ML-T Balances

The ML-T Balance Line

Reliable results

Easy operation

Compact and convenient

d=0.0001 g | Max 220 g

0.0000 g

METTLER TOLEDO

Big Features Go Compact
## Worry-free Weighing

METTLER TOLEDO

ML-T Balances
Results You Can Rely On

With ever-increasing demands, such as those from ISO, GLP and GMP, you need a balance which can support your everyday tasks and keep you on the right track.

With a high-performance weighing cell, integrated security features and user guidance, ML-T balances give you confidence in your results. You can rest assured that your documentation meets the relevant regulations too – up to 4 ID numbers, the balance serial number and lots more can all be automatically included on your results printout.

Proven weighing cell delivers reliable results
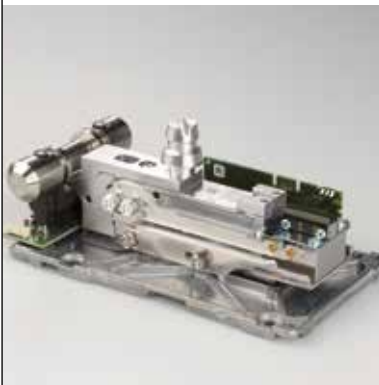
- MonoBloc weighing cell
- FACT automatic internal adjustment
- Overload protection
- Long balance lifetime

Passcodes protect balance settings

- Restrict access to settings
- Avoid accidental alterations
- Metrological performance protected

MinWeigh function ensures measurement accuracy

- Pre-set minimum weight
- User-defined minimum weight
- Red figures indicate net sample weight is too low

The built-in ISO-Log function provides full traceability of all weight relevant adjustments to your balance.
All changes made during routine testing or via FACT are logged automatically.

ML-T Balances
Easy for Anyone to Operate

To keep your production processes running smoothly, weighing tasks, during In-Process-Control for example, need to be finished quickly and efficiently. Built-in applications and a straightforward user interface make ML-T balances easy to use, even for untrained operators.

The weighing-in guide helps you dose within tolerances. The large color touchscreen is easy to read and any warnings are clearly indicated in red. Results can be sent directly to a printer, or even wirelessly to your PC, so there is no need for operators to write results down by hand.

Touchscreen display makes weighing easy

- 4.5" large color TFT display
- Touchscreen operation
- Intuitive interface
- Operable through cotton, silicon or rubber gloves

Unmatched connectivity – simple balance integration

- Just plug in and start (printer, barcode reader, etc.)
- Built-in RS232, USB device, USB host
- Bluetooth adapter available

Electronic guidance simplifies balance leveling

- Built-in warning function
- On-screen electronic guidance
- Level your balance in seconds

The weighing-in guide at the top of the display helps the operator dose to target. The green screen indicates at a glance that the weighing result lies within the process tolerances.

ML-T Balances
Compact and Convenient

Whether you work in a busy laboratory, or out on the factory floor, space is always at a premium. With the smallest-in-class footprint and larger-than-average weighing pan, ML-T balances give you the room you need to carry out your daily tasks efficiently.

Their compact size and battery operation make it easy to take your ML-T balance to where you need to weigh – ideal for stocktaking or fieldwork. And when you have finished your weighing tasks, ML-T balances are easy to clean and take care of too.

Clever design maximizes working space	**Battery operation offers full portability**	**Easy-cleaning features save time and effort**

- Small footprint – saves bench space
- Large weighing pan – convenient for bulky samples and large containers

- Take your balance anywhere
- Up to 150 hours battery run-time
- 8 AA rechargeable batteries and charger included

- Washable parts dismantle in seconds
- No tools needed
- All parts dishwasher-safe
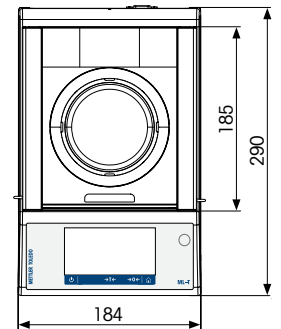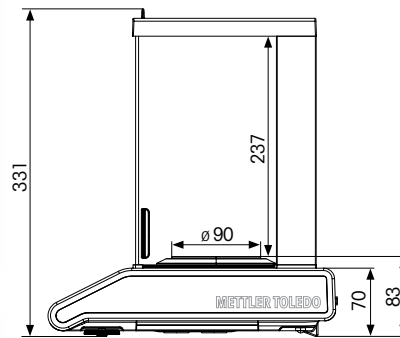- Balance housing is smooth and easy to clean

The compact design makes the most of your workspace, giving you the extra space you need to have all your equipment and samples conveniently nearby – especially handy when you have bulky samples or large containers.
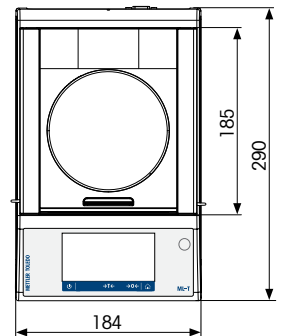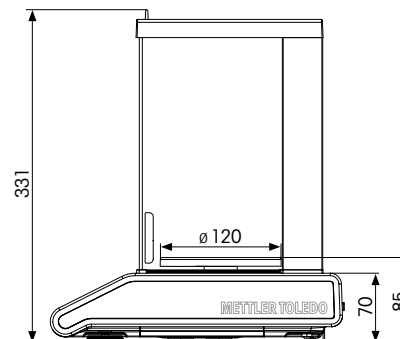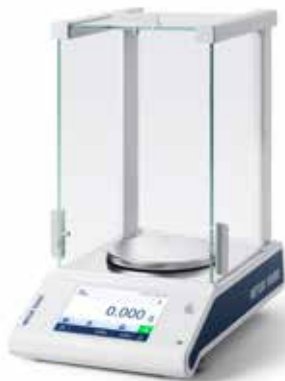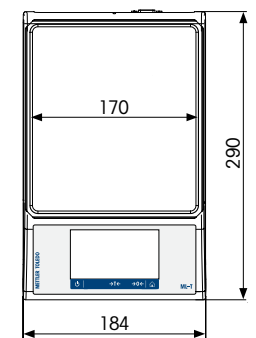
ML-T Balances
Technical Specifications

ML204T

331

237

ø 90

70

83

185

290

184

▶ **www.mt.com/mlt-analytical**

ML503T

331

ø 120

70

85

185

290

184

ML3002T

170

290

200

190

70

84

184
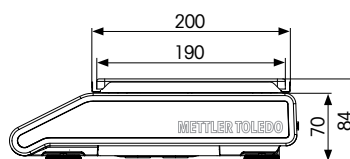
▶ **www.mt.com/mlt-precision**

All dimensions are given in mm.

ML-T Analytical Balances — 0.1 mg

Model	ML54T	ML104T	ML204T	ML304T
Maximum capacity	52 g	120 g	220 g	320 g
Readability	0.1 mg	0.1 mg	0.1 mg	0.1 mg
Repeatability (at nominal load)	0.1 mg	0.1 mg	0.1 mg	0.1 mg
Settling time	2 s	2 s	2 s	2 s
Minimum sample weight (acc. to USP)	160 mg	160 mg	160 mg	160 mg
Minimum sample weight (U=1%, k=2)	16 mg	16 mg	16 mg	16 mg

ML-T Precision Balances — 1 mg

Model	ML203T	ML303T	ML503T
Maximum capacity	220 g	320 g	520 g
Readability	1 mg	1 mg	1 mg
Repeatability (at nominal load)	1 mg	1 mg	1 mg
Settling time	1.5 s	1.5 s	1.5 s
Minimum sample weight (acc. to USP)	1400 mg	1400 mg	1400 mg
Minimum sample weight (U=1%, k=2)	140 mg	140 mg	140 mg

ML-T Precision Balances — 0.01 - 0.1 g

Model	ML802T	ML1602T	ML3002T	ML4002T	ML6002T	ML3001T	ML6001T
Maximum capacity	820 g	1620 g	3200 g	4200 g	6200 g	3200 g	6200 g
Readability	0.01 g	0.01 g	0.01 g	0.01 g	0.01 g	0.1 g	0.1 g
Repeatability (at nominal load)	0.01 g	0.01 g	0.01 g	0.01 g	0.01 g	0.1 g	0.1 g
Settling time	1.5 s	1.5 s	1.5 s	1.5 s	1.5 s	1 s	1 s
Minimum sample weight (acc. to USP)	14 g	14 g	14 g	14 g	14 g	120 g	120 g
Minimum sample weight (U=1%, k=2)	1.4 g	1.4 g	1.4 g	1.4 g	1.4 g	12 g	12 g

Features

Accurate Results	MonoBloc weighing cell and overload protection
	FACT – fully automatic temperature-controlled internal adjustment
	MinWeigh warning function
	Wind ring for faster settling times
	Metal bottom housing (ABS/PC top housing)
Efficient Operation	4.5" large color TFT touchscreen
	LevelControl function
	Statistics – improved management of weighing data
	Easy cleaning with QuickLock for glass panels
	Extra small footprint
	Overload protection
	Battery operation
Quality Assurance	ISO-Log – records important changes, e.g. adjustments, leveling status
	Up to 4 Sample ID's – avoid confusion between samples and provides traceability
	Passcode protection – only authorized users can make adjustments
Seamless Process	3 interfaces – USB device, USB host and RS232
	Bluetooth option
	PC Direct application for easy data transfer (no software needed)

Make the Most of Your Balance
with Clever Accessories

METTLER TOLEDO balances can be customized with accessories and peripheral devices to meet the needs of virtually any application. Our carefully designed accessories make your work easier, convenient and help increase efficiency.

Smooth routine testing

Weights and CarePacs® are perfectly designed for reliable routine testing and adjustment of balances.

Fast density determination

Density determination of solid and liquid samples is easy with this kit for analytical and precision balances.

Easy documentation

The P-5x printers generate fast, high quality printouts on paper, self-adhesive labels and continuous self-adhesive paper (including barcodes).

Protect results from static

The freestanding U-Electrode removes electrostatic charges on samples and containers.

Wireless with Bluetooth

Simply plug in the BT adapter where there is no built-in BT interface to wirelessly send data between your balance and a PC, tablet or printer.

Extra draft shield

The draft shield protects your balance from air currents which may prevent your balance settling e.g. from air conditioning.

▶ **www.mt.com/lab-accessories**

Our team of 5,000 professional service experts and customer supporters in more than 140 countries worldwide have the necessary skills and experience to satisfy all your needs with the following service offering: Good Weighing Practice©, support, repair, maintenance, calibration, certification and quality assurance.

▶ **www.mt.com/service**

Benefit From Our Weighing Expertise

With decades of experience in laboratory weighing, METTLER TOLEDO can offer you a wide range of online learning resources. Take advantage of our know-how and ensure you get the most out of your balance. Check out the documentation on our internet pages for a range of relevant materials.

Videos

Get practical advice in an easy learning format on Laboratory Weighing and Weighing Applications and Solutions. Over 40 videos cover topics such as:
- Easy cleaning
- Density determination

▶ **www.youtube.com/mtlaboratory**

eLearning

Online training is a cost effective way to train new employees and fulfill GLP/GMP/ISO re-training requirements. Get going with:
- Lab Balances – External Influences and Cleaning

▶ **www.mt.com/lab-elearning**

On-demand Webinars

Learn directly from our weighing experts and guest speakers. It is easy to register.
For starters, we recommend:
- Minimizing Out-of-Specification Errors
- Good Weighing Practice™

▶ **www.mt.com/webinars**

www.mt.com/balances

For more information

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