



## GENIUS

Innovative in Function  
and Design



TARE

Max 410g  
0.01g  
0.00000 g  
d = 0.01mg  
100%

TARE



## GENIUS. So N.I.C.E. So F.A.S.T.

### GENIUS – Its functional design sets it apart.

GENIUS offers the highest level of ergonomic operation for optimal functionality. Designed by Sartorius for the real world.

### GENIUS – A new generation of high performance balances from Sartorius.

The GENIUS series boasts outstanding specifications. That means amazingly quick response times and lightning fast results. Reliable and extremely accurate – with the highest degree of precision in analytical weighing.

### GENIUS – With a N.I.C.E. feature.

The built-in N.I.C.E. (Neutralization by Ionic Charge Elimination) static electricity eliminator comes standard on all GENIUS models. It easily neutralizes electrostatic charges on samples or tare containers at the touch of a key. The first standard feature that eliminates a previously unsolved problem.

### GENIUS – Featuring F.A.S.T. technology.

The innovative, flexible F.A.S.T. (Fully Automatic by Soft Touch) draft shield system offers fully automatic operation at the touch of a key. It's a three-part, motorized draft shield with intelligent "self-teaching" functions – for optimal adaptation to every weighing situation.





Max 410g

0%

370.000

Cal

T  
A  
R  
E

1

ABC

2

3

4

5

SETUP

ON/OFF





**GENIUS. Precision with the highest credentials.**

**GENIUS – Top performance for analytical weighing.**

Two new models with substantially extended weighing ranges achieve record highs in the weighing capacity of semi-micro- and analytical balances.

Once again, GENIUS proves that 21<sup>st</sup> century monolithic weighing technology is “the weigh of the future” – delivering lightning-fast response times and extremely accurate results. No longer will heavyweight containers or samples weigh down performance.





## The GENIUS range of models. The right balance for any analytical weighing application.

### GENIUS ME415S

The new SuperRange semi-microbalance with the highest credentials pushes back all limits. Unrestricted, high-resolution weighing from 0.01 mg to 410 g for the highest demands. Unequalled accuracy – even with large tare containers or sample quantities. A "heavy-weight" benefit.

### GENIUS ME235S

The SuperRange semi-microbalance that meets the highest demands for flexibility. It features a weighing range of 0.01 mg to 230 g and full resolution for every sample weighed.

### GENIUS ME235P

The PolyRange semi-microbalance featuring the classic weighing range structure of 60 | 110 | 230 g and readabilities of 0.01 | 0.02 | 0.05 mg. Complete resolution for every tare preload up to 60 g.

### GENIUS ME614S

The SuperRange analytical balance with the incomparably wide weighing range of 0.1 mg to 610 g always offers sufficient reserves. A new benchmark in the world of analytical balances.



### GENIUS ME414S

The SuperRange analytical balance with the exceptionally wide weighing range of 0.1 mg to 410 g.

### GENIUS ME254S

The SuperRange analytical balance for all basic weighing applications. It features a weighing range of 0.1 mg to 250 g.

### GENIUS ME235P-SD

The PolyRange analytical balance with the same weighing range structure as the ME235P; with shortdesign draft shield and pipette opening. Specially designed for pipette calibration or for use in automated systems.



## Facts and more facts.

- Extremely fast, rugged, monolithic weigh cell
- N.I.C.E. static electricity eliminator (= ionizer)
- F.A.S.T. draft shield system
- Large, palm-activated keys for operating the draft shield
- Backlit, graphic display
- Prompts in clear English for operator guidance
- isoCAL self-calibration and fully automatic adjustment function with storage of calibration and adjustment records/printouts
- SQmin function displays the minimum allowable sample quantity in accordance with the United States Pharmacopeia (can be activated by the Sartorius Service Center)
- ISO | GLP-compliant records/printouts that can be configured by the user
- Alphanumeric input capability for sample IDs
- Highly resistant keypad overlay
- Stainless steel weighing pan with removable pan support
- Highly resistant coating over the weighing chamber base
- Sartorius RS-232 communications port
- Sartorius printer port
- 13 built-in application programs
- Remote-capable display and control unit
- Integrated hanger for below-balance weighing
- Anti-twist weighing pan for integration of the balance into automated systems



GENIUS  
sartorius

Max: 410g  
0%  
d= 0.01mg  
100%  
0.00000 g  
Cal

TARE  
TARE  
1 2 3 4 5 6 7 8 9 0  
ABC

## GENIUS. The applications are built in.

GENIUS "surpasses" the ultimate in weighing technology. The GENIUS series features a complete package of built-in application programs that go above and beyond the standard application programs used in the analytical laboratory. User-friendly GENIUS enables you to easily take control of even the most sophisticated and complex tasks.

In addition to the "standard" programs, such as counting, weighing in percent, checkweighing, animal weighing, formulation and totalizing, GENIUS supports the following applications:

Density determination

Calculation of weights using a definable factor or equation

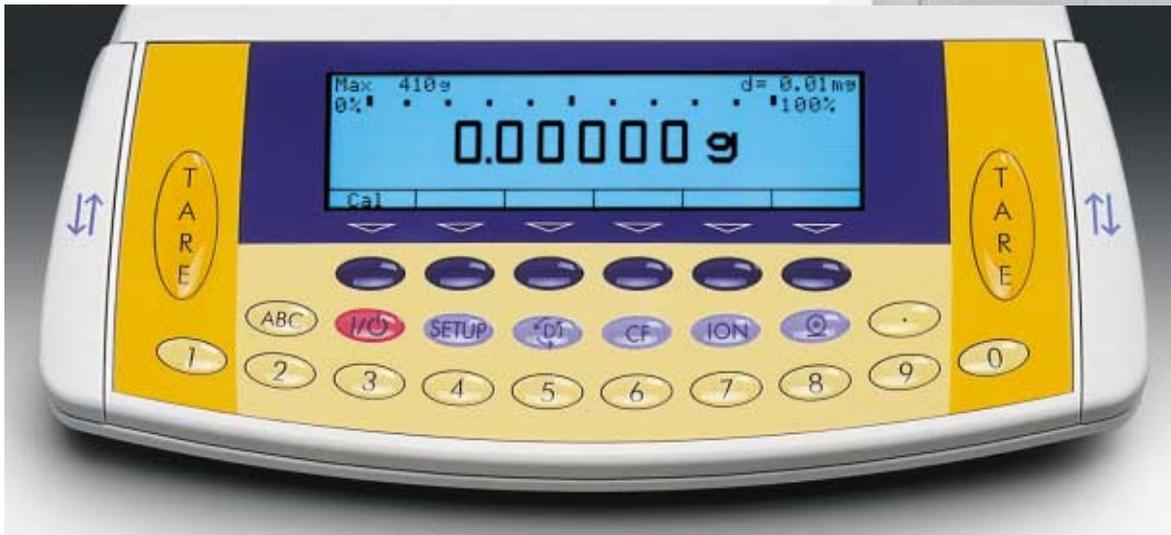
Time-controlled functions

Statistical evaluations

Differential weighing

Air buoyancy correction for high precision, absolute weighing operations

Air density determination



## GENIUS. Specifications for semi-microbalances.

Model	ME415S	ME235S	ME235P
Weighing range structure	SuperRange	SuperRange	PolyRange
Weighing capacity (g)	410	230	60 110 230
Readability (mg)	0.01	0.01	0.01 0.02 0.05
Repeatability ( $\leq$ mg)	0.015 (0–60 g) 0.020 (60–230 g) 0.035 (230–410 g)	0.015 (0–60 g) 0.025 (60–230 g)	0.015 (0–60 g) 0.040 (60–110 g) 0.040 (110–230 g)
Max. linearity ( $\leq$ mg)	0.15	0.1	0.15
Response time ( $\leq$ s)	10	8	8
Sensitivity drift ( $\leq$ ppm/K)	1.0	1.0	1.0
Weighing pan diameter (mm)	90	90	90
External dimensions, W x D x H (mm)	252 x 533 x 292	252 x 533 x 292	252 x 533 x 292
Weighing chamber dimensions, W x D x H (mm)	194 x 184 x 292	194 x 184 x 292	194 x 184 x 292
Clearance above weighing pan, W x D x H (mm)	253	253	253

## GENIUS. Specifications for analytical balances.

Model	ME614S	ME414S	ME254S	ME235P-SD*
Weighing range structure	SuperRange	SuperRange	SuperRange	PolyRange
Weighing capacity (g)	610	410	250	60 110 230
Readability (mg)	0.1	0.1	0.1	0.01 0.02 0.05
Repeatability ( $\leq$ mg)	0.1	0.1	0.07	0.015 (0–60 g) 0.040 (60–110 g) 0.040 (110–230 g)
Max. linearity ( $\leq$ mg)	0.4	0.3	0.15	0.15
Response time ( $\leq$ s)	3	2.5	2.5	8
Sensitivity drift ( $\leq$ ppm/K)	1.0	1.0	1.0	1.0
Weighing pan diameter (mm)	90	90	90	90
External dimensions, W x D x H (mm)	252 x 533 x 292	252 x 533 x 292	252 x 533 x 292	252 x 533 x 234
Weighing chamber dimensions, W x D x H (mm)	194 x 184 x 292	194 x 184 x 292	194 x 184 x 292	194 x 184 x 234
Clearance above weighing pan, W x D x H (mm)	253	253	253	195

\* with short-design draft shield and pipette opening, 60 mm  $\varnothing$ , with cover

<b>Accessories</b>	<b>Order No.</b>
Data printer	YDP03-OCE
Remote display, LCD, height of digits:13 mm; reflective	YRD02Z
Remote display, LCD, height of digits:13 mm; transmissive (for overhead projectors)	YRD13Z
Carrying case	YDB01ME
Antivibration balance table (wood frame with cast stone slab inset)	YWT01
Antivibration balance table (completely made of cast stone with vibration dampeners)	YWT03
Wall console	YWT04
Rechargeable battery pack, external with battery level indicator	YRB05Z
SartoConnect, set of programs for transferring measured values to a PC, with RS-232C interface cable, length: 1 m	YSC01L
Weight set for air density determination	YSS45-00
Density determination kit	YDK01
Density determination kit, verified for legal metrology (for liquid substances)	YDK01-0D
Antistatic pan, specially designed for filter weighing	YWP01ME
Foot switch for opening/closing the draft shield and activating tare and print functions	YPE01RC
PC-compatible data interface (9-contact) incl. 5-contact DIN connector for bar code scanner or PC keyboard	YD001ME
RS-485 data interface (12-contact, round) incl. 5-contact DIN connector for bar code scanner or PC keyboard	YD002ME
Pipette calibration set with software	YCP03-1
Software for pipette calibration	YCP03-2
Glass plate support, holds samples to condition them to temperature inside the weighing chamber	YGS01ME
Extension cord for connecting a weighing platform to a separate display & control unit; length: 2.70 m	YCC01-MED27
RS-232C interface cable for connecting the balance to a PC with a 25-contact COM port; length: approx. 1.5 m	7357312
RS-232C interface cable for connecting the balance to a PC with a 9-contact COM port; length: approx. 1.5 m	7357314
Bar code scanner	YDR02FC

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