

# LANTRONIX xPico 250 Wireless Module User Manual

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## User Manual

## Wireless Module



## METTLER TOLEDO

### METTLER TOLEDO Service

Congratulations on choosing the quality and precision of METTLER TOLEDO. Proper use of your new equipment according to this Manual and regular calibration and maintenance by our factory-trained service team ensures dependable and accurate operation, protecting your investment. Contact us about a service agreement tailored to your needs and budget. Further information is available at ► [www.mt.com/service](http://www.mt.com/service).

There are several important ways to ensure you maximize the performance of your investment:

**1 Register your product:** We invite you to register your product at [www.mt.com/productregistration](http://www.mt.com/productregistration) so we will provide you with information tailored to your specific needs. Additionally, you will receive promotions that you as a METTLER TOLEDO product owner can benefit from at your convenience.

**2 Contact METTLER TOLEDO for service:** The value of a measurement is proportional to its accuracy. An out of specification scale can diminish quality, reduce profits and increase liability. Timely service from METTLER TOLEDO will ensure accuracy and optimize uptime and equipment life.

**Installation, Configuration, Integration and Training:** Our service representatives are factory-trained weighing equipment experts. We make certain that your weighing equipment is ready for production in a cost effective and timely fashion and that personnel are trained for success.

**Initial Calibration Documentation:** The installation environment and application requirements are unique for every industrial scale so performance must be tested and certified. Our calibration services and certificates document accuracy to ensure production quality and provide a quality system record of performance.

**Periodic Calibration Maintenance:** A Calibration Service Agreement provides on-going confidence in your weighing process and documentation of compliance with requirements. We offer a variety of service plans that are scheduled to meet your needs and designed to fit your budget.

#### FCC & IC Notice

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### FCC Radiation Exposure Statement

This modular complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This modular can be installed and operated in a portable condition.

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

#### IC Radiation Exposure Statement

This modular complies with IC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This modular can be installed and operated in a portable condition.

If the IC number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module.

When the module is installed inside another device, the user manual of this device must contain below warning statements;

1. This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

The devices must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product.

For indoor use only.

**Caution:**

- 1) The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
- 2) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit;
- 3) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p limits specified for point-to-point and non-point-to-point operation as appropriate;

And DFS(Dynamic Frequency Selection) products that operate in the bands 5250-5350MHz, 5470-5600MHz, and 5650-5725MHz.

This radio transmitter [25883-MT24103] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

The antenna (type / gain / impedance) which can be used with the transmitter is:

Model Number	Type	Connector	Frequency	Peak Gain
			MHz	dBi
AC-Q24-50ZDB	Dipole	IPEX	2400~2483.5	2.7
			5150~5250	-1.3
			5250~5350	-1.1
			5500~5700	1.3
			5700~5825	0.8
AC-Q58-50ZDB	Dipole	IPEX	2400~2483.5	1.3
			5150~5250	4.8
			5250~5350	5.0
			5500~5700	5.4
			5700~5825	5.1

**List of applicable FCC rules:**

FCC Part 15.247, FCC Part 15.407

**RF exposure considerations**

The application shall define as mobile device and the antenna shall at least 0.5 cm from a person's body. If this conditions cannot provided, a separate approval is required, and host product manufacturer should take responsibility of it.

**Label and compliance information**

The host product must be labeled in a visible area with the following "Contains FCC ID: 2ALAI24MT106" and "Contains IC: 25883-MT24103".

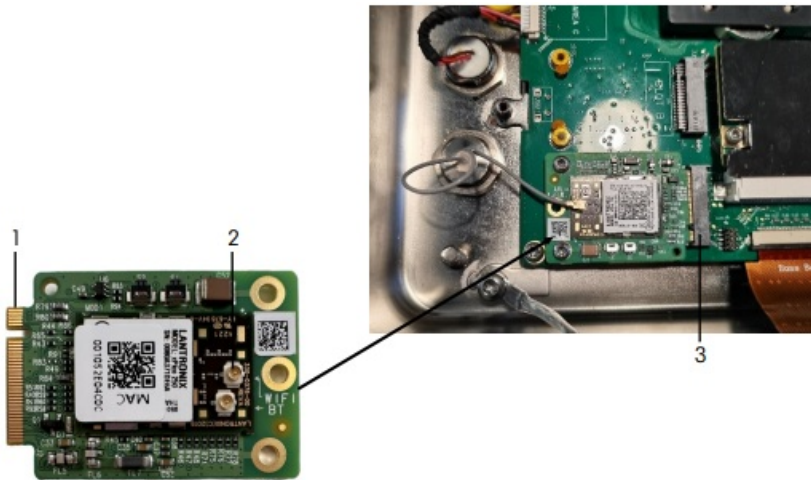
**Information on test modes and additional testing requirements**

The host manufacturer can use the software of "xPico200\_MFG\_Test" to make WIFI transmit.

### Additional testing, Part 15 Subpart B disclaimer

The module is only FCC authorized for the specific rule parts 15.247, 15.407 listed on the grant. The host product manufacturer is responsible for the compliance to any other FCC rules that apply to the host not covered by the modular transmitter grant of certification.

#### Wi-Fi option board



- 1 Plug the edge connector (1) of the Wi-Fi option board into Slot A (3) on the Base board.
- 2 Secure the Wi-Fi board onto the Base board with 2 M2.5 screws.
- 3 Connect the antenna feeder to the Wi-Fi connector (2).

#### **Note**

A 2.4G or 5.8G Wi-Fi radio band is installed in the terminal at factory according to customer option. To switch the Wi-Fi radio band, refer to the following section.

#### Switching Wi-Fi radio band

#### Installing the Wi-Fi antenna



- 1 Open the enclosure [Opening the enclosure ⇒Page 16].
- 2 Remove the already installed 2.4G or 5.8G Wi-Fi antenna by unplugging the antenna feeder (1) from the Wi-Fi board and loosening the screw (2) that secures the antenna.
- 3 Install the new Wi-Fi antenna by connecting the Wi-Fi cable to the Wi-Fi board and tightening the screw that secures the Wi-Fi antenna.
- 4 Close the enclosure [Closing the enclosure Page 27].

#### Enabling Wi-Fi configuration on the terminal

- 1 Start the terminal and login with Administrator or MT Technician access level.

2 In the setup select Communication -> WLAN -> WLAN Setting.

3 Ensure that WLAN is enabled and a WLAN is selected.

4 Touch .

⇒The Network Setting page is displayed.

5 Enable Configuration Page and AP fields.

⇒SSID = **MT-AP-XXXXXXXXXXXX** and IP Address = **192.168.0.1:8080** are displayed.

6 Confirm settings with ✓.

⇒The Wi-Fi configuration on the terminal is finished.

7 Leave the setup.

## Configuring Wi-Fi on the webpage

1 Find the network **MT-AP-00E0EAAE3C64** on the computer and connect to it with password "PASSWORD".

⇒Note that the network name is the same as the default SSID name shown on the Network Setting page.

2 Open the Wi-Fi configuration webpage with the IP Address **192.168.0.1:8080**.

⇒Note that the IP Address is the same as shown on the Network Setting page.

3 Login to the Wi-Fi configuration webpage.

⇒User name = admin

⇒Password = PASSWORD

4 On the Wi-Fi configuration webpage, open the Radio page.

5 In the field "Band" select 2.4 GHz or 5.8GHz.

6 Confirm the selection, e.g. with button Submit.

Communication -> WLAN -> WLAN Setting

### Note

By default only the 5G Wi-Fi radio band is available. For the 2.4G radio band, contact the METTLER TOLEDO service.

### Note

By default only the 5G Wi-Fi radio band is available. For the 2.4G radio band, refer to Switching Wi-Fi radio band.

## Enabling a wireless network

1 Enable Wireless Setting.

The list of the detected wireless networks is displayed. The current connected wireless network is listed on top and marked with ✓.

2 If desired, select another wireless network.

## Viewing the wireless network settings

Select a wireless network and touch .

Network Name and Suite (security status) are displayed.

## Adding a new wireless network

1 When the list of detected wireless networks is displayed, touch .

2 Enter the network name and select the Suite (security status) out of the following:

Open, WEP, WPA-WPA2 Mix, WPA2, WPA3

Alternatively the suite can be taken from the detected wireless network.

3 Depending on the selected suite, make the following settings:

Suite	Sub items	Description
Open	–	No more security settings
WEP	TX Key Index	Number of WEP keys: 1 ... 4
	Key Size	Length of the WEP key: 40 bits (5 characters), 104 bits (13 characters)
	Key 1 ... Key 4	Enter keys according to the TX Key Index and Key Size
WPA-WPA2 Mix WPA2 WPA3	WPAx Authentication = PSK	Get the required settings from the detected network or set them manually.

## Wi-Fi module settings

WLAN is enabled.

On the WLAN Setting page touch .

The following settings are available:

Setting	Description
Configuration page	If set to On, the web page of the Wi-Fi module is enabled.
AP	If set to On, SSID and IP Address of the Wi-Fi module are displayed (read only). SSID = MTAP[Serial_Number] IP Address = 192.168.0.1
<b>Note:</b> The above setup items are only for Wi-Fi module configuration. From a security perspective, it is to be disabled immediately after Wi-Fi configuration.	

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

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Subject to technical changes.

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For more information

## Documents / Resources

  	<p><b><a href="#">LANTRONIX xPico 250 Wireless Module</a></b> [pdf] User Manual 24MT106, 30852845, xPico 250 Wireless Module, xPico 250, xPico 250 Module, Wireless Module, Module</p>
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References

- [Register your Product - METTLER TOLEDO](#)
- [User Manual](#)

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