



LoRa PM2.5 Sensor

MTC-PM01

Quick Start Guide



Thank you for choosing Mutelcor GmbH.
We are proud to be part of your project.

1. Need Help?

For any other query related to our product, please contact the local distributor or Mutelcor at support@mutelcor.com

2. Manufacturer

Mutelcor GmbH: An der Bastei 42a, 47259 Duisburg, Germany

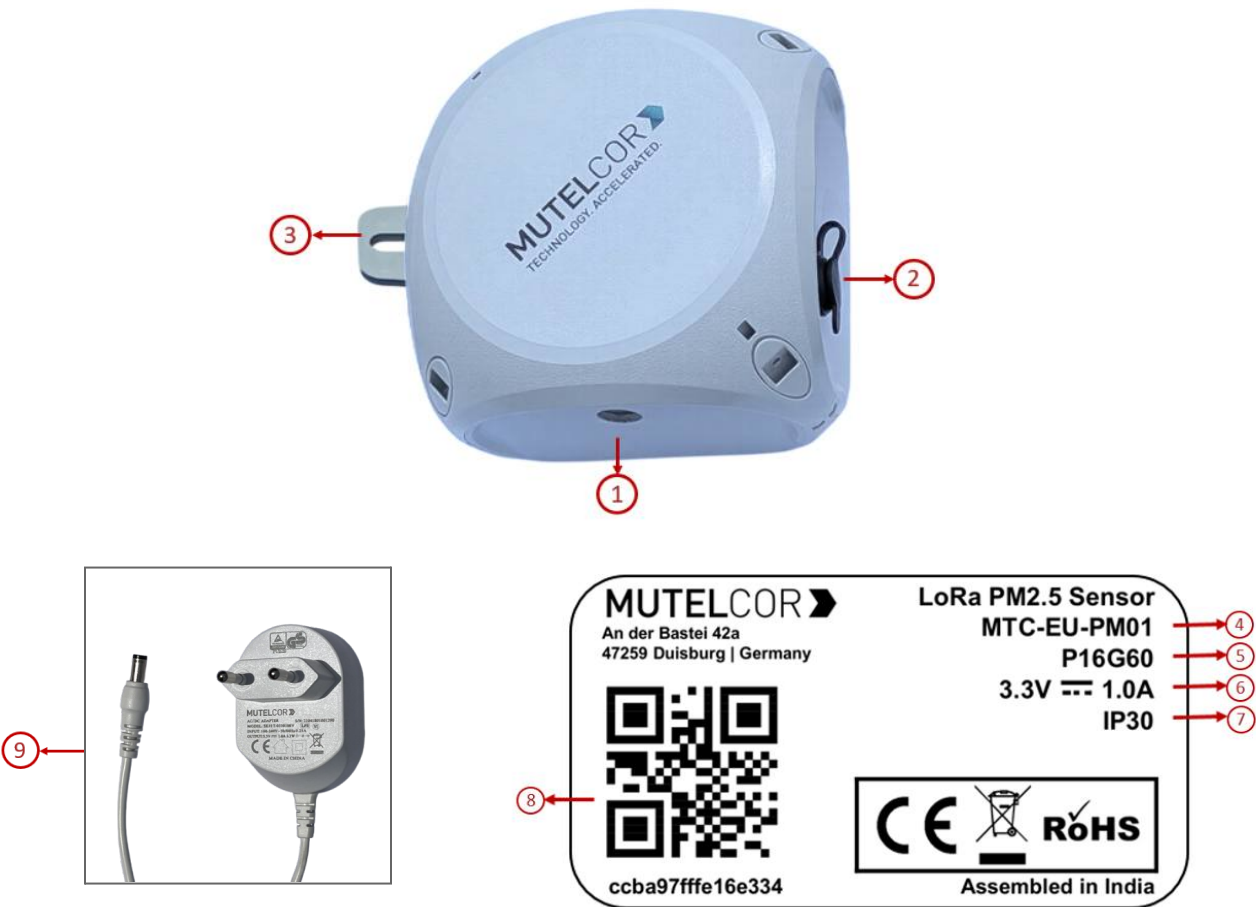
Office: +49 203 72996070, WhatsApp: +49 1525 6173196, Web: www.mutelcor.com

3. Safety

Read the instructions carefully before device installation, operation and maintenance

1	Connect the adapter to a properly wired and grounded electrical outlet
2	The device should only be used with accessories or spare parts supplied by your reseller
3	The device enclosure must not be opened when connected to power
4	Maintenance and repair must be carried out by qualified personnel authorized by reseller
5	Keep the device away from any hot surface

4. Product Description



At a Glance

No.	Description	No.	Description
1	Sensor Vent	6	Power supply Input (3.3V =1A)
2	Jack Connector (for power adapter)	7	Ingress Protection
3	Mounting Clips	8	DevEUI with QR code
4	Model Name	9	Power Adapter
5	Module ID		

5. Activation of the Device

The LoRa PM2.5 Sensor will automatically activate after plugging the device to power. The device will automatically try to register via OTAA to a LoRaWAN network. To verify the device joined successfully, please check on your LoRa Network Server.

By default the device sends measurements every 5 minutes, however, the time duration is customizable.

Payload Document: <https://mutelcor.com/mutelcor-lora-device-downloads/>

For all details on the payload sent on LoRa, changing values via OTAA, provisioning of the device in a LoRa network, please contact the local distributor or Mutelcor GmbH at support@mutelcor.com

Note: If the buzzer in the device continuously beeps at every 8-second interval, then there is a software error. When this happens the device must be returned for repair. Please immediately contact your reseller.

6. Mounting

	The device should be mounted on clean non flammable solid surface or on a pole (pole mounting kit available optionally) It's recommended to install the device at least 1.5m to 3m from the ground
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Avoid the following areas to ensure best product performance and preventing malfunctioning:

- Areas, that are susceptible to vibration
- Near heating appliances
- Near air-conditions

To ensure optimal performance:

- The **sensor opening vents** should face **downward** during installation to ensure accurate readings and prevent water ingress
- Ensure the **adapter wire is placed correctly** without strain or obstruction
- The wall or pole surface must be strong enough to support the device

The device can be mounted on a wall using two **mounting clips** (included with the Sensor) for secure and stable installation:

- Insert Mounting Clips Fig. 6.1 into two clip holders on the back of the enclosure
- Mount the device at a suitable position on the wall or on a pole by using the two screws or Pole mounting kit available optionally



Fig. 6.1

7. Technical Specifications

Model Name	LoRa PM2.5 Sensor	Enclosure Size	104 x 104 x 70 mm
Module ID	P16G60	Net Weight	200 g
Model No	MTC-PM01	Ingress Protection	IP30
Power Adapter	Input: 100-240V~50/60Hz Output: 3.3V=1A	PM Laser-Sensor Range	Range: 0.3 - 10 µm PMC Range: 0 - 500 µg/m ³ Max Range: >= 1000 µg/m
LoRa Frequency	EU863-870 (CE-Certified) IN865-867 (ETA-Certified) US902-928 AU915-928 AS923 -1, -2, -3, -4 KR920-923	Sensor Consistency	Resolution: 1 µg/m ³ ± 10% @ 100- 500 µg/m ³ ± 10µg @ 0- 100 µg/m ³
SF Supported	7 - 12	Operating Temperature	-10°C to +60°C
OTAA and ADR	OTAA and ADR		

8. Declaration of Conformity

Hereby, Mutelcor GmbH, declares that the Product is in conformity with the essential requirements of Article 3.1 (a) the protection of the health, 3.1 (b) an adequate level of electromagnetic compatibility and 3.2 effective use of the spectrum of 2014/53/EU.

The CE mark appears due to the issued declaration of conformity under responsibility of Mutelcor GmbH as manufacturer, who declares that the used radio equipment is in compliance with relevant EC Directives. For any further information, please contact Mutelcor GmbH at support@mutelcor.com

In Europe, the Sensor also complies with EN62479 and ERC requirements regarding duty cycle and maximum EIRP.

9. Disposal / Recycling

	Do not dispose of the product with household waste. For proper disposal, contact a waste disposal company WEEE-Reg.-Nr.: DE 71445608
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10. Product complies and Directives



11. Warranty

Contact your reseller for warranty

	LoRa PM2.5 Sensor is not warranted by Mutelcor GmbH in case the enclosure is opened, modified, broken, painted, branded out, outlined for any reason
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The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Mutelcor GmbH be liable for any consequential, special or incidental damages.

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We stay at your disposal for any help on your project

Mutelcor GmbH Team



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