

# **MS-ND91**

# **USER GUIDE**

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## **Revision History**

- ▶ Version: 1.0
- ▶ Date: 11, 2022

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## FCC-B Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and radiates radio frequency energy, and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ▶ Reorient or relocate the receiving antenna.
- ▶ Increase the separation between the equipment and receiver.
- ▶ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ▶ Consult the dealer or an experienced radio TV technician for help.

### NOTE

- ▶ The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- ▶ Shield interface cables and AC power cord, if any, must be used in order to comply with the emission limits.

## FCC Conditions

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- ▶ This device may not cause harmful interference.
- ▶ This device must accept any interference received, including interference that may cause undesired operation.

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## FCC/IC RF Radiation Exposure and SAR Statements

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The device is designed to meet the requirements for exposure to radio waves established by the Federal Communications Commission (USA). These requirements set a SAR limit of 1.6 W/kg averaged over one gram of tissue. The highest SAR value reported under this standard during product certification for using at the body is 0.935 W/kg.

This equipment complies with Industry Canada radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. The device is designed to meet the requirements for exposure to radio waves established by the Industry Canada. These requirements set a SAR limit of 1.6 W/kg averaged over one gram of tissue. The highest SAR value reported under this standard during product certification for using at the body is 0.935 W/kg.

The device is restricted to indoor use only when operating in the 5150 to 5250 MHz frequency range.

## IC Statements

This device complies with Industry Canada RSS standard(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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(1) il ne doit pas produire de brouillage et

(2) l' utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

- ▶ This Class B digital apparatus complies with Canadian ICES-003.
- ▶ Cet appareil numerique de la classe B est conforme a la norme NMB-003 du Canada.

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## CE Conformity

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This device is in compliance with the essential safety requirements and other relevant provisions set out in the European Directive.

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## Battery Regulations

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**European Union:** Batteries, battery packs, and accumulators should not be disposed of as unsorted household waste. Please use the public collection system to return, recycle, or treat them in compliance with the local regulations.

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廢電池請回收

**Taiwan:** For better environmental protection, waste batteries should be collected separately for recycling or special disposal.

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**California, USA:** The button cell battery may contain perchlorate material and requires special handling when recycled or disposed of in California.

For further information please visit: <http://www.dtsc.ca.gov/hazardouswaste/perchlorate/>

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### Safety Guideline for Using Lithium Battery

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the equipment manufacturer. Discard used batteries according to manufacturer's instructions.

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## WEEE Statement

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**European Union:** Under the European Union ("EU") Directive on Waste Electrical and Electronic Equipment, Directive 2002/96/EC, which takes effect on August 13, 2005, products of "electrical and electronic equipment" cannot be discarded as municipal waste anymore and manufacturers of covered electronic equipment will be obligated to take back such products at the end of their useful life.

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## Safety Instructions

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Read the safety instructions carefully and thoroughly. All cautions and warnings on the equipment or user's manual should be noted.

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Keep this equipment away from humidity and high temperature.

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Lay this equipment on a stable surface before setting it up.

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The openings on the enclosure are used for air convection and to prevent the equipment from overheating. Do not cover the openings.

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- Do not leave the equipment in an unconditioned environment with a storage temperature above 50°C (122°F) or below -10°C (14°F), which may damage the equipment.
- This unit should be operation under maximum ambient temperature of 40°C (104°F).

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Followings are requirements of battery storage:



- If the storage duration is within 3 months, please remain the temperature at -20 °C ~45 °C ; If the storage duration is above 3 months but within 1 year, please remain the temperature at 23°C± 2°C .
- The battery capacity should remain at 30 ± 5%.
- The storage humidity should remain at 65 ± 25%RH.
- The battery charging temperature should be 10 °C ~45 °C , the discharging temperature should be -20°C ~60°C .
- For the maximum battery discharging performance, please remain the storage temperature at 25°C .
- Do not charge the battery while the room temperature is over 40 °C

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- Make sure the power voltage is within safety range and has been adjusted properly to the value of 100~240V before connecting the equipment to the power outlet.
- Always unplug the AC power cord before installing any add-on card or module to the equipment.
- Always disconnect the AC power cord or uninstall the battery pack or switch off the wall socket if the equipment would be left unused for a certain time to achieve zero energy consumption.



Place the power cord in a way that people are unlikely to step on it. Do not place anything on top of the power cord.



Always keep the strong magnetic or electrical objects away from the tablet.



Never pour liquid into the opening that could damage the equipment or cause an electrical shock.

If any of the following situations arises, get the equipment checked by a service personnel:



- The power cord or plug is damaged.
- Liquid has penetrated into the equipment.
- The equipment has been exposed to moisture.
- The equipment has not worked well or you can not get it work according to User's Manual.
- The equipment was dropped and damaged.
- The equipment has obvious signs of breakage.

### **Green Product Features**

- Reduced energy consumption during use and stand-by
- Limited use of substances harmful to the environment and health
- Easily dismantled and recycled
- Reduced use of natural resources by encouraging recycling
- Extended product lifetime through easy upgrades
- Reduced solid waste production through take-back policy



### **Environmental Policy**

- The product has been designed to enable proper reuse of parts and recycling and should not be thrown away at its end of life.
- Users should contact the local authorized point of collection for recycling and disposing of their end-of-life products.

# Introductions

## Introductions

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Congratulations on becoming an user of this product, the finely designed Tablet PC. You will have a delightful and professional experience in using this exquisite Tablet PC. We are proud to tell users that this Tablet PC is thoroughly tested and certified by our reputation for unsurpassed dependability and customer satisfaction.

## Unpacking

First, unpack the shipping carton and check all items carefully. If any item contained is damaged or missing, please contact your local dealer immediately. Also, keep the box and packing materials in case you need to ship the unit in the future. The package should contain the following items:

- ▶ Tablet PC
- ▶ Type-C/Power Delivery adapter and AC power cord
- ▶ String (optional)
- ▶ Hand strap (optional)
- ▶ Brief case handle (optional)
- ▶ Stylus (optional)
- ▶ Quick Start Manual(optional)

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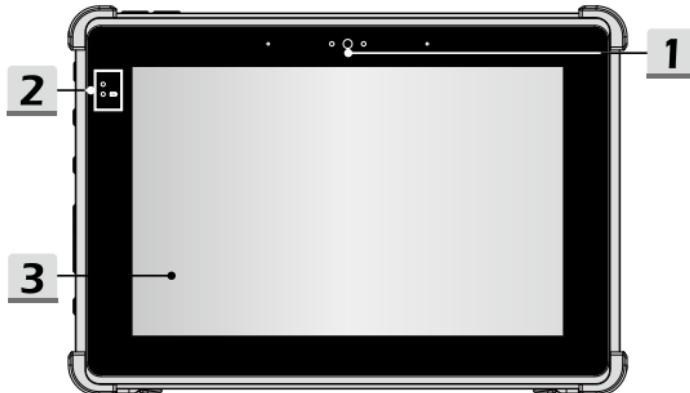
# Product Overview

This section provides the description of basic aspects of the Tablet PC. It will help you to know more about the appearance of this tablet before using it. Please be aware that the figures shown here are for reference only.

## Open View

The figure of open view and description shown below will lead you to browse the main operating area of your Tablet PC.

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### 1. Front Camera

This built-in front camera can be used for picture taking, video recording or conferencing, and any other interactive applications.

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### 2. Status LED

#### Power



- LED glows when the tablet is turned on.
- LED flashes when the tablet goes to the sleep state.
- LED goes off when the tablet is turned off.

### Battery Status



- LED glows when the battery is being charged.
- LED goes out when the battery is fully charged or when the AC/DC adapter is disconnected.
- LED blinks slowly when battery capacity is lower than 7%.
- LED blinks fast when battery error.

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### 3. Touch Screen

Whenever the display is rotated, the touch screen will be rotated and expanded to fit the display automatically.

(NOTE: This function will be changed depends on the user's settings.)

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## Top Side View

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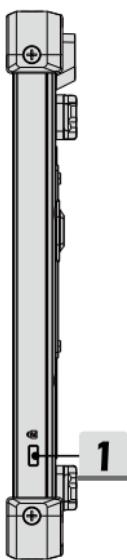
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### 1. Volume Up + / Volume Down - Button

Press the Volume Up or Volume Down button to adjust the sound volume.

### Right Side View

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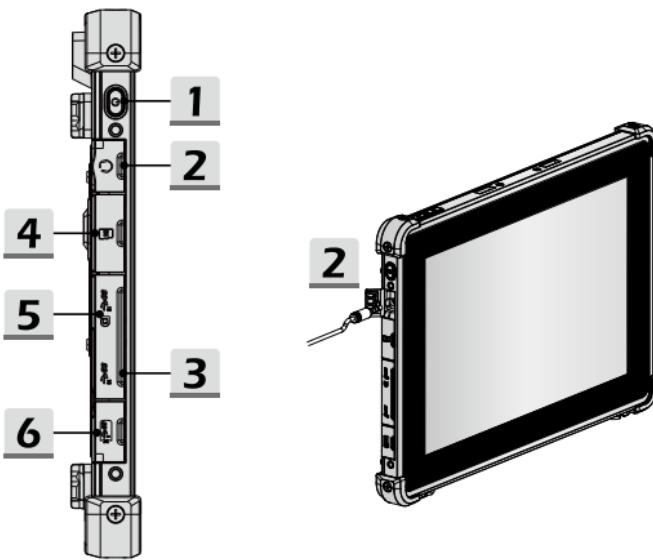
#### 1. Kensington Lock

This tablet provides a Kensington lock hole, which allows users to secure the tablet in place.

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## Left Side View

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### 1. Power Button

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- Before powering on the Tablet PC for the very first time, you must connect it with AC power.
- Press and hold the power button for 2 seconds can shut down the Tablet.

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### 2. Mic-in/ Headphone-out combo Jack

Used for connecting the speakers or headphones.

(NOTE: The diameter of 3.5mm headset plug has to be lower than 5mm.)

### 3. USB 3.1 Gen 1 Port

USB 3.1 Gen 1, the SuperSpeed USB, supports high-speed data transfer for the

connected devices, such as storage devices, hard drives, or video cameras.

### 4. Micro SD Card Reader

The built-in card reader supports SD card.

### 5. USB 3.2 Gen 2 Port (Type-C) (with DisplayPort function)

USB 3.2 Gen 2, the SuperSpeed USB, delivers the higher interface speeds for connecting various devices, such as storage devices, hard drives, or video cameras, and offers more advantages over high-speed data transferring.

The slim and sleek USB Type C connector features reversible plug orientation and cable direction and supports 5V/2A portable charging power when AC power is connected. However, the maximum portable charging power limitation may up to 5V/1.5A while only battery DC power is connected. And it also supports scalable performance to future-proof solution, including USB 3.x, DisplayPort, Audio.

### 6. USB 3.0 Gen 1 Port (Type C)(with PD-IN 20V)

USB 3.0 Gen 1, the SuperSpeed USB, supports high-speed data transfer for connected devices, such as storage devices, hard drives, or video cameras.

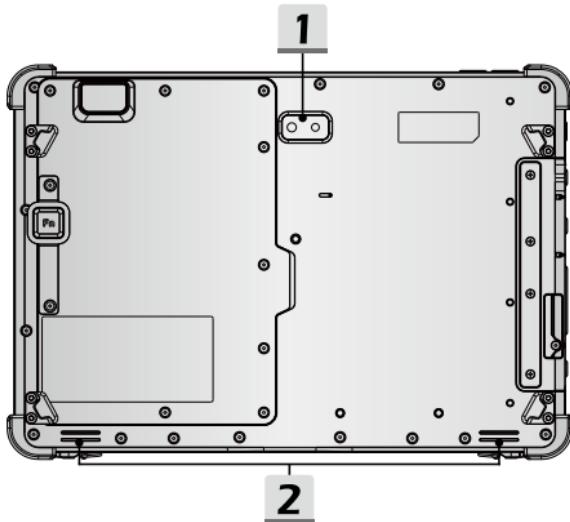
The slim and sleek USB Type C connector offers reversible plug orientation, and supports 5V/1A portable charging power.

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## Rear Side View

The figure of open view and description shown below will lead you to browse the main operating area of your Tablet PC.

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### 1. Rear Camera

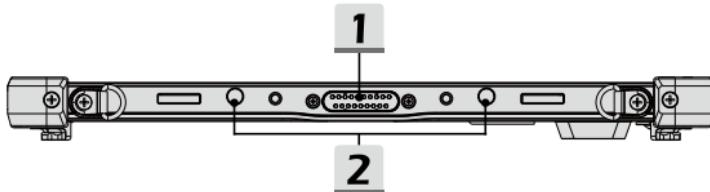
This built-in rear camera can be used for picture taking, video recording or conferencing, and any other interactive applications.

### 2. Speaker

Support high quality sound.

### Bottom Side View

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#### 1. Dock Connector

Connect with external Docking Station to increase more I/O functions.

#### 2. Boss Hole

Used for locking the boss hole of the dock.

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# Specifications

The specifications listed here is reference only, and may change without notice. The actual products sold are different from areas.

<b>Physical Characteristic</b>	
Dimension	274 (W) x 189 (D) x 15 (H) mm
Weight	1100 g
<b>CPU</b>	
Supported Processor	Intel® Dual Core/Quad Core processor
Processor Type	Intel® Elkhart Lake
<b>Memory</b>	
Technology	LPDDR4 3200
Memory	4GB/8GB on board
<b>Power</b>	
AC/DC Adapter	65W, 20V Input: 100-240V~, 50/60Hz Output: 20V ___ , 3.25A The supported AC/DC adapter may vary without notice.
<b>Storage</b> (Note: items listed below may vary without notice)	
EMMC	256GB
<b>I/O Port</b>	
USB	1 x USB 3.1 Gen 2 1 x USB 3.1 Gen 2 Type C 1 x USB 3.0 Gen 1 Type C
Audio Connectors	1 x Mic-in/ Headphone-out combo
Card Reader	1 x Micro SD Card
<b>Communication Port</b>	
Wireless LAN	Supported
Bluetooth	Supported

## Introductions

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<b>Display</b>	
LCD Type	10.1" display
Resolution	800 x 1280
Multi Touch	10-Point Touch Supported
Brightness	Brightness controlled by setting
<b>Video</b>	
Graphics	Intel® UHD Graphics
<b>Webcam</b>	
Front Camera	2.0MP
Rear Camera	8.0MP
<b>Audio</b>	
Internal Speakers	2 x
Sound Volume	Adjust by volume button & SW
<b>Security</b>	
Trusted Platform Module (optional)	<p>TPM 2.0 is a hardware-based encryption device that collaborates with software measures to form a more advanced and secure data protection.</p> <p>TPM functionalities can be de/activated in BIOS settings where appropriate.</p> <p>With professional versions of Windows, BitLocker is the default console available for TPM communications serving data encryption purposes.</p>

# Getting Started

# How to Manage Power Supply

This section provides users basic safety precautions to take when using an AC/DC adapter and battery power properly.

## AC/DC Adapter

Ensure that your notebook is connected to an AC power source via the AC adapter before turning it on for the first time. If the notebook automatically shuts down due to low battery power, it is likely to cause system failure. Below are some Dos and Don'ts of an AC/DC adapter.

- ▶ Dos
  - Use the adapter that shipped with your notebook only.
  - Always be aware of heat coming from the in use AC/DC adapter.
  - Unplug the AC power cord before disassembly the notebook.
- ▶ Don'ts
  - Cover an in-use adapter since it can generate heat.
  - Have the AC power cord plugged after powering off the system when the notebook is going to be left unused for a longer time.

## Plug the AC/DC Adapter

1. Take up the interchangeable plug and look for the groove on the interchangeable plug which can be used for locking on the AC/DC adapter. Then align the groove of the interchangeable plug on the tenon of the AC/DC adapter with correct orientation. Next, rotate the interchangeable plug 90 degrees clockwise until it is fixed on the AC/DC adapter.
2. Plug the DC end of the AC/DC adapter into the DC-in jack of the Tablet PC.
3. Then plug the AC/DC adapter into the power outlet.
4. When remove, please follow the steps 3 2 1.

(NOTE:The interchangeable plug may vary depending on countries or regions.)



