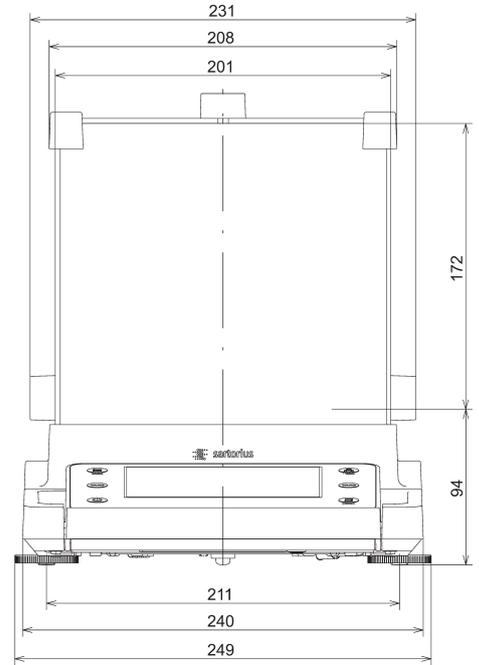
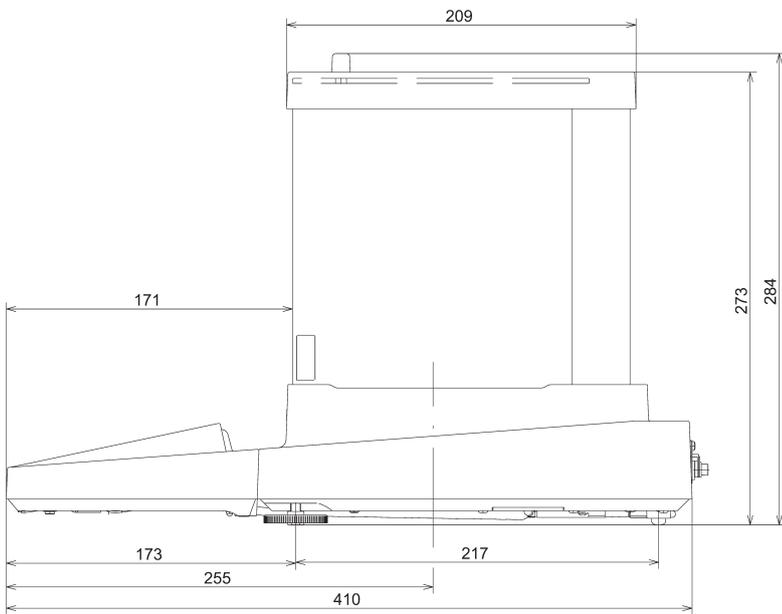
Interior draft shield dimensions
(H)261 x (W)193 x (D)191

Analytical Balances with a Manual DU Draft Shield – MSE Display and Control Unit
 All dimensions are given in millimeters



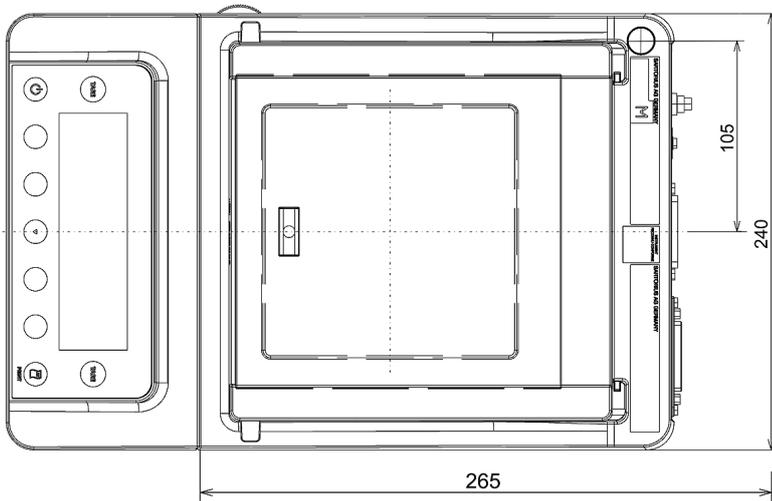
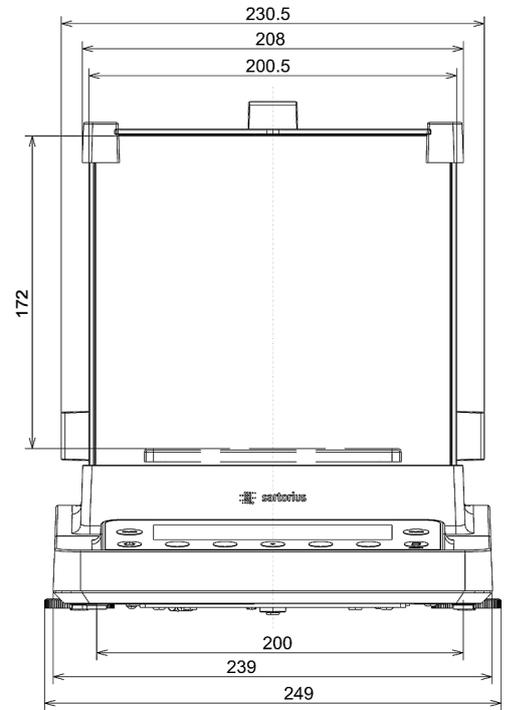
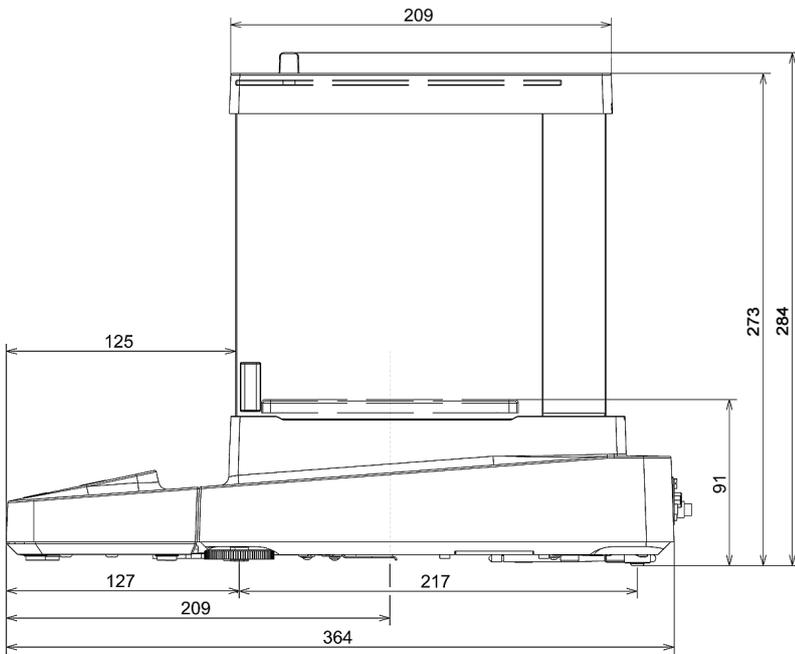
Interior draft shield dimensions
 (H)261 × (W)193 × (D)191

Precision Balances with a Readability of 1 mg or Model 5202S (with a Readability of 10 mg)
 and DE Weighing Pan Draft Shield – MSA | MSU Display and Control Unit
 All dimensions are given in millimeters



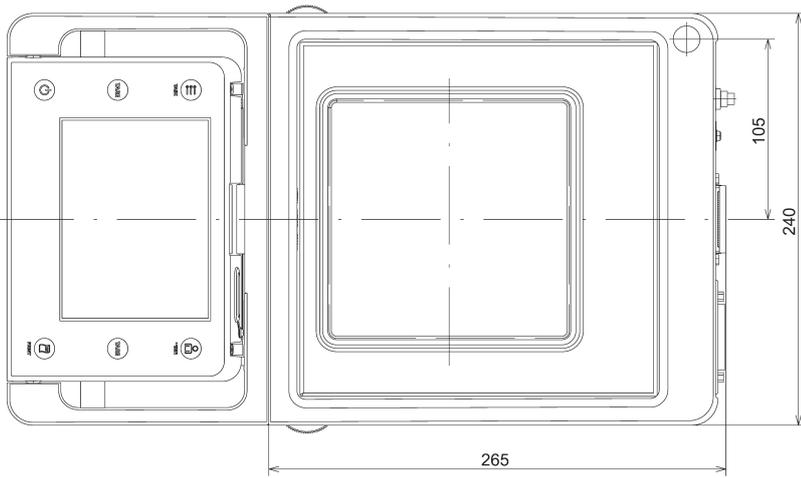
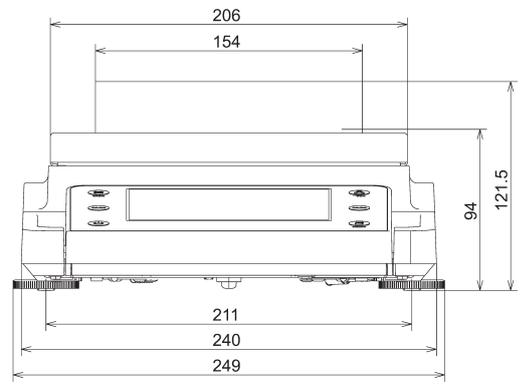
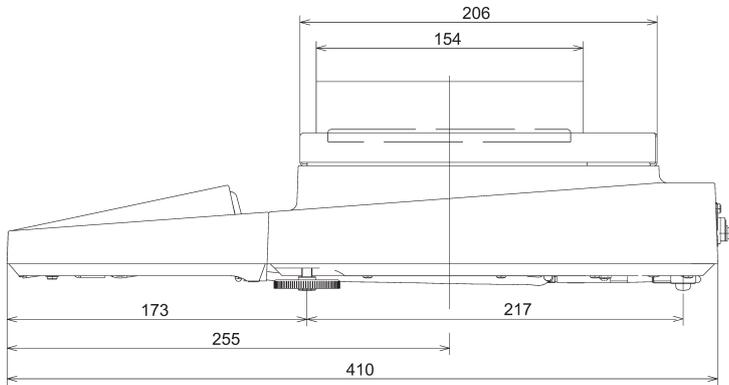
Interior draft shield dimensions
 (H)172 × (B)193 × (T)191

Precision Balances with a Readability of 1 mg or Model 5202S (with a Readability of 10 mg)
 and DE Weighing Pan Draft Shield – MSE Display and Control Unit
 All dimensions are given in millimeters

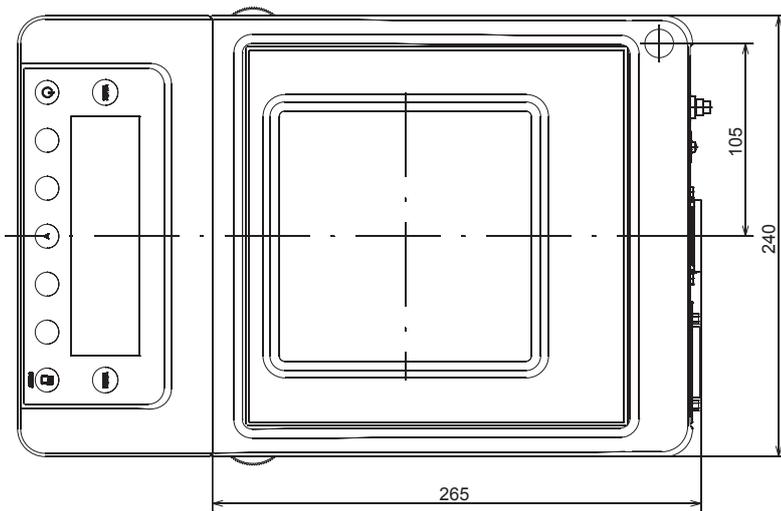
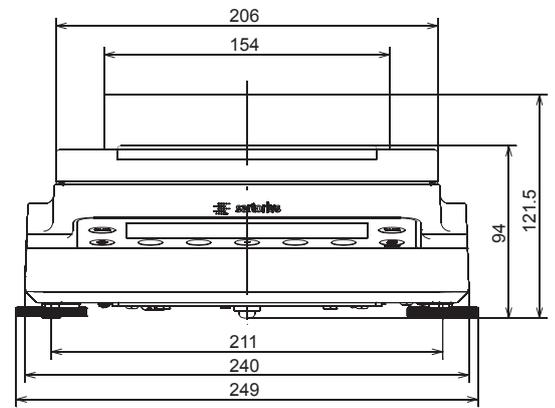
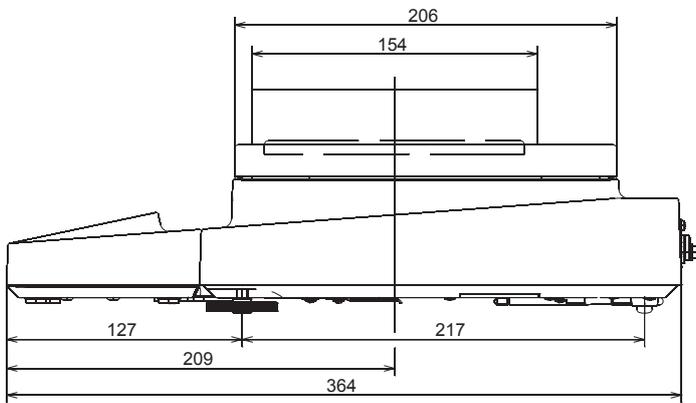


Interior draft shield dimensions
 (H)172 × (B)193 × (T)191

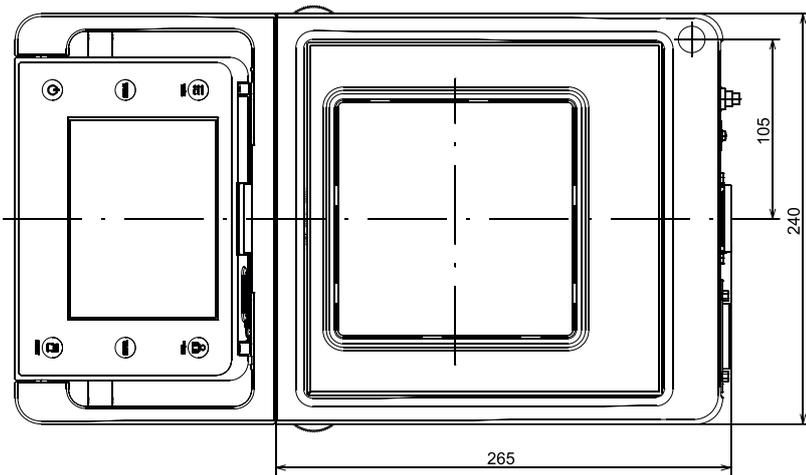
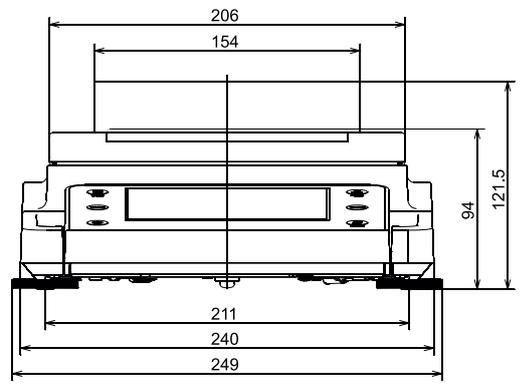
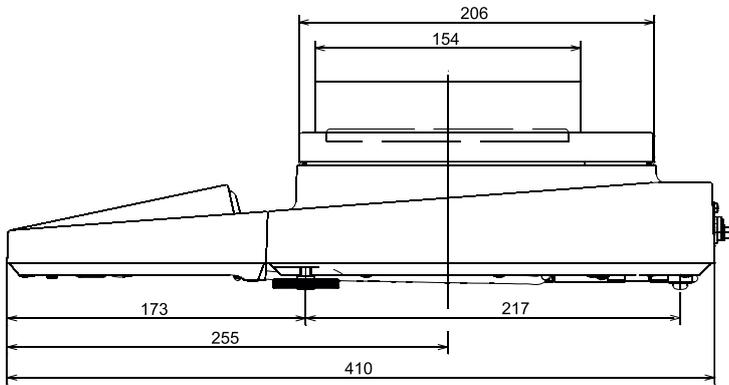
Precision Balances with a Readability of 1 mg or Model 5202S (with a Readability of 10 mg)
and DR Weighing Pan Draft Shield – MSA | MSU Display and Control Unit
All dimensions are given in millimeters



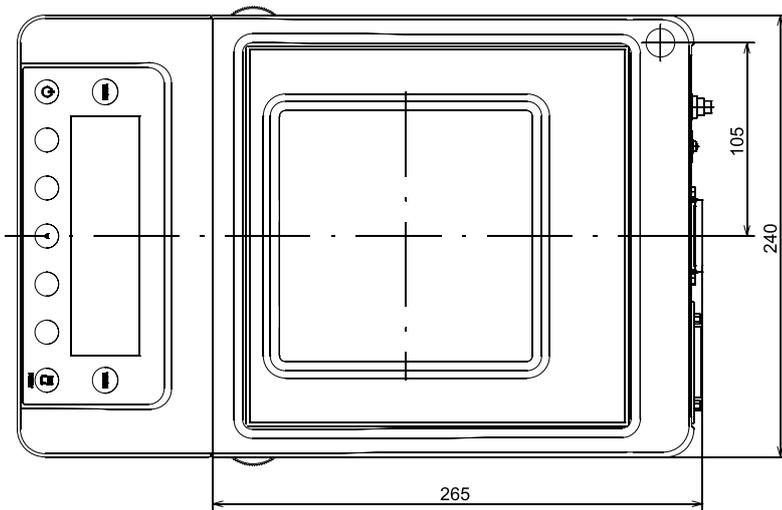
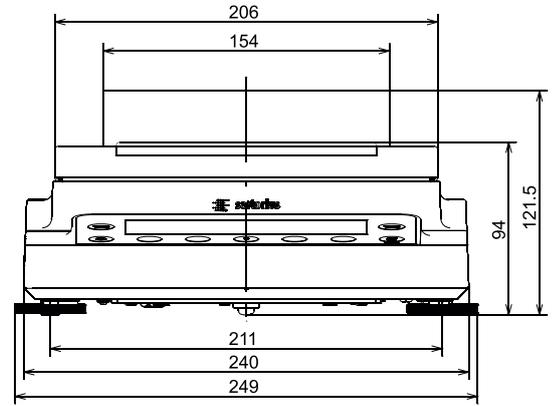
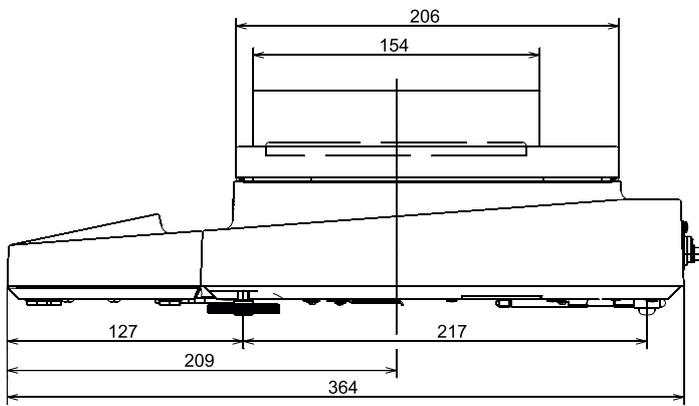
Precision Balances with a Readability of 1 mg or Model 5202S (with a Readability of 10 mg)
 and DR Pan Draft Shield – MSE Display and Control Unit
 All dimensions are given in millimeters



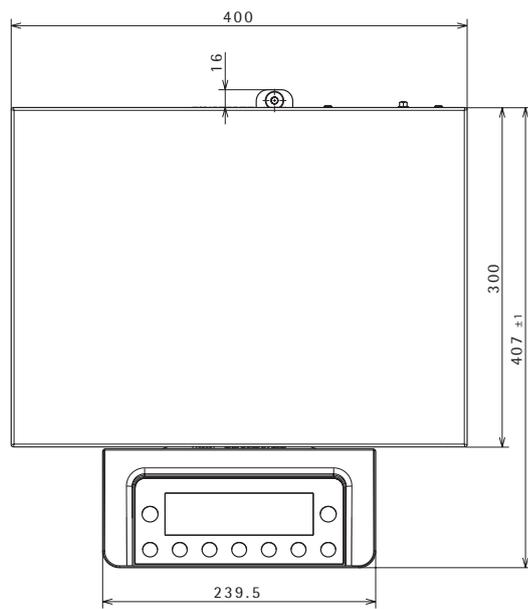
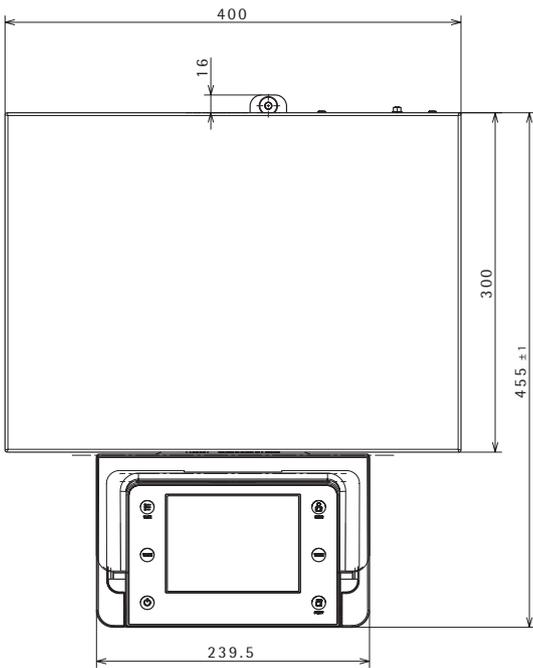
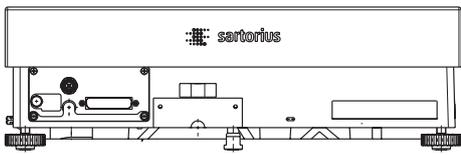
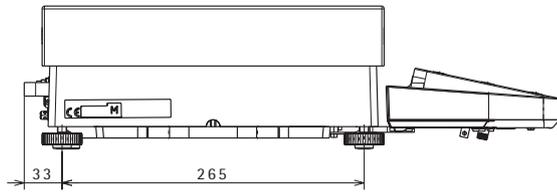
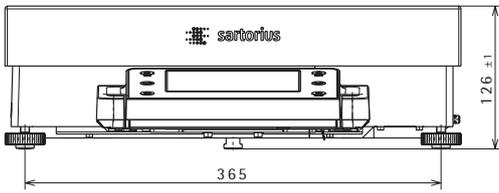
Precision Balances with No Draft Shield (Toploader) – MSA | MSU Display and Control Unit
All dimensions are given in millimeters



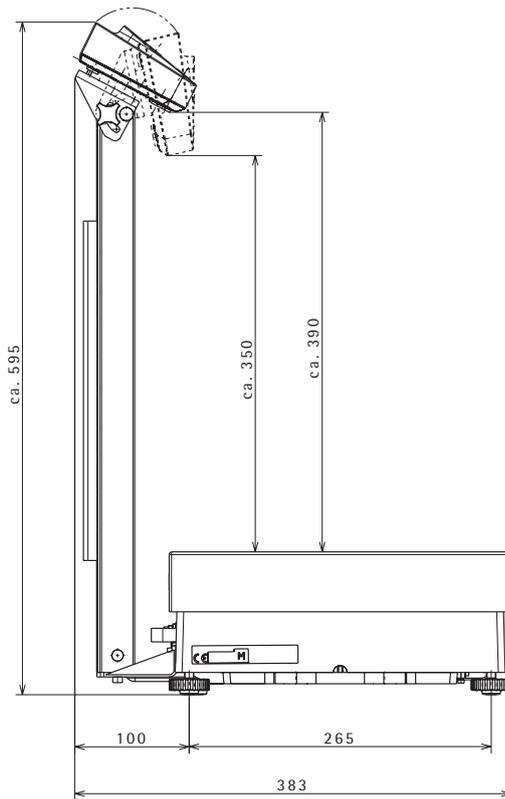
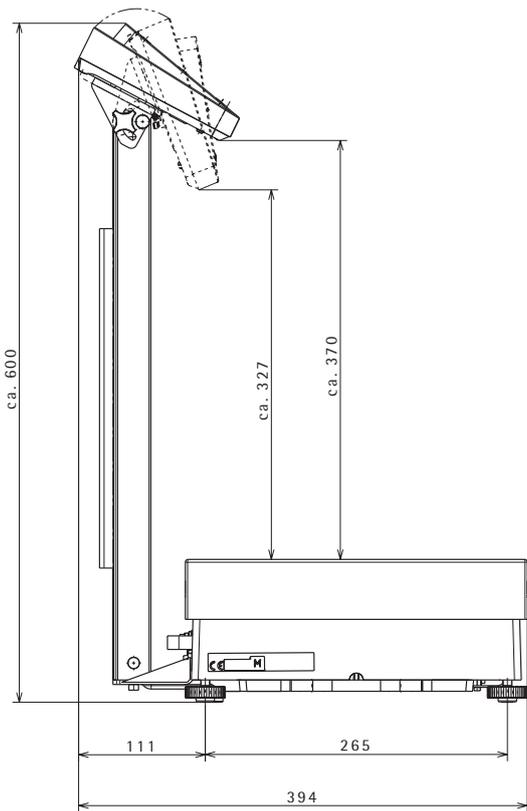
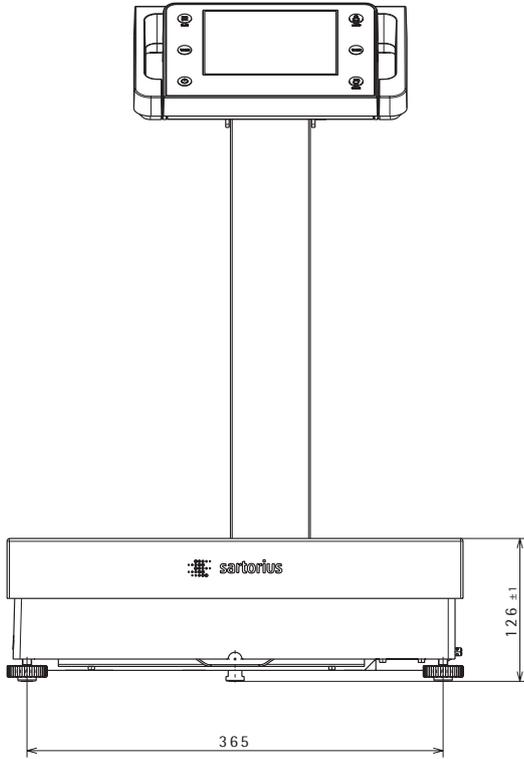
Precision Balances with No Draft Shield (Toploader) – MSE Display and Control Unit
 All dimensions are given in millimeters



High-Capacity Precision Balances
All dimensions are given in millimeters



High-Capacity Precision Balances
 All dimensions are given in millimeters



Sales and Service Contacts

For further contacts, visit www.sartorius.com

Europe

Germany
Sartorius Lab Instruments
GmbH & Co. KG
Otto-Brenner-Strasse 20
37079 Goettingen
Phone +49.551.308.0

France & Suisse Romande
Sartorius France
2, rue Antoine Laurent de Lavoisier
ZA de la Gaudrée
91410 Dourdan
Phone +33.1.70.62.50.00

Austria
Sartorius Austria GmbH
Modecenterstrasse 22
1030 Vienna
Phone +43.1.7965760.0

Belgium
Sartorius Belgium N.V.
Rue Colonel Bourg 105
1030 Bruxelles
Phone +32.2.756.06.90

Finland & Baltics
Sartorius Biohit Liquid Handling Oy
Laippatie 1
00880 Helsinki
Phone +358.9.755.951

Hungary
Sartorius Hungária Kft.
Kagyló u. 5.
2092 Budakeszi
Phone +3623.457.227

Ireland
Sartorius Ireland Ltd.
Unit 41, The Business Centre
Stadium Business Park
Ballycoolin Road
Dublin 11
Phone +353.1.8089050

Italy
Sartorius Italy S.r.l.
Via Torino 3/5
20814 Varedo (MB)
Phone +39.0362.5557.11

Netherlands
Sartorius Netherlands B.V.
Phone +31.30.60.53.001
Fax +31.30.60.52.917
info.netherlands@sartorius.com

Poland
Sartorius Poland sp.z o.o.
ul. Wrzesinska 70
62-025 Kostrzyn
Phone +48.61.6473830

Russian Federation
LLC "Sartorius RUS"
Vasilyevsky Island
5th line 70, Lit. A
199178 St. Petersburg
Phone +7.812.327.53.27

Spain & Portugal
Sartorius Spain, S.A.
Avda. de la Industria, 32
Edificio PAYMA
28108 Alcobendas (Madrid)
Phone Spain +34.913.586.095
Phone Portugal +351.800.855.800

Switzerland
Sartorius Mechatronics Switzerland AG
Ringstrasse 24a
8317 Tagelswangen (ZH)
Phone +41.44.746.50.00

U.K.
Sartorius UK Ltd.
Longmead Business Centre
Blenheim Road, Epsom
Surrey KT19 9QQ
Phone +44.1372.737159

Ukraine
LLS "Sartorius RUS"
Post Box 440 "B"
01001 Kiev, Ukraine
Phone +380.44.411.4918

Americas

USA
Sartorius Corporation
5 Orville Drive, Suite 200
Bohemia, NY 11716
Phone +1.631.254.4249
Toll-free +1.800.635.2906

Argentina
Sartorius Argentina S.A.
Int. A. Ávalos 4251
B1605ECS Munro
Buenos Aires
Phone +54.11.4721.0505

Brazil
Sartorius do Brasil Ltda
Avenida Senador Vergueiro 2962
São Bernardo do Campo
CEP 09600-000 - SP- Brasil
Phone +55.11.4362.8900

Canada
Sartorius Canada Inc
1173 North Service Road West, D4
Oakville, ON L6M 2V9
Phone +1.905.569.7977
Toll-Free +1.800.668.4234

Mexico
Sartorius de México, S.A. de C.V.
Libramiento Norte de Tepetzotlan s/n,
Colonia Barrio Tlacateco,
Municipio de Tepetzotlan,
Estado de México,
C.P. 54605
Phone +52.55.5562.1102
leadsmex@sartorius.com

Peru
Sartorius Peru S.A.C.
Avenue Alberto del Campo 411
Floor 12 - The Office
15076 - San Isidro, Lima
Phone +51.1.441 0158

Asia | Pacific

Australia
Sartorius Australia Pty. Ltd.
Unit 5, 7-11 Rodeo Drive
Dandenong South Vic 3175
Phone +61.3.8762.1800

China
Sartorius (Shanghai) Trading Co., Ltd.
3rd Floor, North Wing, Tower 1
No. 4560 Jinke Road
Zhangjiang Hi-Tech Park
Pudong District
Shanghai 201210, P.R. China
Phone +86.21.6878.2300

Hong Kong
Sartorius Hong Kong Ltd.
Unit 1012, Lu Plaza
2 Wing Yip Street
Kwun Tong
Kowloon, Hong Kong
Phone +852.2774.2678

India
Sartorius Weighing India Pvt. Ltd.
#69/2-69/3, NH 48, Jakkasandra,
Nelamangala Tq
562 123 Bangalore, India
Phone +91.80.4350.5250

Japan
Sartorius Japan K.K.
4th Fl., Daiwa Shinagawa North Bldg.
8-11, Kita-Shinagawa 1-chome
Shinagawa-ku, Tokyo, 140-0001 Japan
Phone +81.3.3740.5408

Malaysia
Sartorius Malaysia Sdn. Bhd
Lot L3-E-3B, Enterprise 4
Technology Park Malaysia
Bukit Jalil
57000 Kuala Lumpur, Malaysia
Phone +60.3.8996.0622

Singapore
Sartorius Singapore Pte. Ltd
10 Science Park Rd
The Alpha #02-13/14
Singapore Science Park II
Singapore 117684
Phone +65.6872.3966

South Korea
Sartorius Korea Ltd.
8th Floor, Solid Space B/D,
PanGyoYeok-Ro 220, Bundang-Gu
SeongNam-Si, GyeongGi-Do, 463-400
Phone +82.31.622.5700

Thailand
Sartorius (Thailand) Co. Ltd.
129 Rama 9 Road,
Huaykwang
Bangkok 10310
Phone +66.2643.8361-6



◀ www.sartorius.com