MS Semi-Microbalances
0.01 mg and 0.1 mg

Precise Results
The High Resolution Technology (HRT) weighing cell provides up to 5-place readability. With two built-in weights, combined with FACT (fully automatic time and temperature-controlled internal adjustment), the balance carries out adjustment and linearization automatically.

Efficient Handling
Reduce the number of movements needed for every weighing. E.g. open the draft shield ErgoDoor with your left hand whilst dosing your sample with the right.

Space Saving
Save working space thanks to split draft shield doors that do not project beyond the balance, and sideways mounted connectors at the back of the balance.

Easy Cleaning
Cleaning has never been this easy: dismantle the QuickLock draft shield in a few short steps, then wash all glass panels and the drip tray in the dishwasher.

Designed for You
Right Down to the Last Detail

Whether you are carrying out a simple routine task or a complicated weighing procedure, every little detail has been thought about to ensure your weighing tasks are comfortable and efficient so that you can maximize your productivity.

MS semi-microbalances provide you with fast settling times and consistently reliable results. The Swiss high precision HRT weighing cell guarantees accuracy over the entire weighing range. The built-in date and time function enables GLP/GMP compliant printouts, ensuring full control and traceability.

METTLER TOLEDO

Semi-Microbalances

Technical data	MS105	MS105DU	MS205DU	MS204
Limit values				
Maximum capacity	120 g	120 g	220 g	220 g
Maximum capacity, fine range	-	42 g	82 g	-
Readability	0.01 mg	0.1 mg	0.1 mg	0.1 mg
Readability, fine range	-	0.01 mg	0.01 mg	-
Repeatability (at nominal load)	0.04 mg	0.08 mg	0.08 mg	0.09 mg
Repeatability (at low load)	0.02 mg (20 g)	-	-	0.07 mg (20 g)
Repeatability, fine range (at nominal load)	-	0.03 mg	0.05 mg	-
Repeatability, fine range (at low load)	-	0.02 mg (20 mg)	0.02 mg (20 mg)	-
Linearity deviation	0.1 mg	0.15 mg	0.2 mg	0.2 mg
Sensitivity offset (test weight)	0.4 mg (100 g)	0.4 mg (100 g)	0.8 mg (200 g)	0.8 mg (200 g)
Typical values				
Repeatability (at nominal load)	0.03 mg	0.06 mg	0.07 mg	0.07 mg
Repeatability (at low load)	0.015 mg (20 g)	0.015 mg (20 g)	0.015 mg (20 g)	0.05 mg (20 g)
Linearity deviation (within 10 g)	0.02 mg	0.02 mg	0.02 mg	-
USP Minimum Weight [1]	30 mg	30 mg	30 mg	100 mg
Minimum sample weight (U=1 %, k=2)	3 mg	3 mg	3 mg	10 mg
Settling time	8 s	4 s	4 s	2 s
Settling time, fine range	-	8 s	8 s	-
Balance dimensions (WxDxH)	247x358x331 mm	247x358x331 mm	247x358x331 mm	247x358x331 mm
Weighing pan dimensions	⌀ 80 mm	⌀ 80 mm	⌀ 80 mm	⌀ 80 mm
Usable height of draft shield	234 mm	234 mm	234 mm	234 mm
Weight of balance	6.8 kg	6.8 kg	6.8 kg	6.8 kg

[1] Typical minimum sample weight according to USP <41>; measurement at ≤ 5% load

Features

HRT **HRT weighing cell**
With two built-in weights, for constant accuracy over the entire weighing range

FACT **FACT**
Fully automatic time- and temperature-controlled internal adjustment

Diagnostics
Easy execution of balance diagnostics e.g. keypad and repeatability tests

ErgoDoor
The right door can be opened from the left side and vice versa

SmartTrac
Shows how much of the entire weighing range has been used

F1 **SmartKeys**
Programmable keys for shortcut access to preferred applications

Quick Lock **QuickLock**
Fast and convenient dismantling of the draft shield

Protection
Balance settings can be password protected

Protective cover
Encloses the entire balance housing to protect against stains and scratches

ErgoSens
For touch-free operation of the balance

USB RS232 **Connectivity**
RS232 to connect to PC, printer or bar code reader; USB to connect to PC

Green MT
Just 1 Watt in standby, PVC and mercury free, energy efficient manufacture

Approval

Approved versions of all models available

Applications

Formulation, piece counting, percent weighing, statistics, totaling, free factor, density, pipette check, dosing, recall

Accessories

Fast, smart printers
Archive quality printouts on paper, labels and continuous labels: P-58, P-56.

Density kit
For determining the density of solids and liquids.

PipetteCheck
Balance and stand-alone pipette check-station combined, for checking pipette accuracy.

www.mt.com/ms-analytical

For more information