

## A Must-Have For Your Research



### Accurate weighing

The XS3DU's superb weighing cell with its 1 µg readability in a 800 mg range guarantees accurate research results even with smallest samples.



### Reliable results

The repeatability of below 0.8 µg is the key for utmost measurement reliability. XS3DU cuts down unnecessary test repetitions and waste of valuable samples.



### Enhanced reproducibility

Accessories such as the U-Ionizing electrode guarantee the accuracy and reproducibility of your results even under difficult weighing conditions.



### Perfect control

The XS terminal with its customizable touch-screen invites to simple, intuitive and error-free usage.



### XS3DU Micro Balance One Step Ahead

In research projects you often deal with limited amounts of valuable samples. Using more than you really need and any waste are stumbling blocks on your way to a successful project completion.

XS3DU Micro Balance keeps your weighing process as short, cost-saving and effective as you need, which allows you to concentrate on your results.

The unique weighing accuracy of the XS3DU Micro Balance lays the safe basis for your daily lab work.

METTLER TOLEDO XS3DU Micro Balance offers:

- Utmost reliable measurement performance
- Intuitive and easy operation
- High flexibility in connectivity and data transfer

METTLER TOLEDO XS3DU Micro Balance is designed to boost efficiency and reliability of your research results.

# XS3DU Micro Balance

For the High Demands of Your Daily Work

## Standard Equipment

- Dual Range Balance with 1 µg readability between 0 – 0.8 g and 10 µg readability up to 3.1 g.
- Manually driven draft shield.
- FACT: fully automatic time- and temperature-controlled internal adjustment and linearization with 2 internal weights.
- Built-in RS232C, two auxiliary interfaces for connecting a keyboard or additional IR sensor for hands-free operation.
- Slot for a second optional interface such as LocalCAN, Ethernet, RS232, USB, MiniMettler, Bluetooth, PS/2.

## Display functions

- Monochrome touchscreen display
- 5 different pre-programmed applications
- 3 definable info fields for user and sample identification
- SmartTrac: graphic weighing-in aid, to track capacity and weighing tolerances
- Up to 10 shortcut keys for special functions



## Technical Data

Guaranteed values	XS3DU Dual Range
Maximum capacity	3.1 g
Readability	0.01 mg
Maximum capacity fine range	0.8 g
Readability fine range	0.001 mg
Repeatability std. range – at nominal load	0.006 mg (3 g)
– at low load (measured at)	0.005 mg (0.2 g)
Repeatability fine range – at nominal load	0.001 mg (0,8 g)
– at low load (measured at)	0.0008 mg (0.2 g)
Linearity	0.004 mg
Eccentric load deviation (test load) <sup>1)</sup>	0.005 mg (2 g)
<b>Typical values<sup>2)</sup></b>	
Repeatability (sd)	$0.0005 \text{ mg} + 1.2 \times (10^{-7}) \cdot R_{gr}$
Differential linearity deviation (sd)	$\sqrt{2} \times (10^{-12}) \text{ g} \cdot R_{nt}$
Differential eccentric load deviation (sd)	$1.2 \times (10^{-6}) \cdot R_{nt}$
Sensitivity offset (sd) <sup>3)</sup>	$3 \times (10^{-6}) \cdot R_{nt}$
Minimum weight* (@ U=1%, 2 sd)	$0.1 \text{ mg} + 2.4 \times (10^{-6}) \cdot R_{gr}$
Settling time	< 6 s
Settling time (fine range)	< 10 s

<sup>1)</sup> According to OIML R76    <sup>2)</sup> Can be used for the estimation of uncertainty, sd: standard deviation, R<sub>gr</sub>: gross weight, R<sub>nt</sub>: net weight (sample weight), a: year (annum)    <sup>3)</sup> In the temperature range 10...30°C

\*Repeatability and minimum weight can be improved and affected by the following measures: – choice of suitable weighing parameters, – moving to better location, – using smaller tare containers

## System options

System options	Part no.
<b>Filter weighing kit</b>	
Filter weighing kit up to Ø 110 mm	00211227
<b>Ionizer option</b>	
Optional U electrode, small	11140161
Power supply for universal AntiStatic kit	11107766
<b>Further options</b>	
Funnel set	00229265
RS-P42 printer	00229265
Weighing table for Micro Balances	11138044

[www.mt.com/micro](http://www.mt.com/micro)

For more information



Quality certificate ISO 9001  
Environment certificate ISO 14001  
Worldwide service

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**GWP® – Good Weighing Practice™**  
**The Global Weighing Guideline**



By following GWP® you can reduce risks associated with your processes and thus guarantee reliable measurements day in, day out. GWP® helps you:

- Choose the right balance for the job
- Optimize the periodicity of your calibrations
- Reduce costs and testing efforts
- Comply with current regulations