

Compact Waterproof Weighing Scale



1 Safety Instructions



WARNING

The BPA121 scale is not designed for use in areas classified as hazardous because of combustible or explosive atmospheres. Do not install a BPA121 scale into an explosive environment.



WARNING

1) This device is an electrostatic sensitive equipment. Please take necessary electrostatic precautions when using and maintaining it. 2) Please ensure the device is grounded during the weighing process, otherwise static buildup may cause damage to the weighing platform or the items being weighed.



WARNING

Only permit qualified personnel to service the terminal. Exercise care when making checks, tests and adjustments that must be made with power on. Failing to observe these precautions can result in bodily harm and/or property damage.



WARNING

Do not charge the battery in a humid or dusty environment or when the temperature is below 0°C.



WARNING

Use caution when testing the battery. A large amount of current may be present in the battery.



WARNING

Dispose of used battery promptly. Keep away from children. Do not disassemble and do not dispose of in fire.



WARNING

Use the BPA121 scale for weighing only. Do not use it for other purposes.



WARNING

Avoid falling loads, shocks and lateral impacts. Do not overload the scale.



WARNING

1) Lead-acid battery version: The battery used in this device may present a risk of fire or chemical burn if mistreated. Do not crush, disassemble, heat or incinerate. Replace battery with the original type only. Use of another battery may present a risk of burn, fire or explosion. 2) Dry-cell version: Use the screw foot tool to tighten battery cover screws (torque: 1.1-1.6Nm) to safeguard battery seal and preserve product life. Exposure to water and moisture can cause electrical hazards and product failure.

Disposal

In conformance with the European Directive 2012/19/EU 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, the content of this regulation must also be related.



Compliance Documents Download

National approval documents, e.g. the FCC Supplier Declaration of Conformity, are available online and/or included in the packaging.

► www.mt.com/ComplianceSearch

Manuals Download

Visit the website ► www.mt.com/BPA121-downloads OR scan the QR-Code to download more manuals of BPA121.



2 Introduction

The BPA121 compact weighing scale is specifically designed for food processing applications. It offers high protection against water penetration and humidity and is built to withstand wet and harsh environments. It is uniquely suitable for moist environments.

The BPA121 scale is not designed for use in areas classified as hazardous because of combustible or explosive atmospheres.

WARNING: Lead-acid battery version includes standard lead-acid batteries upon factory delivery; dry-cell version does not include dry batteries and requires customers to purchase them separately.

2.1 Specifications

BPA121 scale conforms to the specifications listed in the following tables.

Asia Pacific

1) Lead-acid Battery Version:

Model	Capacity	Verification Division	Display Individual Division			
			2×1,500e	3,000d / 3,750d	6,000d / 7,500d	15,000d
BPA121-1211 / BPA121-1221	0.75 / 1.5 kg	0.5 / 1 g	0.5 g	0.2 g	0.1 g	0.05 g
BPA121-2211 / BPA121-2221	1.5 / 3 kg	1 / 2 g	1 g	0.5 g	0.2 g	0.1 g
BPA121-3211 / BPA121-3221	3 / 7.5 kg	2 / 5 g	2 g	1 g	0.5 g	0.2 g
BPA121-4211 / BPA121-4221	7.5 / 15 kg	5 / 10 g	5 g	2 g	1 g	0.5 g
BPA121-5211 / BPA121-5221	15 / 30 kg	10 / 20 g	10 g	5 g	2 g	1 g

2) Dry-cell Version:

Model	Capacity	Verification Division	Display Individual Division		
			3,000e	6,000d / 7,500d	12,000d / 15,000d
BPA121-2121 D-cell	3 kg	1 g	0.5 g	0.2 g	0.1 g
BPA121-3121 D-cell	6 kg	2 g	1 g	0.5 g	0.2 g
BPA121-4121 D-cell	15 kg	5 g	2 g	1 g	0.5 g
BPA121-5121 D-cell	30 kg	10 g	5 g	2 g	1 g

BPA121 Specifications

Parameter	Lead-acid Battery Version	Dry-cell Version
Power	AC-DC 100-240V / 50-60Hz or rechargeable lead-acid batteries (6V, 5Ah)	Five pieces of D-size alkaline dry batteries
Power Consumption	6V / 60mA	7.5V / 20mA
Display	<ul style="list-style-type: none"> 6-bit 7-section red LED display Six-step brightness adjustable Single or dual display 	<ul style="list-style-type: none"> 6-bit 7-section red LED display Six-step brightness adjustable Dual display only
Working Temperature	-10°C to +40°C / -14°F to +104°F, ≤95% relative humidity, non-condensing	
Storage Temperature	-10°C to +70°C / -14°F to +158°F, 10%-95% relative humidity, non-condensing	

Parameter	Lead-acid Battery Version	Dry-cell Version
Tare Range	Full weighing division: when tare exists, the net weighing capacity reduces accordingly.	
Accessories	<ul style="list-style-type: none"> Stainless steel scale pan 6V/5Ah rechargeable lead-acid battery Charger station, capable of charging 6V/5Ah lead acid battery simultaneously 	<ul style="list-style-type: none"> Stainless steel scale pan AC-DC 100-240V / 50-60Hz power supply
Keypad	Mechanical keypad, 2 keys	
Dimensions	300 x 230 x 133 mm	
Shipping Dimensions	380 x 282 x 200 mm	
Platter Size	182 x 226 mm	
Net Weight	3.24 kg (with lead-acid battery)	2.23 kg (without battery)
Shipping Weight	3.81 kg (with lead-acid battery)	2.86 kg (without battery)
Approval	CPA	OIML, CPA, CE
Accuracy Class	III	
Hazardous Areas	The BPA121 scale cannot be operated in areas classified as Hazardous because of combustible or explosive atmospheres in those areas.	

2.2 Display and Keypad

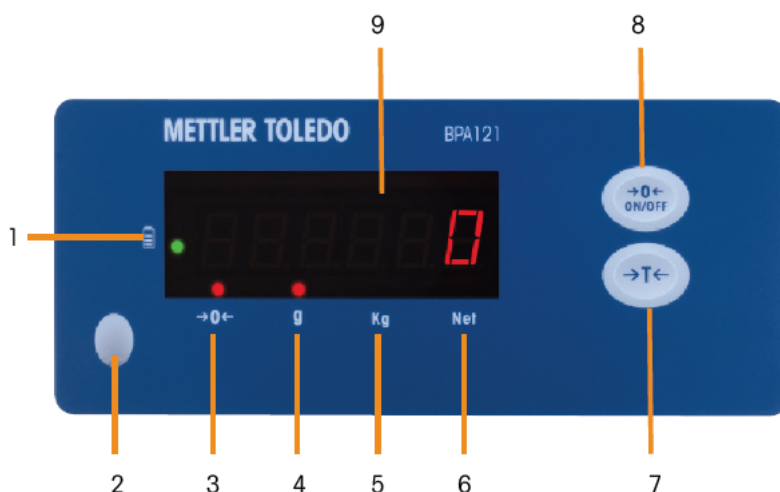


Figure 1: BPA121 Display and Keypad

1	Battery Indicator	<p>The battery indicator lights in the following pattern:</p> <ul style="list-style-type: none"> Green: The battery is full. Red: The battery is low. Please charge the battery immediately. Blinking Red: The battery is low and the scale will turn off. Yellow: The battery is charging. <p>The battery indicator does not indicate which power supply (DC or AC) is in use.</p>
2	Level Bubble	Indicates the levelling status of the scale.
3	Zero Indicator	When the Zero indicator is on, the scale is in gross zero.
4	g Indicator *	When the g indicator is on, the scale weighs in grams.
5	Kg Indicator *	When the Kg indicator is on, the scale weighs in Kilograms. In this case, the Kg indicator is off, and the scale is not weighing in Kilograms.
6	Net Indicator	When the Net indicator is on, the scale displays a net weight. When the Net indicator is off, the scale displays a gross weight. In this case, the Net indicator is off, and the scale is displaying a gross weight.

7	Tare Key	<p>In weighing mode:</p> <ul style="list-style-type: none"> • Press: Captures or clears a tare. • Press and hold: Enters setup mode. <p>In setup mode:</p> <ul style="list-style-type: none"> • Press: Toggles through menu item selections.
8	Zero/Power Key	<p>In weighing mode:</p> <ul style="list-style-type: none"> • Press: Resets the display weight to Zero. • Press and hold: Powers the scale on or off. <p>In setup mode:</p> <ul style="list-style-type: none"> • Press: Toggles through menu items or accepts the menu item selection.
9	LED Display	Displays weight value.

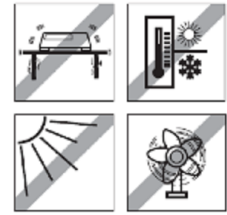
* When both g and Kg indicators are off, the scale is weighing in lb. lb is only available after the scale has been calibrated in lb.

3 Installation

3.1 Selecting the Installation Site

The correct location is important to the accuracy of the weighing results.

- The foundation at the installation site must be capable of safely supporting the total weight of the scale at its support points, when a maximum load is on the scale.
- Select a stable, vibration-free and horizontal location for the scale.
- Observe the following environmental conditions:
 - No direct sunlight
 - No strong drafts
 - No excessive temperature fluctuations



3.2 Working Environment Requirement

- Working Temperature: -10°C to +40°C / -14°F to +104°F, ≤95% relative humidity, non-condensing.
- Storage Temperature: -10°C to +70°C / -14°F to +158°F, 10% - 95% relative humidity, non-condensing.



NOTICE

Fully dry the scale regularly to prolong its service life.

3.3 Unpacking

Verify the contents and inspect the package immediately upon delivery. If the shipping container is damaged, check for internal damage and file a freight claim with the carrier if necessary. If the container is not damaged, remove the scale from its protective package, noting how it was packed, and inspect each component for damage.

If shipping the scale is required, it is best to use the original shipping container. The scale must be packed correctly to ensure its safe transportation.

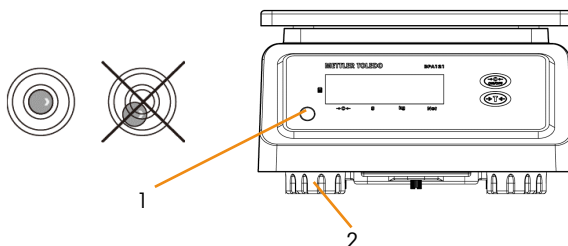
The package should include:

Item	QTY
BPA121 Compact Waterproof Weighing Scale	1
Quick Guide	1
Power Adapter ¹	1

¹: Lead-acid battery version includes a power adapter. Dry-cell version does not include a power adapter.

3.4 Installing the Scale

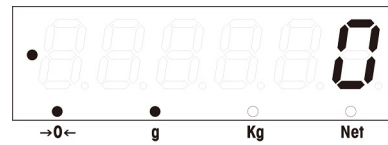
1. Unpack the scale.
2. Place the scale at an installation site that meets the requirements described in [Selecting the Installation Site ▶ Page 8].
3. For Dry-cell version, please install five pieces of D-size alkaline dry batteries first. For Lead-acid battery version, skip the steps to insert the dry cells.
4. Turn the adjustable feet (2) of the scale until the level bubble (1) is inside the inner circle.



4 Operation

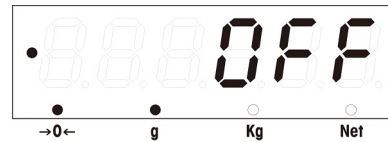
4.1 Powering On

- 1 Press and hold the Zero/Power Key $\rightarrow 0 \leftarrow$ until the display illuminates.
- 2 The scale performs a self-test. Then the display lights up and shows the software version number.
- 3 The scale captures zero and then is ready for operation.



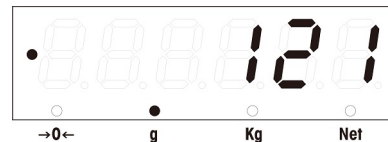
4.2 Powering Off

- In basic weighing mode, press and hold the Zero/Power Key $\rightarrow 0 \leftarrow$ until "OFF" is displayed.



4.3 Weighing

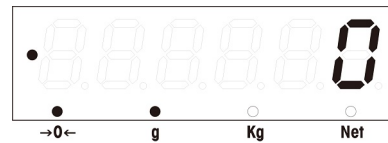
- 1 Place weighing sample on the scale.
- 2 Wait until the weight value in the display is stable.
- 3 Read the weighing result.



4.4 Zeroing

Zeroing corrects the influence of slight changes on the platter or minor deviations from the zero point.

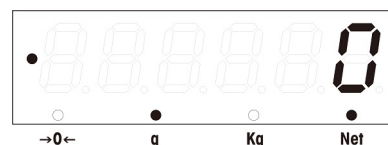
- 1 Unload the scale.
- 2 Press the Zero/Power key $\rightarrow 0 \leftarrow$.
- 3 Zero appears in the display.



4.5 Weighing with Tare

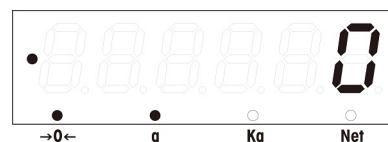
4.5.1 Taring

- 1 Place the empty container on the scale and press the Tare key $\rightarrow T \leftarrow$.
- 2 Zero appears in the display and the Net indicator turns on.
- 3 The tare weight remains stored until it is cleared.



4.5.2 Clearing Tare

- 1 Empty the scale.
- 2 The scale displays a negative weight value, which is the tare weight.
- 3 Press the Tare key $\rightarrow T \leftarrow$.
- 4 The gross zero displays. The Net indicator turns off and the Zero indicator turns on.



To protect your product's future:

METTLER TOLEDO Service assures the quality, measuring accuracy and preservation of value of this product for years to come.

Please request full details about our attractive terms of service.

► www.mt.com/service

www.mt.com

For more information

Mettler-Toledo (Changzhou) Measurement Technology Co., Ltd.

111 Taihu West Road
Xinbei District
Changzhou, Jiangsu
China, 213125
www.mt.com/contacts

Subject to technical changes.
© 04/2024 METTLER TOLEDO. All rights reserved.
30864496B



30864496