

## knows no alternative



### SmartGrid

for fast and secure weighing. The unique grid weighing pan successfully minimizes the effects of air turbulence in the weighing chamber, which dramatically shortens stabilization times. Various ErgoClip holders allow secure fastening of any type of tare container for ergonomic weighing.



### SmartSens

increases user safety. The programmable infrared sensors allow hands-free operation of the balance. With complete focus on the sample, you can weigh valuable or toxic substances safely and without spilling.



### SmartScreen

guarantees complete control. The color touchscreen display offers individual profiles and access rights for up to eight users. The result: highest data security and full regulatory compliance.



Whenever your balance is not leveled, the XP sends out a warning signal and proposes corrective action in the display – for always accurate results.



### Excellence Plus XP

High-performance analytical balances

METTLER TOLEDO is changing the world of analytical balances. SmartSens, SmartGrid and SmartScreen – three innovations combined in one balance – ensure comprehensive weighing security. They provide optimal user protection, unprecedented measurement performance, full data security and seamless traceability. Built-in warning systems visually and audibly alert the user when valid measuring results are at risk, for instance when the balance is not leveled. This enables quick adjustments to maximize uptime and ensures always accurate results. The bottom line: more secure processes and higher speed at lower costs.

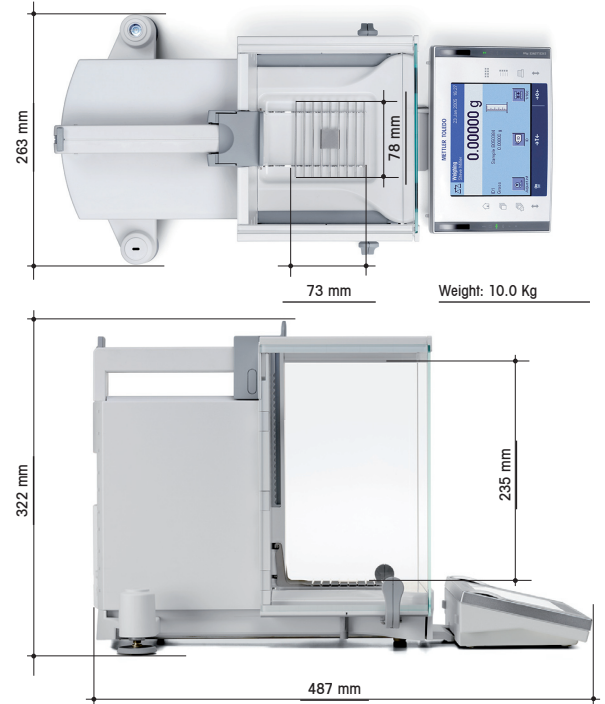
Technical data

## Excellence Plus XP

High-performance analytical balances

### Standard equipment

- SmartSens sensor for handsfree operation
- SmartGrid grid weighing pan for fast and stable results
- SmartScreen color touchscreen display for comfortable and secure operation
- ErgoClip holders for different tare containers for efficient weighing
- MinWeigh warns if the minimum weight is not reached (minimum weight determined on-site by service technician)
- UserManagement for the assignment of access rights
- LevelControl warns you when the balance is not leveled
- BalanceCheck prompts automatically for validation with external weights
- proFACT fully automatic time- and / or temperature-controlled internal adjustment and linearization
- Six different applications with user guidance (including density determination, statistical evaluation and formula weighing)
- Individual reports can be defined with up to 4 IDs
- Built-in RS232 interface and two auxiliary outlets
- Slot for second interface (7 options)
- Height-adjustable inner draft shield
- Motorized automatic draft shield doors
- Completely dismantable draft shield for easy cleaning
- Terminal can be placed away from the balance
- Protective cover for the terminal
- Production certificate



Balance model	XP105DR	XP205	XP205DR	XP204	XP504	XP504DR
Maximum capacity	120 g	220 g	220 g	220 g	520 g	520 g
Maximum capacity, fine range	31 g	–	81 g	–	–	101 g
Readability	0.1 mg	0.01 mg	0.1 mg	0.1 mg	0.1 mg	1 mg
Readability, fine range	0.01 mg	–	0.01 mg	–	–	0.1 mg
Repeatability – at nominal load	0.06 mg (100 g)	0.03 mg (200 g)	0.06 mg (200 g)	0.07 mg (200 g)	0.12 mg (500 g)	0.6 mg (500 g)
– at low load	0.05 mg (10 g)	0.015 mg (10 g)	0.05 mg (10 g)	0.05 mg (10 g)	0.1 mg (10 g)	0.5 mg (10 g)
– at low load in fine range	0.015 mg (10 g)	–	0.015 mg (10 g)	–	–	0.1 mg (10 g)
Linearity	0.15 mg	0.1 mg	0.15 mg	0.2 mg	0.4 mg	0.5 mg
Eccentric load deviation (test load) <sup>1)</sup>	0.2 mg (50 g)	0.2 mg (100 g)	0.25 mg (100 g)	0.25 mg (100 g)	0.4 mg (200 g)	0.5 mg (200 g)
Sensitivity offset	4x10 <sup>-6</sup>	2x10 <sup>-6</sup>	2.5x10 <sup>-6</sup>	3x10 <sup>-6</sup>	3x10 <sup>-6</sup>	4x10 <sup>-6</sup>
Sensitivity temperature drift <sup>2)</sup>	1x10 <sup>-6</sup> /°C	1x10 <sup>-6</sup> /°C	1x10 <sup>-6</sup> /°C	1x10 <sup>-6</sup> /°C	1x10 <sup>-6</sup> /°C	1x10 <sup>-6</sup> /°C
Sensitivity stability <sup>3)</sup>	1x10 <sup>-6</sup> /a	1x10 <sup>-6</sup> /a	1x10 <sup>-6</sup> /a	1x10 <sup>-6</sup> /a	1x10 <sup>-6</sup> /a	1x10 <sup>-6</sup> /a
Weighing time, typical <sup>4)</sup> (coarse/fine range)	4 s / 6 s	6 s	4 s / 6 s	4 s	4 s	3.5 s / 4 s
Stabilization time (coarse/fine range)	1.5 s / 2.5 s	2.5 s	1.5 s / 2.5 s	1.5 s	1.5 s	1.5 s / 1.5 s

<sup>1)</sup> According to OIML R76

<sup>2)</sup> In temperature range from 10...30°C

<sup>3)</sup> Stability of sensitivity as from first installation with proFACT

<sup>4)</sup> Including sample handling and stabilization time

s: seconds

a: year (annum)

### Accessories

RS-P42 printer with RS232 connection	229265	ErgoClip Flask	11106764
BT-P42 printer with wireless Bluetooth connection	11132540	MinWeigh Door	11106749
Foot-operated switch for balance functions	11106741	ErgoClip Tube	11106784
ErgoSens sensor for balance functions	11132601	ErgoClip Titration Basket	11106883
Terminal extension cable 4.5 m	11600517	ErgoClip Weighing Boat	11106748
Density determination kit	11106706	ErgoClip Round Bottom Flask	11106746
Integrable Antistatic-kit	11107761	ErgoClip Basket Small	11106747
RS232 C (interface)	11132500	Weighing Kit - ErgoClips Set	11106707
Bluetooth BTS single-point (interface)	11132535	PC-Volume Option1	21900791
Bluetooth BT multi-point (interface)	11132530	Evaporation trap, PC-Volume Option2 XS/XP	21901263
Ethernet (interface)	11132515	PC-Volume Option3 XS/XP	21901264
PS2 keyboard connection (interface)	11132520	Stand for printer	11106730
LocalCAN (interface)	11132505	SE-Kit XP-A Separate electronic evaluation equipment	11106743
RS9-RS9 (m/f) cable, 1 m	11101051	LC-RS9 cable for LocalCAN	229065



The new ErgoClips are tailor-made for your specific needs. They allow secure placement of any tare container and will make your daily weighing routine easier.