Precision and Analytical Balances

Quick Guide

Mettler Toledo
1 Safety Information

1.1 Definition of signal warnings and symbols

Safety notes are marked with signal words and warning symbols. These show safety issues and warnings. Ignoring the safety notes may lead to personal injury, damage to the instrument, malfunctions and false results.

**WARNING** for a hazardous situation with medium risk, possibly resulting in severe injuries or death if not avoided.

**CAUTION** for a hazardous situation with low risk, resulting in damage to the device or the property or in loss of data, or minor or medium injuries if not avoided.

**Attention** (no symbol) for important information about the product.

**Note** (no symbol) for useful information about the product.

![General hazard](Image)

![Electrical shock](Image)

1.2 Product safety information

**Intended use**

Your balance is used for weighing. Use the balance exclusively for this purpose. Any other type of use and operation beyond the limits of technical specifications without written consent from Mettler-Toledo AG, is considered as not intended.

It is not permitted to use the instrument in explosive atmosphere of gases, steam, fog, dust and flammable dust (hazardous environments).

**General safety information**

This balance complies with current industry standards and the recognized safety regulations; however, it can constitute a hazard in use. Do not open the balance housing: The balance contains no user-serviceable parts. In the event of problems, please contact a METTLER TOLEDO representative.

Always operate and use your instrument only in accordance with the instructions contained in this manual. The instructions for setting up your new instrument must be strictly observed.

If the instrument is not used according to these Operating Instructions, protection of the instrument may be impaired and METTLER TOLEDO assumes no liability.

**Staff safety**

These operating instructions must be read and understood before using the balance. These operating instructions must be retained for future reference.

The balance must not be altered or modified in any way. Only use METTLER TOLEDO original spare parts and accessories.
Safety notes

**CAUTION**

**Damage to the balance**

a) Only use indoors in dry locations.

b) Do not use pointed objects to operate the touch screen!
   The balance is of a very sturdy design, but is still a precision instrument. It must be handled with care.

c) Do not open the balance:
   The balance contains no user-serviceable parts. In the event of problems, please contact a METTLER TOLEDO representative.

d) Only use METTLER TOLEDO original accessories and peripheral devices for the balance.
   These are specifically designed for the balance.

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**WARNING**

**Risk of electric shock**

Use only the original universal AC/DC adapter delivered with your balance, and check that the voltage printed on it is the same as your local power supply voltage. Only plug the adapter into a socket which is grounded.
2 Design and Function

2.1 Components

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Display</td>
</tr>
<tr>
<td>2</td>
<td>Operation keys</td>
</tr>
<tr>
<td>3</td>
<td>Leveling foot</td>
</tr>
<tr>
<td>4</td>
<td>Handle for operation of the draft shield door</td>
</tr>
<tr>
<td>5</td>
<td>Weighing pan</td>
</tr>
<tr>
<td>6</td>
<td>Draft shield element</td>
</tr>
<tr>
<td>7</td>
<td>Level indicator</td>
</tr>
<tr>
<td>8</td>
<td>Kensington slot for anti-theft purposes</td>
</tr>
<tr>
<td>9</td>
<td>Glass draft shield</td>
</tr>
<tr>
<td>10</td>
<td>RS232C serial interface</td>
</tr>
<tr>
<td>11</td>
<td>Socket for AC adapter</td>
</tr>
<tr>
<td>12</td>
<td>Legal for Trade (LFT) sealing</td>
</tr>
<tr>
<td>13</td>
<td>USB Device</td>
</tr>
<tr>
<td>14</td>
<td>USB Host</td>
</tr>
</tbody>
</table>
2.2 Peripheral devices

Interfaces and possible connectivity of peripheral devices:

<table>
<thead>
<tr>
<th>USB Device</th>
<th>RS232C</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>Printer RS-P2x / P5x</td>
</tr>
<tr>
<td></td>
<td>Barcode Reader</td>
</tr>
<tr>
<td></td>
<td>RS 2\textsuperscript{nd} Display</td>
</tr>
<tr>
<td></td>
<td>PC</td>
</tr>
</tbody>
</table>

Note
The USB Host has currently no function.
For more information about the peripheral devices see at section Accessories.

2.3 Terminal keys

<table>
<thead>
<tr>
<th>No.</th>
<th>Key</th>
<th>Name</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>ON/OFF</td>
<td>To switch the instrument on or off.</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Capacitive color TFT touch screen</td>
<td>General navigation</td>
</tr>
<tr>
<td>3</td>
<td>(\rightarrow T \leftarrow)</td>
<td>Tare</td>
<td>To tare the balance.</td>
</tr>
<tr>
<td>4</td>
<td>(\rightarrow 0 \leftarrow)</td>
<td>Zero</td>
<td>To zero the balance.</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Home</td>
<td>To return from any menu level, or other window to the application home screen.</td>
</tr>
</tbody>
</table>
2.4 User Interface

The screen is a capacitive color TFT touch screen. The screen not only displays information, it also allows the user to enter commands by tapping on certain areas on its surface. You can choose the information displayed on the screen, change balance settings or perform certain operations on the instrument.

Only those elements which are available for the current dialog appear on the display.

⚠️ CAUTION

Do not touch the touch screen with pointed or sharp objects!
This may damage the touch screen.
2.4.1 Application home screen

The application home screen appears after the startup of the instrument. It always shows the last application that was being used before the balance was switched off. The application home screen is the main screen of the balance, from where every function can be accessed. You can always return to the application home screen by pressing on the home button \[ \text{home} \] in the lower right corner of the screen.

### Information and work bars

<table>
<thead>
<tr>
<th>Name</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Weighing information bar</td>
<td>Shows the weighing-in aid and general balance information.</td>
</tr>
<tr>
<td>2 Work title bar</td>
<td>Shows information about the current activity.</td>
</tr>
<tr>
<td>3 Value bar</td>
<td>Shows information about the current weighing process.</td>
</tr>
<tr>
<td>4 Main navigation</td>
<td>Work-related functions.</td>
</tr>
</tbody>
</table>

### Information fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Weighing-in aid</td>
<td>A dynamic graphic indicator shows the used amount of the total weighing range.</td>
</tr>
<tr>
<td>6 Short balance information</td>
<td>Readability and capacity of the balance.*</td>
</tr>
<tr>
<td>7 Weighing value field</td>
<td>Shows the value of the current weighing process.</td>
</tr>
<tr>
<td>8 Coach text field</td>
<td>Shows instructions for the current weighing process.</td>
</tr>
</tbody>
</table>

* For approved balances: \text{Min} (minimum capacity) and \text{e} (Verification scale interval) are shown in the left upper corner.

### Action buttons

<table>
<thead>
<tr>
<th>Name</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Main activity configuration</td>
<td>To configure the current application (e.g. Weighing).</td>
</tr>
<tr>
<td>10 Detailed balance Information</td>
<td>Shows detailed technical data about the balance.</td>
</tr>
<tr>
<td>11 Weighing unit</td>
<td>Shows the unit of the current weighing process.</td>
</tr>
<tr>
<td>12 Activities</td>
<td>To open the activities selection.</td>
</tr>
<tr>
<td>13 Print</td>
<td>To print out results and/or settings (printer required).</td>
</tr>
<tr>
<td>14 Settings/Preferences</td>
<td>To configure settings/preferences.</td>
</tr>
<tr>
<td>15 Status information field</td>
<td>Shows information about the system status.</td>
</tr>
</tbody>
</table>
2.4.2 Input Dialogs

2.4.2.1 Entering Characters and Numbers

The keyboard dialog allows the user to enter characters including letters, numbers and a variety of special characters.

<table>
<thead>
<tr>
<th>Name</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Input field</td>
<td>Shows the characters that have been entered.</td>
</tr>
<tr>
<td>2 Delete all</td>
<td>To delete all entered characters.</td>
</tr>
<tr>
<td>3 Switch</td>
<td>If a switch appears on the right side in the content title bar, it must be switched on in order to enter a value.</td>
</tr>
<tr>
<td>4 Discard</td>
<td>To discard the entered data and to exit the dialog.</td>
</tr>
<tr>
<td>5 Page indicator</td>
<td>To navigate when the dialog consists of several steps.</td>
</tr>
<tr>
<td>6 Confirm</td>
<td>To confirm the data entered.</td>
</tr>
<tr>
<td>7 Delete</td>
<td>To delete the last entered character.</td>
</tr>
<tr>
<td>8 Shift</td>
<td>To switch between lower and upper case letters.</td>
</tr>
<tr>
<td>9 Specialized tabs</td>
<td>To switch the keyboard mode for entering letters, numbers or special characters.</td>
</tr>
<tr>
<td>10 Explanation field</td>
<td>Extra information about the value to enter (e.g. the maximum number of characters available).</td>
</tr>
</tbody>
</table>
2.4.2.2 Changing the date and time

The dialog (Picker view) allows the user to set the date and time.

<table>
<thead>
<tr>
<th>Name</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Change date/time format</td>
<td>Various date/time formats can be chosen.</td>
</tr>
<tr>
<td>2  Pick button</td>
<td>Increment</td>
</tr>
<tr>
<td>3  Picker field</td>
<td>Shows the defined time/date.</td>
</tr>
<tr>
<td>4  Pick button</td>
<td>Decrement</td>
</tr>
<tr>
<td>5  Selection tabs</td>
<td>Tabs of the selectable sub-categories</td>
</tr>
</tbody>
</table>
2.4.3 Lists and tables

Basic elements of a simple list include a content title and a list of sub-elements. Tapping on an element opens a list of sub-elements or an input dialog.

<table>
<thead>
<tr>
<th>Name</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 List title</td>
<td>Title of the current list</td>
</tr>
<tr>
<td>2 Contextual help</td>
<td>Additional information about the current process</td>
</tr>
<tr>
<td>3 Back button</td>
<td>To go one step back</td>
</tr>
<tr>
<td>4 List element title</td>
<td>Title of the list element</td>
</tr>
<tr>
<td>5 Scroll position</td>
<td>The list can be scrolled</td>
</tr>
<tr>
<td>6 Selection tabs</td>
<td>Tabs of the selectable sub-categories.</td>
</tr>
</tbody>
</table>
2.4.4 Detailed balance information

- Tap on [i] to open the general balance information menu.

Balance information

Tap on [⇒] to display balance information.

The display shows balance identification defined by the user (see the section system settings), information about the software and the hardware.

Balance support information

Tap on [⇐] to display balance support information.

The display shows Support information, Service information (next service due) and Quick support request

Quick support request

Quick support request contains an unique QR code. If you have a QR (Quick Response) code reader on your smartphone, you can take a picture of the QR code. The smartphone creates an email with all relevant service information.

Note

Make sure that the QR code can be identified by the smartphone. A program to read the QR codes must be installed. Make sure that there are no access restrictions, which could block your email program in some way.
3 Installation and Putting into Operation

This section describes how to put the new instrument into operation.

3.1 Scope of delivery

<table>
<thead>
<tr>
<th>Components</th>
<th>Model</th>
<th>0.1 mg</th>
<th>1 mg</th>
<th>0.1 g / 0.01 g</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft shield</td>
<td>high, 235 mm</td>
<td>✔️</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>low, 170 mm</td>
<td>–</td>
<td>✔️</td>
<td>–</td>
</tr>
<tr>
<td>Weighing pan with pan support</td>
<td>Ø 90 mm</td>
<td>✔️</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Ø 120 mm</td>
<td>–</td>
<td>✔️</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>180 x 180 mm</td>
<td>–</td>
<td>–</td>
<td>✔️</td>
</tr>
<tr>
<td>Draft shield element</td>
<td></td>
<td>✔️</td>
<td>–</td>
<td>✔️</td>
</tr>
<tr>
<td>Pan support</td>
<td></td>
<td>–</td>
<td>–</td>
<td>✔️</td>
</tr>
<tr>
<td>Protective cover</td>
<td></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Universal AC adapter</td>
<td></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Declaration of conformity</td>
<td></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Quick Guide</td>
<td></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Operating instructions: printed or on CD-ROM depending on the country.</td>
<td></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>
3.2 Installing the components

Balances with readability of 0.1 mg

Place the following components on the balance in the specified order:
1. Push the side glass doors back as far as will go.
2. Place draft shield element (1).
3. Place weighing pan (2).

**Note**
Cleaning the draft shield see Cleaning and Service.

Balances with readability of 1 mg

Place the following components on the balance in the specified order:
1. Push the side glass doors back as far as will go.
2. Place weighing pan (1).

**Note**
Cleaning the draft shield see Cleaning and Service.
Balances with readability of 0.01 g / 0.1 g

Place the following components on the balance in the specified order:

1. Place draft shield element (1): carefully pull apart the draft shield element to fix it under the retaining plate.
2. Insert pan support (2).
3. Place weighing pan (3).
### 3.3 Installing Protective Cover

**Note**
Make sure using the correct protective cover, see Accessories and Spare Parts

<table>
<thead>
<tr>
<th>Balance with readability of 0.1 mg / 1 mg</th>
<th>Balance with readability of 0.01 g / 0.1 g</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install the protective cover according to the illustrations below, using a screwdriver Phillips No. 2.</td>
<td>Install the protective cover according to the illustrations below, using a flat-head screwdriver.</td>
</tr>
</tbody>
</table>
3.4 Selecting the location

Your balance is a sensitive precision instrument; the location where it is placed will have a profound effect on the repeatability and accuracy of weighing results. Chose a stable surface that is as horizontal as possible. The surface must be able to safely carry the weight of a fully loaded balance.

Observe ambient conditions (see Technical Data).

Avoid the following:
- Direct sunlight
- Air drafts (e.g. from fans or air conditioners)
- Temperature fluctuations
- Vibrations
3.5 Connecting the instrument

The balance is supplied with a country-specific AC/DC adapter or with a country-specific power cable. The power supply is suitable for all line voltages in the range: 100 - 240 VAC, 50/60 Hz. For detailed specifications, see the section Technical Data [31].

Note
Allow the balance to warm up for 30 minutes (0.1 mg models need 60 minutes) to adapt itself to the ambient conditions.

Connect the AC/DC adapter to the connection socket on the back of your balance and to the power line.

Attention
- Check if the local power supply falls within this range. If this is not the case, under no circumstances connect the AC/DC adapter to the power supply, but contact a METTLER TOLEDO representative.
- The power plug must be accessible at all times.
- Prior to use, check the power cable for damage.
- Route the cable in such a way that it cannot be damaged or cause a hindrance when working.
- Ensure that no liquid ever comes into contact with the AC/DC adapter.
3.6 Leveling the balance

Exact horizontal positioning and stable installation are prerequisites for repeatable and accurate weighing results.

Note

To compensate for small irregularities or inclinations (±2 %), the instrument must be leveled and adjusted each time it is moved to a new location. There are two adjustable leveling feet to compensate for slight irregularities in the surface of the weighing bench.

Leveling the balance

- Adjust the two front leveling feet until the air bubble comes to rest exactly in the middle of the glass:

  - Air bubble at "12 o'clock" turn both feet clockwise
  - Air bubble at "3 o'clock" turn left foot clockwise, right foot counterclockwise
  - Air bubble at "6 o'clock" turn both feet counterclockwise
  - Air bubble at "9 o'clock" turn left foot counterclockwise, right foot clockwise
3.7 Transporting the balance

Switch off the balance and remove the power cable and any interface cable from the balance. Refer to the notes in section Selecting the location [17] regarding the choice of an optimal location.

Transporting over short distances

⚠️ CAUTION ⚠️

For balances with a draft shield:
Never lift the balance by its glass draft shield. The draft shield is not sufficiently fastened to the balance.

Transporting over long distances

⚠️ CAUTION ⚠️

If you would like to transport or ship your balance over long distances, use the complete original packaging.

3.8 General requirements

3.8.1 Warming up the balance

Before working with the balance, it must be warmed up in order to obtain accurate weighing results. To reach operating temperature, the balance must be connected to the power supply for at least:

- 30 minutes for balances with a readability of 1 mg to 0.1 g.
- 60 minutes for balances with a readability of 0.1 mg and higher.

3.8.2 Adjusting the balance

To obtain accurate weighing results, the balance must be adjusted to match the gravitational acceleration at its location and depending on the ambient conditions. After reaching the operation temperature, an adjustment is necessary in the following cases:

- Before the balance is used for the first time.
- When the balance (readability of 0.1 mg) was disconnected from the power or in case of a power failure.
- After a change of location and after the warming-up phase.
- At regular intervals during weighing service.
4 Weighing Made Simple

This section describes how to perform a simple weighing. In addition, the basic concept of the navigation and the basic functions of the balance are explained.

4.1 Switching on the balance

Switching on the balance for the first time

1. Remove any load from the weighing pan.
2. Connect the balance using the AC/DC adapter to the mains.
   - After the start screen has disappeared, the balance starts with the application home screen.

After the balance has switched on for the first time, it can be switched on by pressing long on [ ◎ ].

Note
When the balance is switched on for the first time, the home screen of the application Weighing opens. If the balance is switched on again, it always starts with the home screen of the application that was last used before switching off.

4.2 Switching off the balance

1. Press on [ ◎ ] and hold until the dialog Switch-off appears.
2. Tap on [ ✔ ].
   - the balance switches off and goes into standby mode.

Note
• After switching on from standby mode, the balance needs no warm-up time and is immediately ready for weighing.
• If the balance has been switched off after a preselected time, the display is dimly lit and shows the time and the date.
• If the balance has been switched off manually, the display is off.
  - To completely switch off the balance, it must be disconnected from the power supply.
4.3 Main settings and activities at a glance

The diagram below provides an overview of the main settings of an application (in this example, Weighing). Depending on the application, the selectable options and their content can differ. Every application is based on this concept.
4.4 Navigation on the touch screen

To interact with the balance, use the screen and the operating keys at the bottom of the screen. The navigation on the screen is similar to the navigation on a smart phone or tablet PC.

4.4.1 Opening an application

To open settings or applications, tap with your finger on the symbol of the application (e.g. Weighing).

4.4.2 Scrolling

When the options are too numerous to be shown on one screen, a blue bar on the right side appears. This means that the user can scroll up and down. For scrolling, simply place your finger somewhere in the list and drag it up or down.
4.4.3 Using shortcuts

To simplify navigation on the capacitive color TFT touch screen, there are a few shortcuts that allow quick access to the most important areas of the balance. The weighing value field on the application home screen for example works as a shortcut (see diagram below), so does the weighing unit next to the weighing value field. Depending on the application, there may be other shortcuts that can be used.

<table>
<thead>
<tr>
<th>d=0.0001 g</th>
<th>Max 220 g</th>
</tr>
</thead>
</table>

0.0000 g

Note
Every setting that can be changed directly via shortcut, can also be changed in the main configuration settings of the application.

4.5 Performing a simple weighing

When you switch on the balance for the first time, the home screen of the application Weighing opens automatically. If the balance was used already, the last used application before the balance was switched off opens. If another application is running, switch to the application Weighing.

Navigation:
Activities - Weighing applications ➔ Weighing

1. Press [O] to zero the balance or [T] to tare the balance.

The initial screen looks like this:

<table>
<thead>
<tr>
<th>d=0.0001 g</th>
<th>Max 220 g</th>
</tr>
</thead>
</table>

0.0000 g
2. Place a sample on the weighing pan.
   ➔ The unstability symbol \( \square \) appears at the left side of the screen and the value in the weighing value field becomes light blue.

   After a short period of time, the weighing pan is stable. The unstability symbol \( \square \) disappears and the value in the weighing value field becomes dark blue again.

   The weighing process is finished. The result appears on the screen.

4.6 Switching the weighing unit

There are several weighing units available. The default value is country-specific.

The weighing unit can be chosen via the main configuration of the current application or via shortcut. This example describes how to change the weighing unit via shortcut.

1. Tap on the weighing process unit (shortcut) gram (g).
   ➔ the screen Main unit opens.
2. Put your finger somewhere in the list and drag up to scroll down.

3. Choose another weighing unit (e.g. ounce (oz)) by tapping on it.
4. Tap on [✓] to confirm the chosen weighing unit.

The weighing unit gram (g) has been changed to ounce (oz).

**Note**

With approved balances, this menu topic has a fixed setting and cannot be changed.
### 4.7 Changing the resolution

There are several resolutions available. The default resolution is instrument-specific. The resolution can be changed as follows:

1. Tap on the weighing value field.
2. Tap on **10d - 0.001 g**.
3. Confirm the chosen resolution by tapping on [✓].

The resolution has been changed.

### 4.8 Zeroing

1. Unload the balance.
2. Press [→ O ←] to set the balance to zero.

All weight values are measured in relation to the zero point.
Note
Press \([\rightarrow \text{O} \leftarrow]\) before starting the weighing process.

4.9 Taring

1. Tap on \([\rightarrow \text{O} \leftarrow]\) to set the balance to zero.
2. Place the empty container on the balance.
   \(\Rightarrow\) The weight is displayed.
3. Press \([\rightarrow \text{T} \leftarrow]\) to tare the balance.
   \(\Rightarrow\) The status information field on the left side of the screen shows \textbf{Net} and the weighing value field shows \textbf{0.000 g}. 
5 Maintenance

**WARNING**

Risk of electric shock
– The instrument must be disconnected from the power supply, before cleaning or other maintenance work to be performed.
– Use only the power cord from METTLER TOLEDO, if it needs replacing.

Please observe the following notes:

**Note**
On no account use cleaning agents which contain solvents or abrasive ingredients, as this can result in damage to the touch screen.

5.1 Cleaning and Service

Every now and then, clean the weighing pan, draft shield element, bottom plate, draft shield (depending on the model) and housing of your balance. Your balance is made from high-quality, durable materials and can therefore be cleaned using a damp cloth or with a standard, mild cleaning agent.

Please observe the following notes:

- The balance must be disconnected from the power supply
- Ensure that no liquid comes into contact with the balance or the AC adapter.
- Never open the balance or AC adapter – they contain no components, which can be cleaned, repaired or replaced by the user.

- On no account use cleaning agents which contain solvents or abrasive ingredients, as this can result in damage to the operation panel overlay.
- Do not use wet, but only damp cloth for cleaning.

Please contact your METTLER TOLEDO dealer for details of the available service options. Regular servicing by an authorized service engineer ensures constant accuracy for years to come and prolongs the service life of your balance.
5.2 Draft Shield

Removing or inserting sliding glass doors

It is possible to remove the sliding glass doors for cleaning or for replacing. In this case you have to remove the handle first. Installing the handle after insertion of the glass door.

Note
Front and rear glass panels cannot be removed.

5.3 Disposal

In conformance with the European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE) this device may not be disposed of in domestic waste. This also applies to countries outside the EU, per their specific requirements.

Please dispose of this product in accordance with local regulations at the collecting point specified for electrical and electronic equipment. If you have any questions, please contact the responsible authority or the distributor from which you purchased this device. Should this device be passed on to other parties (for private or professional use), the content of this regulation must also be related.

Thank you for your contribution to environmental protection.
6 Technical Data

6.1 General Data

Power Supply
• AC operation:
  - AC/DC Adapter
  - Primary: 100V–240V, ±10%, 50/60Hz, 0.3 A
  - Secondary: 12VDC, 0.84A (with electronic overload protection)
  - Power supply to the balance: 8–20VDC, 10W

  \[\text{Use only with a tested AC Adapter with SELV output current.}\]
  \[\text{Ensure correct polarity \(\pm\)}\]

Protection and Standards
• Overvoltage categorie: II
• Degree of pollution: 2
• Degree of protection: Protected against dust and water.
• Standards for safety and EMC: See Declaration of Conformity
• Range of application: For use only in dry interior rooms

Environmental conditions
• Height above mean sea level: up to 3500 m
• Ambient temperature range: Operating condition for ordinary lab application: +10 to 30 °C (operability guaranteed between +5 to 40 °C)
  - Storage condition: -25 to 70 °C
• Relative air humidity: 10% up to 80 % at 31 °C, linearly decreasing to 50 % at 40 °C, noncondensing

Materials
• Housing:
  - Top housing: Plastic (ABS)
  - Bottom housing: Die-cast aluminum, lacquered
• Weighing pan:
  - Pan ø 90 mm: Stainless steel X2CrNiMo 17-12-2 (1.4404)
  - All others: Stainless steel X5CrNi 18-10 (1.4301)
• Draft shield element:
  - 0.1 mg models: Stainless steel X5CrNi 18-10 (1.4301)
• Draft shield:
  - Plastic (ABS), glass
• In-use-cover:
  - Plastic (PET)
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Good Weighing Practice™

GWP® is the global weighing standard, ensuring consistent accuracy of weighing processes, applicable to all equipment from any manufacturer. It helps to:
- Choose the appropriate balance or scale
- Calibrate and operate your weighing equipment with security
- Comply with quality and compliance standards in laboratory and manufacturing

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