

Inateck FE2025

Inateck M.2 NVMe Hard Drive Enclosure FE2025 User Manual

Model: FE2025 | Brand: Inateck

1. INTRODUCTION

This user manual provides detailed instructions for the Inateck FE2025 M.2 NVMe Hard Drive Enclosure. It covers product features, package contents, installation steps, operating procedures, maintenance tips, and troubleshooting common issues. Please read this manual thoroughly before using the product to ensure proper operation and longevity.

2. PACKAGE CONTENTS

Upon opening the package, please verify that all the following items are included:

- 1 x Inateck FE2025 M.2 NVMe Hard Drive Enclosure
- 2 x Fixators (for different SSD lengths)
- 1 x USB-C to USB-C Data Cable
- 1 x USB-C to USB-A Data Cable
- 1 x Silicone Heat Dissipation Shim
- 1 x Instruction Manual (this document)



Figure 2.1: Inateck FE2025 Enclosure and Accessories

3. PRODUCT FEATURES

- **Fast Transfer Rate:** Supports up to 10Gbps transmission bandwidth with read-write rates up to 950Mb/s, enabling rapid transfer of large files.
- **Wide Compatibility:** Compatible with both M.2 SATA and NVMe SSDs. (Note: B key M.2 SATA is not supported).
- **Optimized Design:** Features a tool-free installation mechanism for convenient use.
- **Flexible Hard Drive Installation:** Includes two fixators to securely accommodate M.2 SSDs of various standards: 2242, 2260, and 2280.
- **Efficient Heat Dissipation:** Equipped with a silicone heat dissipation shim and a thickened aluminum shell to effectively manage heat during operation.

4. COMPATIBILITY

The Inateck FE2025 enclosure is designed for broad compatibility with various M.2 SSD types and operating systems.

4.1 SSD Compatibility

This enclosure supports both M.2 NVMe and M.2 SATA SSDs. Please note that B key M.2 SATA SSDs are not supported. It is compatible with M-key and B+M key NVMe SSDs, and B+M key SATA SSDs.

Compatible with NVMe and SATA M.2 SSD

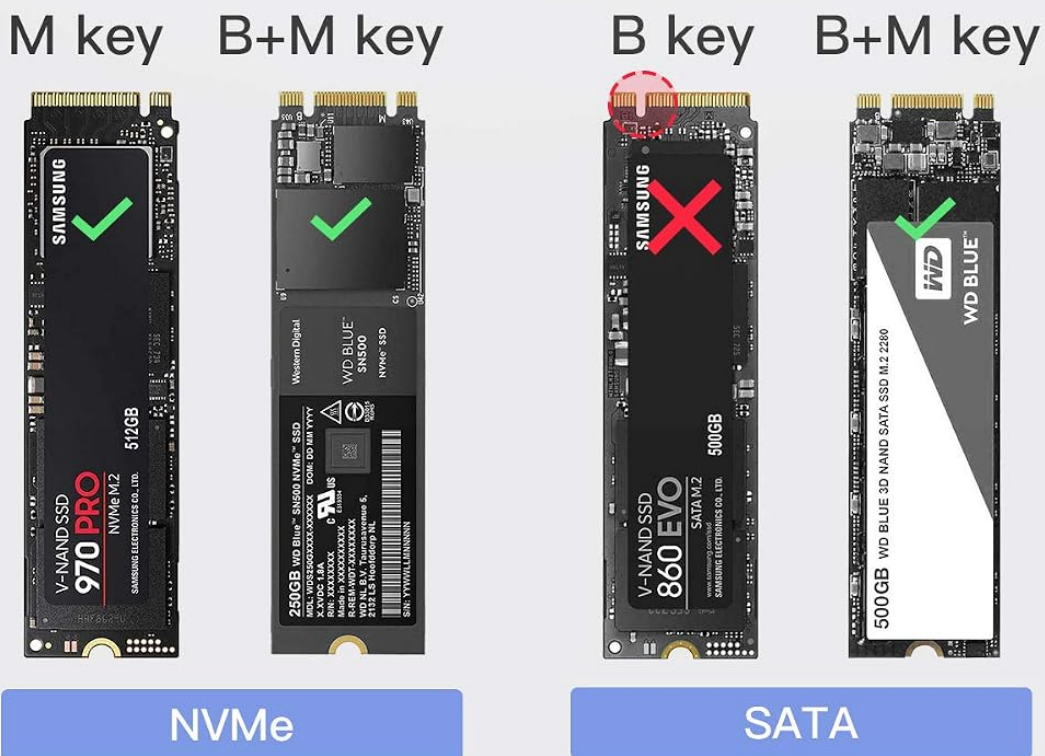


Figure 4.1: Supported M.2 SSD Key Types

4.2 Supported SSD Sizes

The enclosure accommodates M.2 SSDs of three common lengths: 2242 (22x42mm), 2260 (22x60mm), and 2280 (22x80mm). Fixators are provided to secure the SSD in place regardless of its length.

Supported Sizes

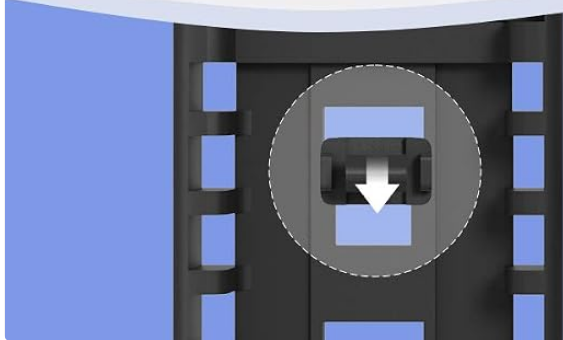
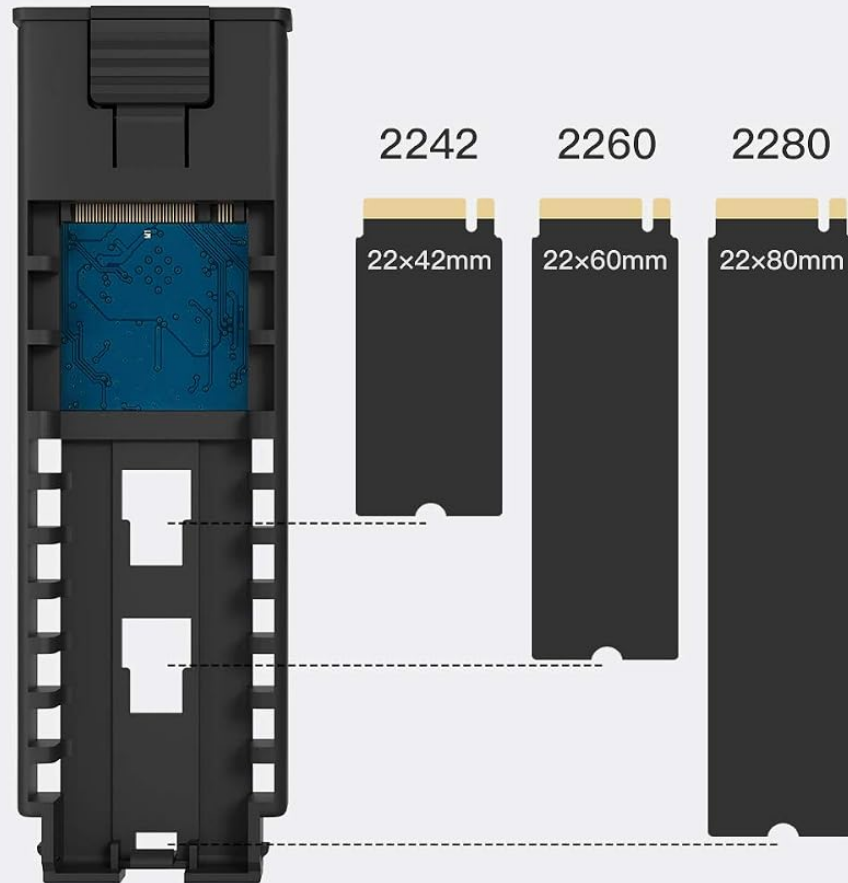


Figure 4.2: Supported M.2 SSD Lengths

4.3 Operating System Compatibility

The FE2025 enclosure is compatible with a wide range of operating systems, including Windows 7/8/10, Mac OS, and Linux, ensuring broad usability across different computing environments.

Meet the Demand of Different Devices



Figure 4.3: Operating System Compatibility

5. SETUP AND INSTALLATION

The Inateck FE2025 features a tool-free design for easy installation of your M.2 SSD.

5.1 SSD Installation Steps

1. **Open the Enclosure:** Gently slide the inner tray out from the aluminum shell. The enclosure is designed for tool-free access.

2. **Insert the SSD:** Align your M.2 NVMe or SATA SSD with the M.2 slot on the circuit board within the tray. Insert the SSD firmly into the slot at an angle.
3. **Secure the SSD:** Locate the appropriate fixator for your SSD's length (2242, 2260, or 2280). Slide the fixator into the corresponding notch on the tray to secure the SSD in place. Ensure the SSD is flat and firmly seated.
4. **Apply Thermal Pad:** Peel off the protective film from both sides of the silicone heat dissipation shim. Carefully place the shim on top of your installed SSD, ensuring it covers the main chip area for optimal heat transfer to the aluminum shell.
5. **Close the Enclosure:** Slide the inner tray back into the aluminum shell until it clicks securely into place.

Your browser does not support the video tag.

Video 5.1: Visual guide demonstrating the tool-free installation process of an M.2 SSD into the Inateck FE2025 enclosure, including securing the SSD and applying the thermal pad.

Efficient Heat-dissipating

Heat-dissipating silicone thermal pad

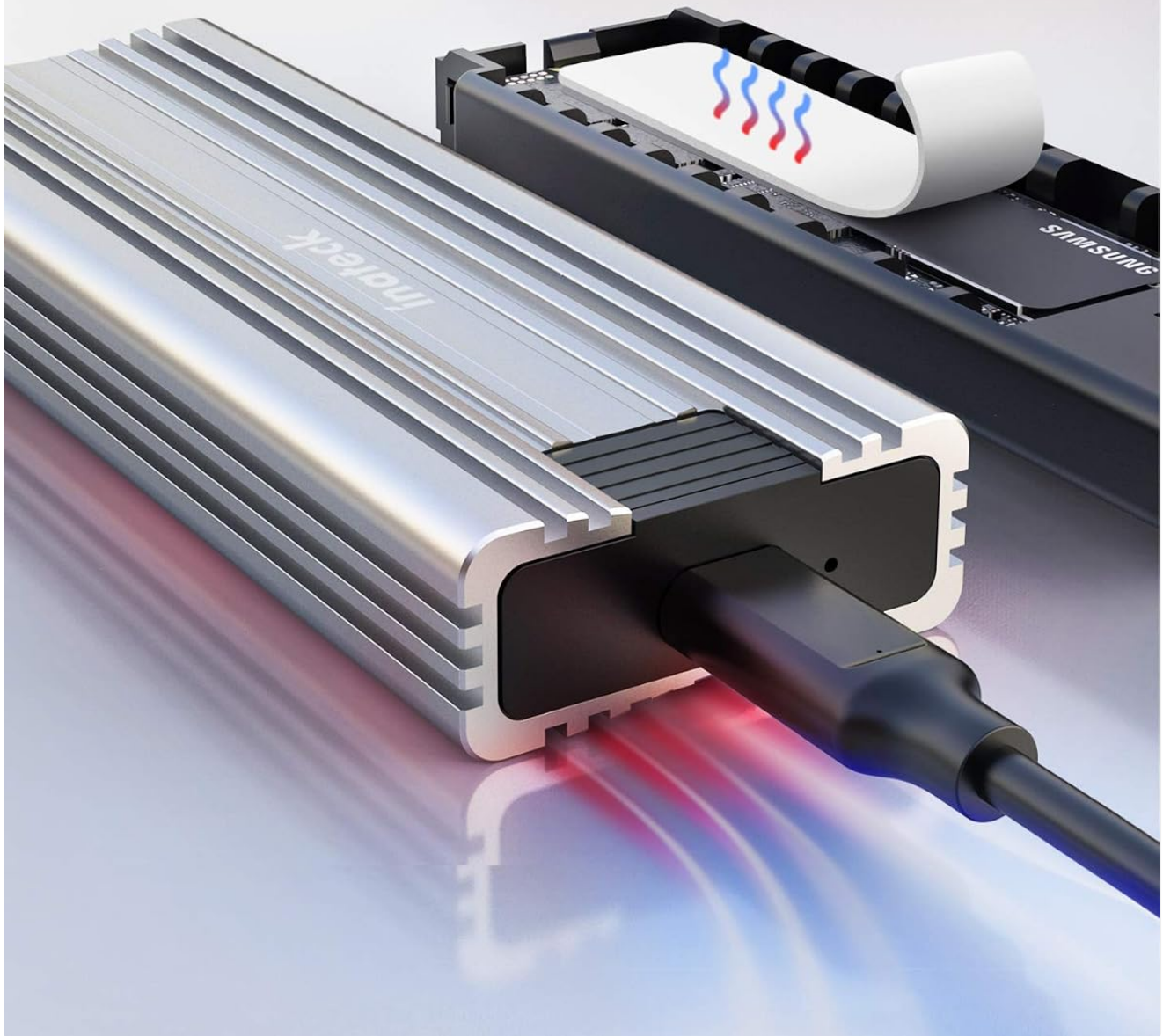


Figure 5.2: Silicone Heat Dissipation Shim Placement

6. OPERATING INSTRUCTIONS

Once your M.2 SSD is installed in the Inateck FE2025 enclosure, you can connect it to your computer for data access.

6.1 Connecting to Your Device

1. **Select Cable:** Choose the appropriate data cable for your computer's port: either the USB-C to USB-C cable

for USB-C/Thunderbolt ports or the USB-C to USB-A cable for standard USB-A ports.

2. **Connect Enclosure:** Plug the USB-C end of the chosen cable into the port on the Inateck FE2025 enclosure.
3. **Connect to Computer:** Plug the other end of the cable into an available USB port on your computer.
4. **Access Drive:** The enclosure will be recognized by your operating system as an external storage device. You can now access the SSD's contents, transfer files, or format the drive if it's new.



High-speed Transmission

USB 3.2 Gen 2

Figure 6.1: High-speed Data Transmission via USB 3.2 Gen 2

6.2 Initializing and Formatting (for new SSDs)

If you are using a brand new M.2 SSD, it may need to be initialized and formatted before it can be used. This process is typically done through your operating system's Disk Management utility (Windows) or Disk Utility (Mac OS).

- **Windows:** Right-click on 'This PC' or 'My Computer', select 'Manage', then 'Disk Management'. Find your new drive, right-click to 'Initialize Disk', then create a 'New Simple Volume' and follow the prompts to format.
- **Mac OS:** Open 'Disk Utility' (found in Applications/Utilities). Select your new drive from the sidebar, then click 'Erase' to format it.

7. MAINTENANCE

To ensure the longevity and optimal performance of your Inateck FE2025 enclosure and the installed SSD, follow these maintenance guidelines:

- **Handle with Care:** While the aluminum shell provides durability, avoid dropping or subjecting the enclosure to strong impacts.
- **Keep Clean:** Use a soft, dry cloth to wipe the exterior of the enclosure. Avoid using liquid cleaners or solvents.
- **Proper Disconnection:** Always safely eject or unmount the drive from your operating system before physically disconnecting the enclosure to prevent data corruption.
- **Temperature Management:** The enclosure is designed for efficient heat dissipation. Ensure it is used in a well-ventilated area and not covered during operation to prevent overheating, especially during prolonged data transfers.
- **Cable Care:** Store the USB cables properly to avoid kinks or damage, which can affect data transfer speeds and connectivity.

8. TROUBLESHOOTING

If you encounter issues with your Inateck FE2025 enclosure, refer to the following common problems and solutions:

8.1 Drive Not Recognized

- **Check Connections:** Ensure both ends of the USB cable are securely plugged into the enclosure and your computer. Try a different USB port on your computer.
- **Try Different Cable:** Use the other provided USB cable (USB-C to USB-A or USB-C to USB-C) to rule out a faulty cable.
- **Verify SSD Installation:** Open the enclosure and ensure the M.2 SSD is correctly seated in its slot and secured by the fixator.
- **Initialize/Format SSD:** If it's a new SSD, it might need to be initialized and formatted via Disk Management (Windows) or Disk Utility (Mac OS).
- **Check SSD Type:** Confirm that your M.2 SSD is either NVMe or a supported SATA type (B+M key). B key SATA SSDs are not compatible.
- **Test SSD Separately:** If possible, test the M.2 SSD in another compatible device or enclosure to determine if the issue lies with the SSD itself.

8.2 Slow Data Transfer Speed

- **USB Port Type:** Ensure you are connecting the enclosure to a USB 3.0 (or higher) port on your computer. USB 2.0 ports will significantly limit speeds. For 10Gbps, a USB 3.2 Gen 2 (or USB 3.1 Gen 2) port is required.
- **Cable Quality:** Use the original cables provided, as not all USB-C cables support 10Gbps speeds.

- **SSD Performance:** The actual speed is also limited by the performance of your M.2 SSD. Ensure your SSD is capable of high speeds.
- **System Load:** High CPU usage or other background processes on your computer can affect transfer speeds.
- **Thermal Throttling:** If the SSD overheats, its performance may be reduced. Ensure the thermal pad is correctly applied and the enclosure has adequate ventilation.

8.3 Enclosure Feels Warm

- **Normal Operation:** It is normal for the aluminum shell to become warm during data transfer, especially during large file transfers or prolonged use. This indicates that the heat dissipation system is working effectively to transfer heat away from the SSD.
- **Thermal Pad Check:** Ensure the silicone heat dissipation shim is properly placed on the SSD and making good contact with the aluminum shell.
- **Ventilation:** Ensure the enclosure is not covered and has sufficient airflow around it.

9. TECHNICAL SPECIFICATIONS

Specification	Detail
Model Number	FE2025
Brand	Inateck
Compatible Devices	Laptop, Desktop PC
Hard Disk Form Factor	M.2 (2242, 2260, 2280)
Supported SSD Types	M.2 NVMe, M.2 SATA (B+M key only)
Data Transfer Rate	Up to 10 Gigabits Per Second (USB 3.2 Gen 2)
Hardware Interface	USB Type C, USB Type A
Operating System Compatibility	Windows 7/8/10, Mac OS, Linux
Material	Aluminum (shell), Silicone (thermal pad)
Color	Dark Gray
Product Dimensions (LxWxH)	4.21 x 1.5 x 0.59 inches
Item Weight	2.4 ounces

10. WARRANTY AND SUPPORT

Inateck products are designed for reliability and performance. For specific warranty information regarding your FE2025 enclosure, please refer to the warranty card included in your product packaging or visit the official Inateck website. For technical support, troubleshooting assistance beyond this manual, or inquiries about replacement parts, please contact Inateck customer service through their official channels. Keep your purchase receipt as proof of purchase for warranty claims.

You can find more information and support resources on the Inateck official website:www.inateck.com

