

# ICS226

## Compact Scale



**ServiceXXL**

Tailored Services

Congratulations on choosing the quality and precision of METTLER TOLEDO. Proper use according to these instructions and regular calibration and maintenance by our factory-trained service team ensure dependable and accurate operation, protecting your investment. Contact us about a ServiceXXL agreement tailored to your needs and budget.

We invite you to register your product at

[www.mt.com/productregistration](http://www.mt.com/productregistration)

so we can contact you about enhancements, updates and important notifications concerning your METTLER TOLEDO contact.

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# 1 Introduction

## 1.1 Safety instructions

Product safety is very important for METTLER TOLEDO.

Non-observance of the following instructions can lead to damage to the weighing terminal and/or injuries.

- ▲ Read this manual carefully **before** operating or servicing the equipment.
- ▲ Store these instructions for future use.
- ▲ Strictly observe these instructions.
- ▲ Only permit qualified personnel to make checks, tests and adjustments to be carried out with power on. Failing to observe these precautions can result in bodily harm.
- ▲ Always disconnect the device from the power supply before installing, servicing, cleaning or performing maintenance.
- ▲ Remove the battery if the device will not be used for a long time.
- ▲ Replace the used batteries by the batteries of the same type. Replacement by wrong battery type can result in battery explosion.
- ▲ Check the power cable regularly for damage. If it is damaged, immediately disconnect the device from the power supply.
- ▲ Do not open the scale. The warranty is void if this stipulation is ignored. The scale may only be opened by authorized persons.

## 1.2 Description

### 1.2.1 General

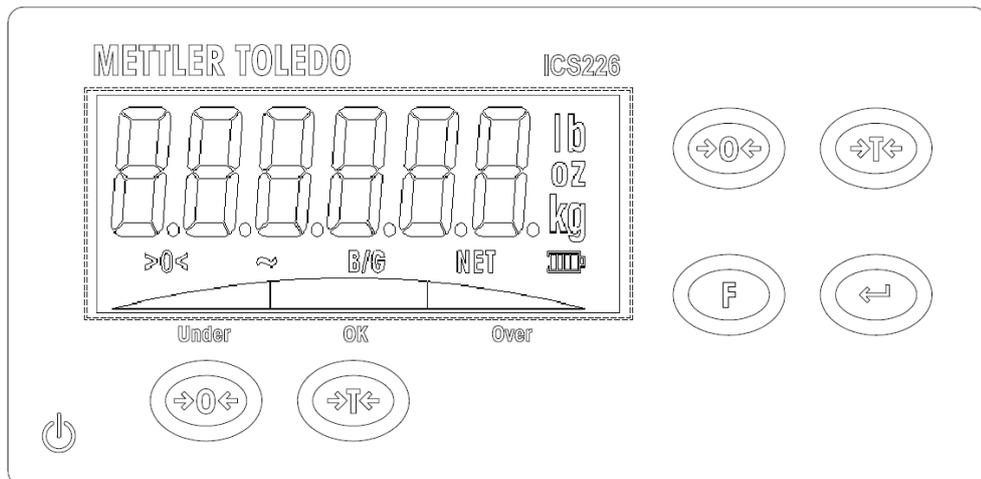
#### Versions of ICS226:

- ICS226-QAxF for front mounting compact version
- ICS226-QAxR for rear mounting compact version
- ICS226-QAxFCL Front version with Ni- MH rechargeable battery
- ICS226-QAxRCL rear version with Ni- MH rechargeable battery

#### Features of ICS226:

- Two weighing functions can be performed:
  - Simple weighing (zero, tare)
  - Check weighing

## 1.3 Display



### 1.3.1 Status indicators

Icon	Meaning
	Indicators for check weighing
>0<	Zero setting activated
~	Motion indicator
B/G	Brutto/gross weight
NET	The displayed weight value is net weight value
	Condition of the battery
lb/oz/kg	Currently chosen weight unit

### 1.3.2 Keys

Key	Operating mode	Menu
	Zeroing	<ul style="list-style-type: none"> <li>● Scrolling back</li> <li>● Press and hold : abort current setting</li> </ul>
	Tare	<ul style="list-style-type: none"> <li>● Scrolling forward</li> <li>● When editing numeric values: increase the value</li> </ul>
	Function key	<ul style="list-style-type: none"> <li>● Enter to edit value</li> <li>● When editing numeric values: move the cursor to left</li> </ul>
	Enter	<ul style="list-style-type: none"> <li>● Activating menu item</li> <li>● Accepting selected setting</li> </ul>

## 2 Putting into operation

### 2.1 Unpacking

1. Inspect the package immediately upon receipt.
  - If the package is damaged, check for internal damage and file a freight claim with the carrier, if necessary.
  - If the container is undamaged, open the package.
2. Remove the scale from the package and place it on a solid, flat surface.
3. Check all parts with the checklist. Make sure no part is damaged or missing.



Keep the packing material and inserts, in case you need to return the scale to a METTLER TOLEDO representative.

### 2.2 Charging and discharging battery

ICS226 provides a Ni-MH rechargeable battery as an option. Please contact METTLER TOLEDO service organization if the battery needs to be exchanged.



#### WARNING

Risk of explosion due to wrong operations of the battery or improper connection!

- ▲ Please don't use battery for other applications.
- ▲ Please don't manipulate on the battery pack.

## 3 Operation

### 3.1 Switching on and off

#### 3.1.1 Switching on

→ Press and hold  until the display lights go on.  
At first, the scale performs a self-test. Then the display lights up and shows the software number.

#### 3.1.2 Switching off

→ In simple weighing mode, press and hold  until **-OFF-** is displayed.

### 3.2 Zero

Zeroing corrects the influence of slight changes on the load plate.

### 3.3 Tare

Place an empty container on the scale and press  button.  
The zero display and the **NET** indicator appears.

### 3.4 Units Switch

✓ **F2.1.1 = ON** is set in the operator menu.

Press  to switch between the main and second unit.

### 3.5 Check weighing

✓ **F2.2.1 = ON** is set in the operator menu.

Press  to enter into check weighing mode.



The scale starts to check weighing as soon net weight is greater than 10d.



### 3.5.1 Setting target weight

There are two ways to set new target values.

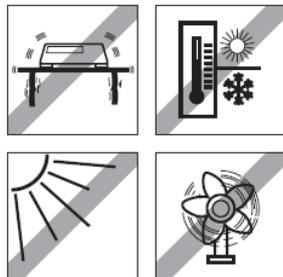
If **F2.2.2 = MANUAL** is set in the operator menu.

1. Press and hold **F** until last target value appears and blinks.
2. Enter the new target weight. Using **F** to move the cursor one place to left, **→T←** to increase the displayed digit.
3. Press **←J** to save the new target weight. Or press **→0←** to abort new value and quit.

If **F2.2.2 = WEIGHT** is set in the operator menu.

1. Press and hold **F** until the blinking current weight value is displayed.
2. Put the target weight to the plate.
3. Press **←J** to save the new target weight. Or press „Z” to abort new value and quit.

### 3.6 Selecting the scale location



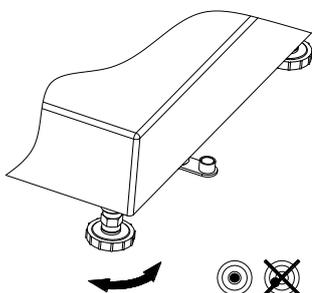
The correct location is important to the accuracy of the weighing results.

→ Select a stable, vibration-free and horizontal location for the weighing platform.

→ Observe the following environmental conditions:

- No direct sunlight
- No strong drafts
- No excessive temperature fluctuations

### 3.7 Leveling the scale



Weighing scales should be leveled precisely horizontally to provide accurate weighing results.

1. Turn the adjustable feet of the weighing platform until the air bubble is inside the inner circle.
2. Tighten the lock nuts of the adjustable feet.

### 3.8 Notes on battery operation

ICS226 provides an optional available Ni- MH rechargeable battery, which could continuous work for 90 hours w/o backlight.

The  indicator shows the state of the battery:

-  indicator appears => Battery operation
-  indicator doesn't appears => Adapter operation
-  indicator blinks => the battery has to be charged immediately.

Connect the adapter to the scale and power on the scale, if the  indicator blinks, that means batteries are being charged.

Take the following measures to prolong the batteries operation time:

- Set F3.1 to the required parameter for turning the backlight off or shorten the backlight time.
- Set auto power-off/sleep time (F3.2).

Remove the battery if the device will not be used for a long time.

### 3.9 Cleaning



#### **DANGER!**

#### **Electric shock hazard due to ingress of moisture!**

▲ Before cleaning the scale, pull off the power plug to disconnect the unit from the power supply.

#### **Further notes on cleaning**

- Use a damp cloth.
- Do not use any acids, alkalis or strong solvents.
- Follow all the relevant instructions regarding cleaning intervals and permissible cleaning agents.

## 4 Settings in the menu

The menu consists of the following 4 main blocks which contains various submenus on several levels.

- F1 - Scale menu setting
- F2 - Application menu setting
- F3 - Instrument menu setting
- F4 - Maintenance menu setting
- End - Exit menu

### 4.1 Operating the menu

The menu has 2 different operating levels: Operator and Supervisor. The operator level can only access F2 and F3 menu settings. The supervisor level can set all menu settings.

#### 4.1.1 Calling up the menu and entering the password

Press and hold  until **PSD** is displayed to prompt user for a password.

Operator menu →   

Supervisor menu →    



If **F1.1 = CN**.

The following settings are only accessible in Chinese: F1.1, F1.2, F1.3, F1.4, F1.7, F2.1 and F4.3.

#### 4.1.2 Numeric entry

1. Press  to start editing the displayed value.
2. Increase the displayed digit using the  key.
3. When entering multi-digit numbers, use the  key to move the cursor one place to left.
4. Change the digit as described in step2.
5. Repeat steps 2, 3 and 4 if necessary.
6. When all digits are entered, use the  key to confirm the entry.

## 4.2 F1 – Scale menu

Factory settings are printed in **bold** characters.

### 4.2.1 F1.1 – Approval

<b>no</b>	no approval
OINL	Approval for China

### 4.2.2 F1.2 – Full capacity

Possible settings	3kg, 6kg, 15kg
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### 4.2.3 F1.3 – Calibration

#### F1.3.1 – Geo value

Adaptation of the scale to the geographical location.

Factory setting	<b>16</b>
Possible settings	0...31
Note	Re-calibrate after changing Geo value

#### F1.3.2 – Calibration

Perform calibration	<ol style="list-style-type: none"><li>1. <b>E SCL</b> appears, unload scale.</li><li>2. Start calibration by pressing . The scale determines the zero point. The calibration weight to be placed on the scale is shown on the display.</li><li>3. Place the calibration weight on the scale and confirm with .</li><li>4. <b>done</b> appears, calibration completed.</li></ol> <p>In step 2, if you want to change the calibration weight, press the  key repeatedly until the desired calibration weight appears on the display.</p>
Note	Press and hold  to abort calibration process

### F1.3.3 – Linearity Calibration

Perform calibration	<ol style="list-style-type: none"> <li>1. <b>E SCL</b> appears, unload scale.</li> <li>2. Start calibration with . After capturing zero point, first weight is shown on the display.</li> <li>3. Place first weight on the scale and press .</li> <li>4. First weight confirmed. Second weight is shown on the display.</li> <li>5. Remove first weight and place second weight on the scale and press .</li> <li>6. <b>donE</b> appears, calibration completed.</li> </ol> <p>In step 2 and 4, if necessary, change the weight displayed value with .</p>
Note	Press and hold  to abort calibration process

### 4.2.4 F1.4 – Zero

#### F1.4.1 – Automatic zero setting

Factory setting	<b>0.5d</b>
Possible settings	OFF, 1d, 2d, 5d, 10d

#### F1.4.2 – Power up zero

2%	Power up zero within +/-2%
<b>20%</b>	Power up zero from -2% ~ %18

\* For approved mode, the setting is always 2%.

#### F1.4.3 – Pushbutton zero

Factory setting	<b>2%</b>
Possible settings	2%, 20%, Off

## 4.2.5 F1.5 – Tare

### F1.5.1 – Auto Tare

Factory setting	<b>OFF</b>
Possible settings	ON, OFF

### F1.5.2 – Auto clear tare

Factory setting	<b>OFF</b>
Possible settings	ON, 9d

### F1.5.3 – Pushbutton tare

Factory setting	<b>OFF</b>
Possible settings	ON

### F1.5.4 – Chain tare

Factory setting	<b>OFF</b>
Possible settings	ON

### F1.5.5 – Auto tare threshold

✓ **F1.5.1=ON**

Factory setting	<b>1d</b>
Possible settings	0 ... maximum load

## 4.2.6 F1.6 – Digital filter

### F1.6.1 – Digital filter

Factory setting	<b>Middle</b>
Possible settings	Low, High

### F1.6.2 – Stability

Factory setting	<b>Stand</b>
Possible settings	Fast, Exact

## 4.2.7 F1.7 – Display

### F1.7.1 – Weighing unit

Factory setting	<b>kg</b>
Possible settings	g, lb, oz

### F1.7.2 – Resolution

Capacity	3 kg	6 kg	15 kg
Factory setting	<b>0.001 kg</b>	<b>0.002 kg</b>	<b>0.005 kg</b>
Possible settings	0.0002 kg, 0.0005 kg	0.0005 kg, 0.001 kg	0.001 kg, 0.002 kg

## 4.2.8 F1.10 – Reset F1 parameters to factory setting

Reset all F1 parameters to factory setting, except the calibration and full capacity values.

## 4.3 F2 – Application menu

Factory settings are printed in **bold** characters.

### 4.3.1 F2.1 – Units switch

#### F2.1.1 – Unit switch

Factory setting	<b>OFF</b>
Possible settings	ON

#### F2.1.2 – Second unit

✓ **F2.1.1=ON**

Factory setting	<b>g</b>
Possible settings	kg, lb, oz

### 4.3.2 F2.2 – Check weighing function

#### F2.2.1 – Check weighing

Factory setting	<b>OFF</b>
Possible settings	ON

### F2.2.2 – Setting the target weight

✓ F2.2.1=ON

<b>WEIGHT</b>	By weighing in an actual sample weight
ManUAL	By numeric entry

### F2.2.3 – Upper tolerance

✓ F2.2.1=ON

Factory setting	<b>1d</b>
Possible settings	0 ... maximum load

### F2.2.4 – Lower tolerance

✓ F2.2.1=ON

Factory setting	<b>1d</b>
Possible settings	0 ... maximum load

### 4.3.3 F2.10 – Reset F2 parameters to factory setting

Reset all F2 parameters to factory setting.

## 4.4 F3 - Terminal menu

Factory settings are printed in **bold** characters.

### 4.4.1 F3.1 – Backlight

Factory setting	<b>ON</b>
Possible settings	5s, 10s, 30s, 60s, OFF

### 4.4.2 F3.2 – Auto power off/sleep time

Factory setting	<b>30</b>
Possible settings	5, 10, 30, 60 (minutes)

### 4.4.3 F3.10 – Reset F3 parameters to factory setting

Reset all F3 parameters to factory setting.

## 4.5 F4 - Maintenance menu

Factory settings are printed in **bold** characters.

### 4.5.1 F4.1 – Keyboard test

✓ The scale shows **PrESS**

Press all the keys to go through the test.

**Note:** If keypad test fails, please switch off the scale to quit test.

### 4.5.2 F4.2 – Display test

All the icons and segments light up.

### 4.5.3 F4.3 – Display expand resolution

Expand display resolution to 100,000.

Factory setting	<b>OFF</b>
Possible settings	ON

### 4.5.4 F4.10 – Reset F4 parameters to factory setting

Reset all F4 parameters to factory setting.

## 4.6 End - Ending menu

1. Press .  
**StoreE?** appears.
2. Press  again to save changes.  
- or -  
Press  to reject changes.  
**AbOrt** appears.  
Press .

## 5 Error messages

Error code	Error	Remedy
┌-----┐	Overload	→ Unload scale → Reduce preload
└-----┘	Underload	→ Zeroing the weighing platform
┌-no-┐ └-no-┘	Zero/Tare setting outside setting range	→ Unload scale → Empty platter before power up → Recalibrate zero point
--no--	Cannot perform the key function	→ Back to gross mode
-----	scale is in motion	→ Ensure the weighing platform is stable
<b>Err 53</b>	EEPROM checksum error	→ Unplug power plug and plug in again → If this doesn't help, contact your authorized METTLER TOLEDO service organization
<b>Err 35</b>	Calibration weight too small	→ Check calibration weight
<b>Err 6</b>	Scale not calibrated yet	→ Recalibrate scale
<b>Err 8</b>	Illegal operation	→ Switch off the scale and switch on again
<b>Err 10</b>	Illegal target value	→ Please set the correct target and tolerance values

## 6 Technical Data

### 6.1 Scale

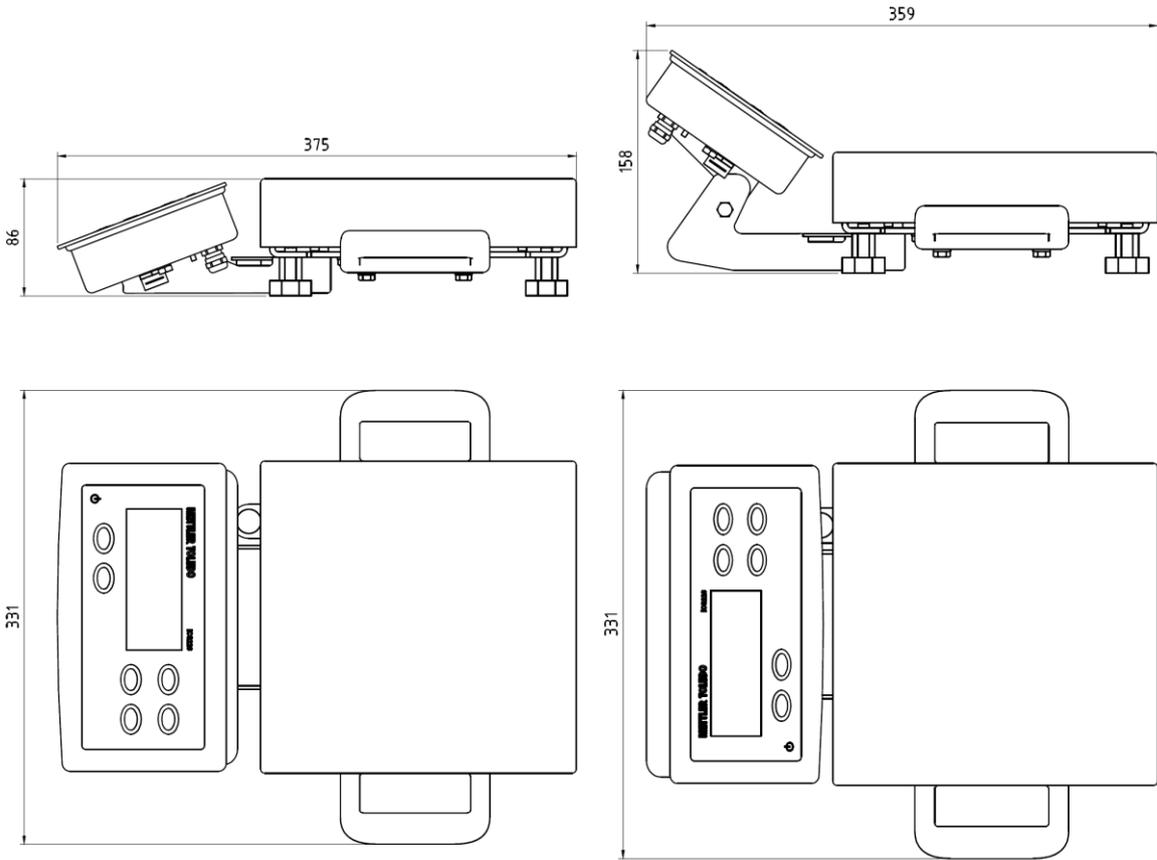
Capacity	3kg/6kg/15kg
Resolution	3000d/6000d/7500d
Power Supply	<ul style="list-style-type: none"> <li>• 100~240 VAC</li> <li>• 6V Ni-MH rechargeable battery 3800mAh (option)</li> </ul>
IP Protection	<ul style="list-style-type: none"> <li>• Terminal:IP67</li> <li>• Scale:IP65</li> </ul>
Environment	• Temperature range: -10°C ~ +40°C
Display	8-seg x 6 LCD Display, LED white backlight
Material	AISI304 stainless steel
Load cell	Stainless steel, IP67
Platform Size	240 x 240mm

### 6.2 Product versions

AC				
Model	Capacity	Readability	Installation	Product Size
ICS226-QA3F	3kg	1g	Front	375 x 331 x 86 mm
ICS226-QA6F	6kg	2g	Front	
ICS226-QA15F	15kg	5g	Front	
ICS226-QA3R	3kg	1g	Rear	
ICS226-QA6R	6kg	2g	Rear	
ICS226-QA15R	15kg	5g	Rear	

Internal Rechargeable Battery, AC/DC				
Model	Capacity	Readability	Installation	Product Size
ICS226-QA3FCL	3kg	1g	Front	359 x 331 x 158 mm
ICS226-QA6FCL	6kg	2g	Front	
ICS226-QA15FCL	15kg	5g	Front	
ICS226-QA3RCL	3kg	1g	Rear	
ICS226-QA6RCL	6kg	2g	Rear	
ICS226-QA15RCL	15kg	5g	Rear	

### 6.3 Dimensions



Front mounting (375X331X86mm)

Rear mounting(359X331X158mm)

## 7 Appendix

### 7.1

#### Disposal



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

→ 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.

[www.mt.com/service](http://www.mt.com/service)

For more information

**Mettler Toledo**

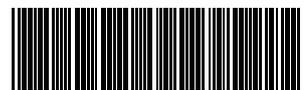
**Industry/Retail**

Add: 111 West Tai Hu Road, Xinbei District,  
Changzhou, Jiangsu

Tel: 0519-86642040

Fax: 0519-86641991

E-mail: [ad@mt.com](mailto:ad@mt.com)



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