# **The First Class Choice**

# For Valuable Samples



### Reliable results

With a readability of 0.1  $\mu g$  and ar unparalleled capacity of 6 g the UI Micro Balance sets new standards for weighing down to a tenth of a microgram.



### Save costs

Excellent repeatability helps to reduce sample weights and the short stabilization time of only 8 seconds maximizes sample throughput. All in all METTLER TOLEDO Micro Balances cut your costs significantly.



# **Easy operation**

With its clearly structured and customizable color touchscreen and SmartSens infrared sensors for hands-free operation, the terminal ensures simple, fast and error-free use.



## **Audits passed easily**

Inbuilt safely features such as password protection and minimum weight control make the XP6U / XP2U and XP6 the ideal instrument for regulated environments.



# XP6U / XP2U Ultra Micro Balance and XP6 Micro Balance

Ensure maximum sample yield for valuable substances

Keeping sample weights as small as possible means tremendous cost savings when handling precious, degradable or toxic substances.

METTLER TOLEDO XP6U / XP2U and XP6 offer unsurpassed accuracy up to a tenth of a microgram. Even sample sizes below 1 mg still meet strict process tolerances as well as comply with international regulatory standards.

The XP6U / XP2U and XP6 Micro Balances offer:

- Optimum measurement performance in seconds
- Comprehensive QM-functions that help to fulfil regulatory requirements
- Intuitive and easy operation

METTLER TOLEDO XP6U / XP2U Micro Balance and XP6 Ultra Micro Balance are designed to boost efficiency and reliability as well as support network compatibility.



## XP6U / XP2U / XP6 Micro Balances

# Predestined for excellence

#### Standard Equipment

- ProFACT: fully automatic time- and temperature-controlled internal adjustment and linearization
- · Easy to clean, motor-driven draft shield
- SmartSens: two IR sensors for hands-free operation
- In-built 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

#### Coloured touchscreen display

- 7 different pre-programmed applications
- 8 configurable user accounts with password protection
- 4 definable info fields for user and sample identification
- SmartTrac: graphic weighing-in aid, to track capacity and weighing tolerances
- 3 definable minimum weights with MinWeigh warning if the minimum weight requirement is violated
- Up to 10 shortcut keys for special functions



**Ergonomic weighing**Height adjustable weighing table for ergonomic weighing



**Electrostatic Discharging**System controlled U-lonizer for efficient discharging



**Excellent Connectivity**7 freely definable optional interfaces



Intuitive User Interface Customizable colored touchscreen display

### **Technical Data**

Nominal and guaranteed values	XP2U	XP6U	XP6
Maximum capacity	2.1 g	6.1 g	6.1 g
Readability	0.0001 mg	0.0001 mg	0.001 mg
Repeatability – at nominal load	0.00025 mg	0.00040 mg	0.0008 mg
- at low load (measured at)	0.0002 mg (0.2 g)	0.00025 mg (0.2 g)	0.0006 mg (0.2 g)
Linearity	0.001 mg	0.004 mg	0.004 mg
Eccentric load deviation (test load)1)	0.0025 mg (1 g)	0.0005 mg (2 g)	0.005 mg (2 g)
Sensitivity offset	1.5 x 10 <sup>-5</sup>	0.7 x 10 <sup>-5</sup>	8 x 10 <sup>-6</sup>
Sensitivity temperature drift <sup>2)</sup>	0.0001%/°C	0.0001%/°C	0.0001%/°C
Sensitivity stability <sup>3)</sup>	0.0001%/a	0.0001%/a	0.0001%/a
Typical values <sup>4</sup> )			
Repeatability (sd)	0.00015 mg+2.5x(10 <sup>-8</sup> )·R_gr	0.00015 mg+2.5x(10 <sup>-8</sup> )·R_gr	0.0004 mg+3x(10 <sup>-8</sup> )·R_gr
Differential linearity deviation (sd)	$\sqrt{8}x(10^{-14})g.R_nt$	$\sqrt{1.5}$ x(10 <sup>-13</sup> )g·R_nt	$\sqrt{1.5}$ x(10 <sup>-13</sup> )g·R_nt
Differential eccentric load deviation (sd)	8x(10 <sup>-7</sup> )·R_nt	3x(10 <sup>-7</sup> )·R_nt	5x(10 <sup>-7</sup> )·R_nt
Sensitivity offset (sd) <sup>2)</sup>	3x(10 <sup>-6</sup> )·R_nt	1.5x(10 <sup>-6</sup> )·R_nt	1.5x(10 <sup>-6</sup> )·R_nt
Minimum weight* (according to USP)	0.45 mg+7.5x(10 <sup>-5</sup> )·R_gr	0.45 mg+7.5x(10 <sup>-5</sup> )·R_gr	1.2 mg+9x(10 <sup>-5</sup> )·R_gr
Minimum weight* (@ U=1%, 2 sd)	0.03 mg+5x(10 <sup>-6</sup> )·R_gr	0.03 mg+5x(10 <sup>-6</sup> )·R_gr	0.08 mg+6x(10 <sup>-6</sup> )·R_gr
Settling time	< 10 s	< 15 s	< 8 s

<sup>1)</sup> According to OIML R76 2) In the temperature range 10...30°C 3) Stability of sensitivity as from first installation with FACT 4) Can be used for the estimation of uncertainty sd: standard deviation Rgr: gross weight Rnt: net weight (sample weight) a: year (annum)

 $<sup>-\</sup> choice\ of\ suitable\ weighing\ parameters,-moving\ to\ better\ location,-using\ smaller\ tare\ containers$ 







<sup>\*</sup>Repeatability and minimum weight can be improved and affected by the following measures: