

## AOOSTAR WTR PRO

# AOOSTAR WTR PRO AMD Ryzen 7 5825u 4 Bay NAS Mini PC User Manual

## 1. INTRODUCTION

This manual provides essential information for the setup, operation, and maintenance of your AOOSTAR WTR PRO AMD Ryzen 7 5825u 4 Bay NAS Mini PC. Please read these instructions carefully before using the device to ensure optimal performance and longevity.

The AOOSTAR WTR PRO is a versatile mini PC designed for Network Attached Storage (NAS) applications, offering robust performance and extensive storage capabilities. It features an AMD Ryzen 7 5825U processor, support for up to four 3.5-inch SATA hard drives, and dual M.2 NVMe slots for high-speed storage.

## 2. PRODUCT OVERVIEW

### 2.1 Key Features

- **Processor:** AMD Ryzen 7 5825U (8 Cores, 16 Threads, up to 4.5 GHz) with integrated Radeon Vega graphics.
- **Storage Bays:** 4 bays for 3.5-inch SATA hard drives (up to 22TB each).
- **M.2 Slots:** 2 x M.2 2280-NVMe slots for high-speed SSDs.
- **RAM:** Dual channel 3200MHz DDR4 RAM, 2 slots, supporting up to 64GB.
- **Video Output:** Supports up to three 4K-resolution displays simultaneously via DP1.4 (4K144Hz), HDMI 2.1, and Type-C.
- **Networking:** 2 x 2.5G LAN ports.
- **Cooling:** Through-the-wall construction with a 12CM fan for efficient and quiet heat dissipation.
- **Additional Features:** WOL (Wake on LAN) support, Micro SD card port.

### 2.2 Ports and Connectors

The AOOSTAR WTR PRO offers a comprehensive set of ports for connectivity and expansion:

- 2 x USB 3.0 ports
- 2 x USB 2.0 ports
- 1 x DisplayPort 1.4 (4K@144Hz)
- 1 x HDMI 2.1 port

- 1 x Type-C port (supports 100W power supply)
- 2 x 2.5G LAN ports
- 1 x 3.5mm Audio Jack
- 1 x Micro SD Card Port
- 1 x DC Power Input



Figure 1: Rear Ports and Connectors

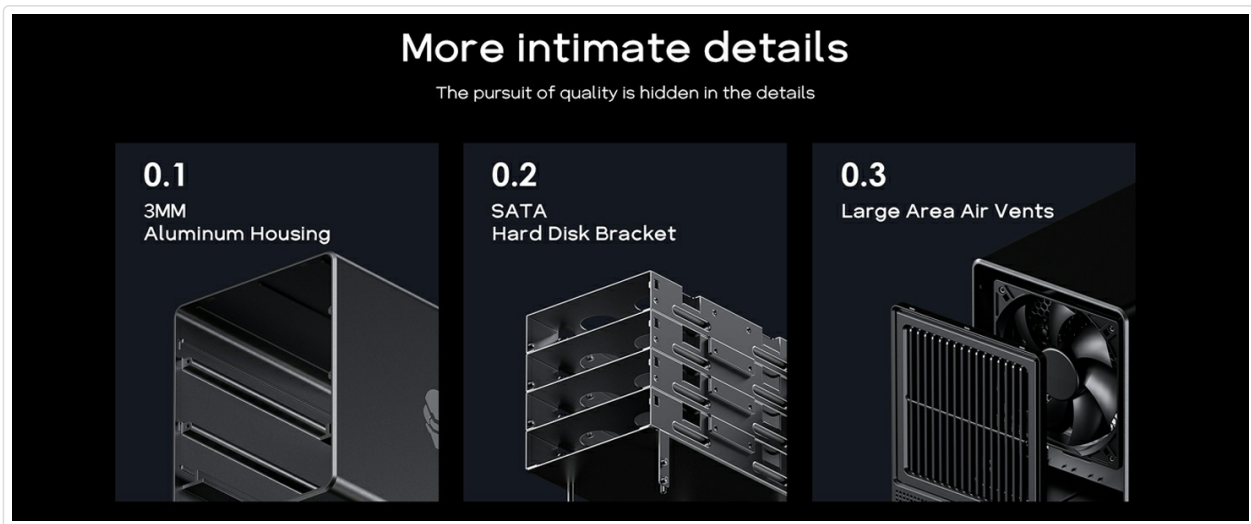


Figure 2: Key Features and Port Overview

## 3. SETUP

### 3.1 Hardware Installation

The AOOSTAR WTR PRO allows for easy installation of memory (RAM) and M.2 SSDs. For 3.5-inch SATA HDDs, use the front-loading drive bays.

#### 3.1.1 Memory (RAM) and M.2 SSD Installation

To install or upgrade RAM and M.2 SSDs, you will need to access the internal components. Refer to the video below for a general guide on disassembling a similar mini PC model and installing internal components. Note that specific steps may vary slightly for the WTR PRO model.

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Video 1: General Guide for Disassembly and Component Installation (UM890 Pro model shown, steps may vary)

1. Carefully remove the bottom panel of the mini PC.
2. Locate the DDR4 SO-DIMM slots and M.2 NVMe slots on the motherboard.
3. Insert the RAM modules into the slots, ensuring they click into place.
4. Insert the M.2 SSDs into their respective slots and secure them with the provided screws.
5. Reattach the bottom panel.

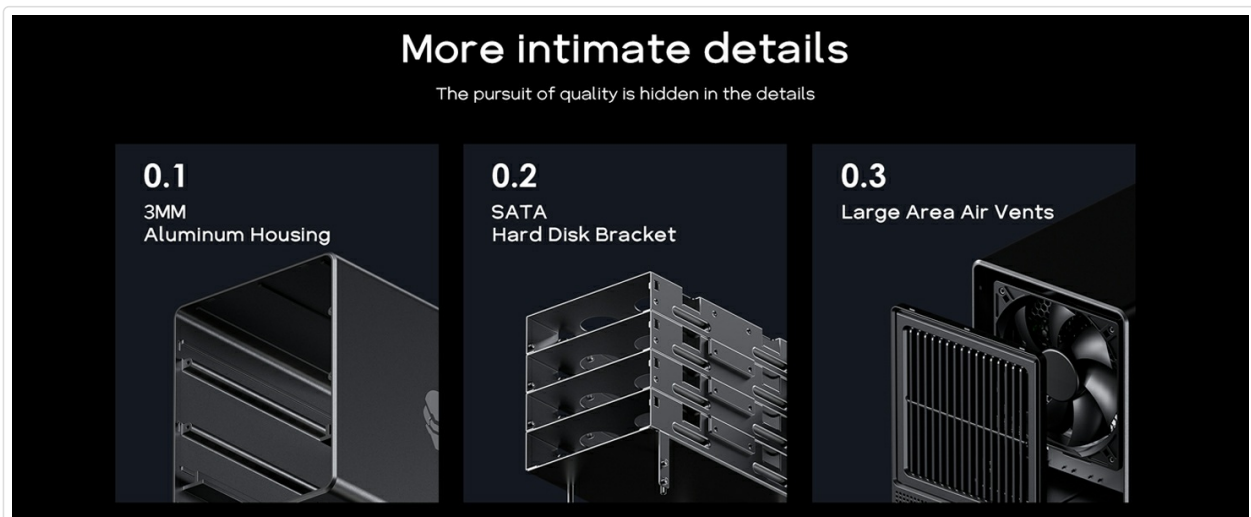


Figure 3: Internal Components (RAM and M.2 SSD slots)

#### 3.1.2 3.5-inch SATA HDD Installation

The WTR PRO features four hot-swappable drive bays for 3.5-inch SATA HDDs:

1. Gently pull the handle of an empty drive tray from the front of the NAS.
2. Place your 3.5-inch SATA HDD into the tray, aligning the screw holes.
3. Secure the HDD to the tray using the provided screws.
4. Slide the loaded drive tray back into the empty drive bay until it clicks into place.
5. Repeat for additional drives as needed.



Figure 4: 3.5-inch HDD Drive Bays

### 3.2 Initial Software Setup

After hardware installation, connect your NAS to a power source, display, and network. The device will boot up, and you can proceed with software configuration.

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Video 2: Power-on Operation and Initial Setup Guide (General NAS setup)

1. **Connect Cables:** Connect the power adapter, Ethernet cable, and HDMI cable (if using a display) to the NAS.
2. **Power On:** Press the power button briefly to turn on the device. The status and network lights will illuminate.
3. **Access MinisCloud:** Once the device boots and displays the MINISFORUM logo and an IP address on the connected monitor, you can access the MinisCloud client.
4. **Install Client:** Download and install the MinisCloud client software on your computer. The website address for the client download is typically provided in a quick start guide or on the manufacturer's support page.
5. **Bind Device:** Open the MinisCloud client and follow the instructions to bind your NAS device. If automatic scanning fails, you can manually enter the NAS's local IP address.
6. **Administrator Account:** Register an administrator account and log in.
7. **System Pool Setup:** The first login requires a system pool setup. This process will wipe all storage drives. Select your preferred disk array configuration (e.g., Mirror Device for RAID 1 for data protection) and confirm.

## 4. OPERATING INSTRUCTIONS

After successful setup, you will enter the MinisCloud desktop interface, which provides various applications

and functionalities for managing your NAS.

#### 4.1 MinisCloud Desktop Overview

The MinisCloud desktop provides access to applications like Docker, File Manager, Task Center, Album, Chat, Internet Share, Remote Access, Notebook, Storage, Device Monitor, LAN Share, Settings, Movie, and Music.

#### 4.2 File Management and Storage

Use the File Manager to organize, upload, and download files. The Storage application allows you to monitor your storage pool and individual hard disks.

#### 4.3 Docker Applications

The Docker application allows you to install and manage various containerized applications, expanding the functionality of your NAS. Popular applications like qBittorrent, Plex, Home Assistant, Nextcloud, and Minecraft Server are available.

#### 4.4 Remote Access

Configure remote access settings to access your NAS files and services from outside your local network. Ensure proper security measures are in place when enabling public access.

### 5. MAINTENANCE

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Regular maintenance helps ensure the stable operation and longevity of your AOOSTAR WTR PRO NAS Mini PC.

- **Dust Management:** The device features a dustproof design. Periodically inspect and clean the air vents to prevent dust buildup, which can affect cooling performance.
- **Software Updates:** Regularly check for and install software updates for the MinisCloud client and NAS operating system to ensure optimal performance, security, and access to new features.
- **Data Backup:** While RAID configurations offer data redundancy, it is always recommended to maintain external backups of critical data.

# Large silent Fan

Pass-through construction + large 12 CM cooling fan accelerates heat to unleash greater performance!

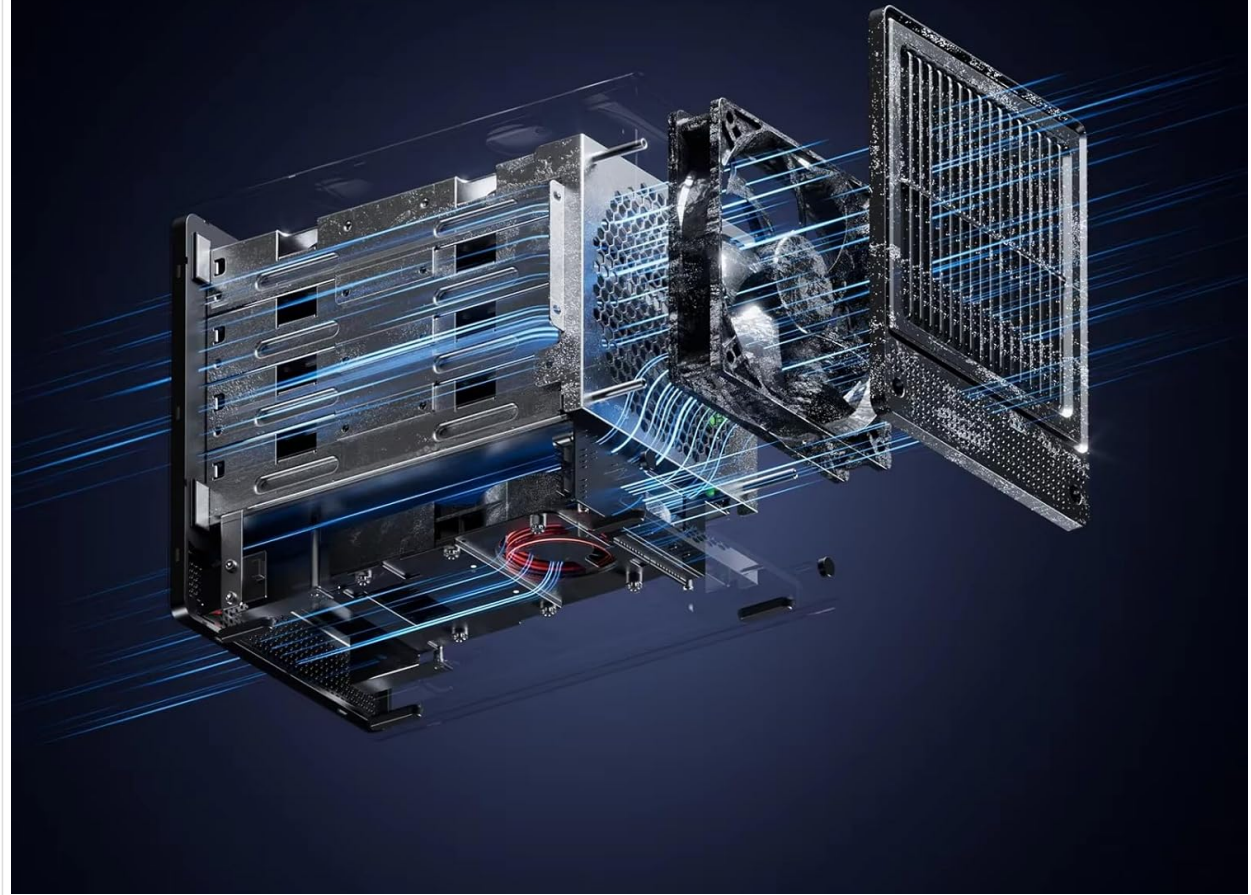


Figure 5: Cooling System with 12CM Fan

## 6. TROUBLESHOOTING

If you encounter issues with your AOOSTAR WTR PRO, consider the following troubleshooting steps:

- **No Power:** Ensure the power adapter is securely connected to both the NAS and a working power outlet.
- **No Display Output:** Verify that the HDMI/DP/Type-C cable is correctly connected to both the NAS and the monitor. Try a different cable or port if available.
- **Network Connectivity Issues:** Check that the Ethernet cable is securely connected to both the NAS and your router/switch. Confirm that your router is functioning correctly. If using MinisCloud, ensure the device is bound correctly and the network mode is set appropriately.
- **Storage Drive Not Detected:** Ensure hard drives are properly seated in their bays or M.2 SSDs are correctly installed and secured. Check the system pool status in the MinisCloud Storage application.
- **Slow Performance:** Monitor CPU, RAM, and disk usage via the Device Monitor application. Ensure sufficient free space on your drives.
- **System Pool Creation Issues:** Remember that creating a system pool will erase all data on the selected drives. Ensure you have backed up any important data before proceeding.

## 7. SPECIFICATIONS

Component	Specification
Processor	AMD Ryzen 7 5825U (8 Cores, 16 Threads, 2.0 GHz Base, 4.5 GHz Boost)
Graphics	Integrated Radeon Vega Graphics (2000 MHz)
RAM	LPDDR4 (Dual Channel 3200MHz, Max 64GB)
Internal Storage	1TB SSD (Configurable), 2 x M.2 2280-NVMe slots
Drive Bays	4 x 3.5-inch SATA (up to 22TB each)
Video Output	1 x DP1.4 (4K@144Hz), 1 x HDMI 2.1, 1 x Type-C (4K output)
LAN Ports	2 x 2.5G LAN
USB Ports	2 x USB 3.0, 2 x USB 2.0
Audio	1 x 3.5mm Audio Jack
Card Reader	1 x Micro SD Card Port
Power Supply	DC Input (120W, 19V-6.32A)
Dimensions (LxWxH)	7.28 x 5.91 x 8.98 inches (22.8cm x 15cm x 18.5cm)
Weight	11 pounds (5.0 KG)



<b>Brand</b> <b>aoostar</b>		<b>Wireless NET</b>	
WTR Pro		2*2.5G LAN Ports+WIFI 6 (Wireless WIFI card not included) +Bluetooth 5.2	
<b>CPU</b>		<b>OS</b>	
AMD Ryzen 7 5825U (2.0Ghz–4.5Ghz )		Support for linux,istoreos, windows and other systems	
<b>ROM</b>		<b>Connector</b>	
dual DDR4–3200MHz Up to 64G RAM		USB3.0x2 USB2.0x2 HDMI2.1x1 DPx1 Full–featured Type–Cx1 TF card slot x 1 2.5G LAN ports x 2 audio interface x 1	
<b>SSD</b>		<b>Power</b>	
M.2 2280–NVMEx2 3.5 SATAx4		120W 19V–6.32A	
<b>GPU</b>		<b>Size</b>	<b>Weights</b>
<b>【AMD Radeon Graphics】</b> 2000 MHz		22.8cm*15cm*18.5cm	5.0KG





Figure 6: Detailed Product Specifications

## 8. WARRANTY AND SUPPORT

AOOSTAR provides 12 months of after-sales service from the date of order. For any questions or assistance regarding your product, please contact AOOSTAR customer support through inquiry or email. Refer to your product packaging or the official AOOSTAR website for specific contact details.

### Related Documents - WTR PRO

	<a href="#">AOOSTAR MN78 Mini PC User Manual</a> Comprehensive user manual for the AOOSTAR MN78 Mini PC, covering setup, operation, environment, installation, and warranty information.
	<a href="#">AOOSTAR MACO Mini PC User Manual and Specifications</a> User manual and technical specifications for the AOOSTAR MACO Mini PC, including operation instructions, installation guide, warranty information, and FCC compliance.

	<p><a href="#">AOOSTAR GEM12 Max Mini PC User Manual &amp; Specifications</a></p> <p>Comprehensive user manual for the AOOSTAR GEM12 Max Mini PC (R7 8845HS). This guide provides detailed information on unpacking, product interfaces, operating environment, important precautions, troubleshooting slow boot issues, and warranty terms.</p>
	<p><a href="#">Custom 3D Printable Top Shell for AooStar and Tian Bei Mini PCs</a></p> <p>Enhance the cooling performance of your AooStar GODxx, Tian Bei MN5X, MN18A, and clone mini PCs with this custom 3D printable top shell. Designed to improve ventilation and reduce thermal throttling, it offers various height and cutout options for optimal airflow and quieter operation.</p>
	<p><a href="#">Aoostar T8 Mini-PC im Test: Kompakter Rechner mit Intel N100</a></p> <p>Umfassender Testbericht zum Aoostar T8 Mini-PC. Erfahren Sie mehr über die kompakte Bauweise, die Ausstattung und die Leistung des Intel N100 Prozessors.</p>
	<p><a href="#">SYSTEMTREFF PC Tower 20190111-a Product Information and Safety</a></p> <p>This document provides product identification, description, intended uses, risk assessment, and technical documentation for the SYSTEMTREFF PC Tower 20190111-a. It includes information on safe power connection and compliance with the General Product Safety Regulation (GPSR).</p>