

XPR Essential Analytical Balances

Simply Excellent



Accurate Weighing Results

The hanging weighing pan and high-performance load cell allow for precise weighing of small samples, while the gap-free design protects the balance's mechanics and makes spills easy to clean.



Smart Compliance Support

We offer Good Weighing Practice® methodology, built-in features like StatusLight to indicate that the balance is ready, and data management options to help you comply with regulations.



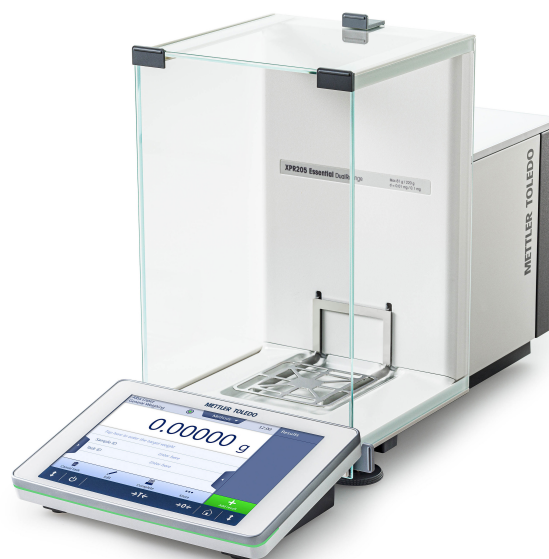
Excellent Ergonomics

Open the motorized doors with one touch, dose easily onto the low weighing pan, and place the balance display where it's convenient. ErgoClip accessories can be used to ergonomically position tare vessels.



Flexible Data Management

Connect your balance to LabX software to save your results automatically, ensure traceability, and simplify data management. Users can receive step-by-step guidance on the balance display while progress is simultaneously monitored remotely.



Highly Accurate and Fast Results

All the Essentials You Need

XPR Essential analytical balances deliver highly accurate and fast results with all the essentials you need. With a high-performance load cell and hanging weighing pan design, you can weigh small samples with high accuracy, reducing waste and saving costs.

Manufactured in Switzerland using high-quality materials, these balances uphold the famous durability of METTLER TOLEDO products. The load cell and electronics withstand intensive use, providing reliable performance and a low cost of ownership for years to come.

We are committed to protecting the environment, focus on sourcing sustainable materials, and our operations have been carbon neutral since 2020.

METTLER TOLEDO

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Technical Specifications



	24A00J593	24A00J592	24A00J591
Limit values			
Capacity	120 g	220 g	220 g
Readability	0.1 mg	0.1 mg	0.1 mg
Capacity of fine range	41 g	81 g	121 g
Readability in fine range	0.01 mg	0.01 mg	0.01 mg
Repeatability (at 5% load)	0.02 mg	0.02 mg	0.02 mg
Linearity deviation	0.2 mg	0.2 mg	0.2 mg
Typical values			
Repeatability (at 5% load)	0.01 mg	0.01 mg	0.01 mg
Linearity deviation	0.06 mg	0.06 mg	0.06 mg
Sensitivity offset (at nominal load) ▲	0.25 mg	0.4 mg	0.4 mg
Minimum weight (USP, tolerance = 0.10%) ▼	20 mg	20 mg	20 mg
Minimum weight (tolerance = 1%) ▼	2 mg	2 mg	2 mg
Settling time	1.5 s	1.5 s	1.5 s
Dimensions and other specifications			
Balance dimensions (W × D × H)	195 × 456 × 292 mm	195 × 456 × 292 mm	195 × 456 × 292 mm
Weighing pan dimensions (W × D)	78 × 73 mm	78 × 73 mm	78 × 73 mm
▲ after adjustment with internal weight			
▼ determined at 5% load, k = 2			



	24A00J594	24A00J597	24A00J596	24A00J595
Limit values				
Capacity	220 g	320 g	120 g	220 g
Readability	0.1 mg	0.1 mg	1 mg	1 mg
Capacity of fine range	–	–	81 g	121 g
Readability in fine range	–	–	0.1 mg	0.1 mg
Repeatability (at 5% load)	0.07 mg	0.08 mg	0.1 mg	0.1 mg
Linearity deviation	0.2 mg	0.3 mg	0.2 mg	0.2 mg
Typical values				
Repeatability (at 5% load)	0.04 mg	0.04 mg	0.04 mg	0.04 mg
Linearity deviation	0.06 mg	0.1 mg	0.06 mg	0.06 mg
Sensitivity offset (at nominal load) ▲	0.5 mg	0.6 mg	0.3 mg	0.5 mg
Minimum weight (USP, tolerance = 0.10%) ▼	82 mg	82 mg	82 mg	82 mg
Minimum weight (tolerance = 1%) ▼	8.2 mg	8.2 mg	8.2 mg	8.2 mg
Settling time	1.5 s	1.5 s	1.5 s	1.5 s
Dimensions and other specifications				
Balance dimensions (W × D × H)	195 × 456 × 292 mm	195 × 456 × 292 mm	195 × 456 × 292 mm	195 × 456 × 292 mm
Weighing pan dimensions (W × D)	78 × 73 mm	78 × 73 mm	78 × 73 mm	78 × 73 mm
▲ after adjustment with internal weight				
▼ determined at 5% load, k = 2				

Features

Accurate Results

- High-performance load cell
- Automatic internal adjustment (FACT)
- Compact ionizer connectable (with stand)

Efficient Operation

- 7-inch color touchscreen (glove compatible)
- ErgoClips: accessories for ergonomic dosing*
- SmartTrac: dosing guidance on terminal
- SmartPan: hanging weighing pan
- Digital results notepad
- Storage of SOPs in method library (including sample series and tolerances)
- Motorized doors

* For ErgoClips without hanger, the weighing pan can be exchanged with the SmartGrid weighing pan.

Quality Assurance

- GWP® Approved: built-in quality assurance monitoring
- MinWeigh: warning function for low weights
- StatusLight: indicates balance is ready
- LevelControl: ensures balance is leveled
- Tolerance profiles: Easily switch between balance readabilities
- User management and password protection
- Adjustment and routine test history
- Alibi memory (for approved models only)

Seamless Processes

- LabX™ software compatible
- Connectivity via drop-to-cursor and MT-SICS
- Multiple ports for easy connectivity and data export: 3 × USB-A, 1 × LAN, 1 × USB-B

Sustainable Value

- Compact front-loader design
- Easy-to-clean draft shields
- Overload protection for load cell
- Carbon neutral operations

Accessories

Enhance performance, improve ergonomics, and handle your data efficiently with our wide range of accessories, including compact external ionizers, motion sensors, test weights, ErgoClips, printers, or density measurement kits.

► [Contact your local Thomas Scientific Sales Representative for information!](#)



LabX™ Laboratory Software

Connect your balance to LabX™ software for a fully integrated data handling solution:

- SOP guidance on the balance terminal
- Automatic data handling and calculations
- Easy data access and documentation
- Complete process and results traceability
- Centralized management of multiple instruments

► [Contact your local Thomas Scientific Sales Representative for information!](#)



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