

Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /

› [ZOTAC](#) /

› [ZOTAC GeForce GTX 1660 Super 6GB GDDR6 192-bit Gaming Graphics Card, Super Compact, ZT-T16620F-10L](#)

ZOTAC

ZOTAC GeForce GTX 1660 Super Graphics Card

Instruction Manual

INTRODUCTION

The ZOTAC GAMING GeForce GTX 1660 Super is a high-performance graphics card designed to deliver an exceptional gaming and computing experience. Built on the NVIDIA Turing architecture, it features 6GB of GDDR6 memory, offering fast and efficient processing for demanding applications and games. Its super compact design ensures compatibility with a wide range of PC systems. This manual will guide you through the installation, operation, and maintenance of your new graphics card.



Image: The ZOTAC GeForce GTX 1660 Super graphics card alongside its retail packaging, highlighting its compact form factor and branding.

1. SETUP

1.1 What's in the Box

Upon opening your ZOTAC GAMING GeForce GTX 1660 Super package, you should find the following items:

- ZOTAC GAMING GeForce GTX 1660 SUPER Twin Fan graphics card
- User Manual (this document)

1.2 Physical Installation

Before proceeding, ensure your system is powered off and unplugged from the wall outlet. It is recommended to wear an anti-static wrist strap to prevent damage from static discharge.

1. **Prepare your PC Case:** Open your PC case to access the motherboard and PCI Express slots.
2. **Locate PCI Express Slot:** Identify an available PCI Express 3.0 x16 slot on your motherboard. The GTX 1660 Super is a dual-slot card, so ensure sufficient space.
3. **Insert the Graphics Card:** Carefully align the graphics card with the PCI Express slot and press down firmly until it is securely seated.
4. **Secure the Card:** Use the screw or latch mechanism on your PC case to secure the graphics card to the case.
5. **Connect Power:** The card requires an 8-pin power input. Connect the appropriate power cable from your power supply unit (PSU) to the graphics card. A 450-watt power supply is recommended for optimal performance.
6. **Close PC Case:** Once the card is installed and secured, close your PC case.

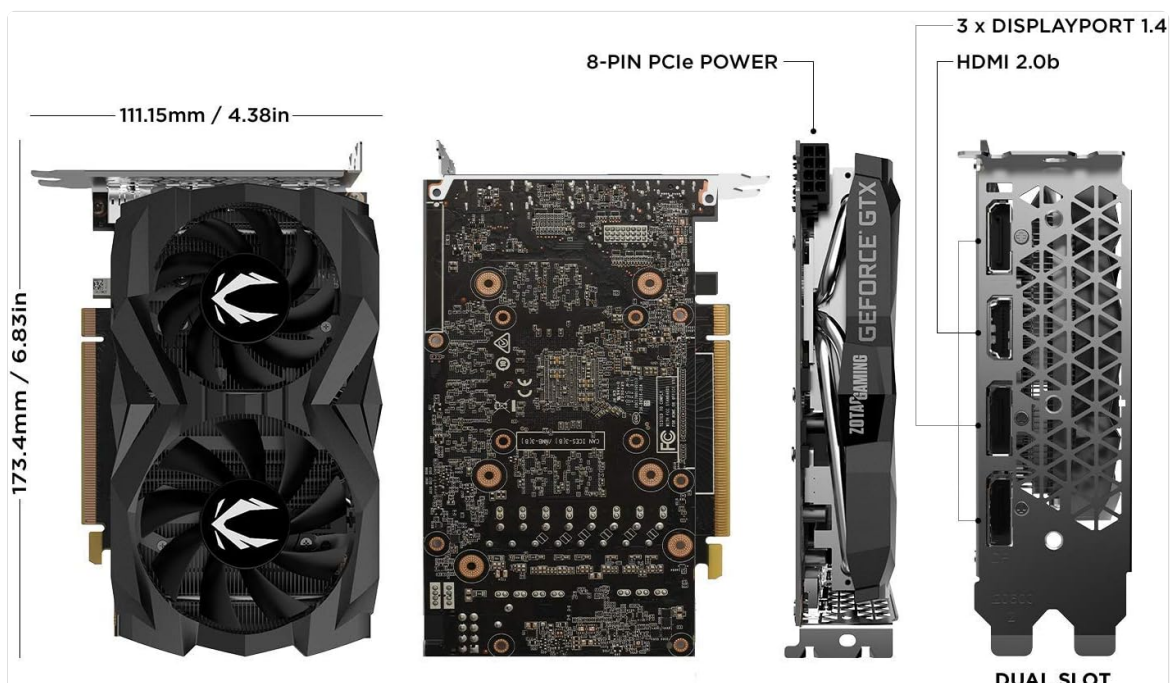


Image: Detailed diagram showing the dimensions of the ZOTAC GeForce GTX 1660 Super and its various ports, including DisplayPort 1.4 and HDMI 2.0b, and the 8-pin PCIe power connector.

*system is not included, image is for reference only



SUPER COMPACT

Fits 99% of the systems

Image: The ZOTAC GeForce GTX 1660 Super graphics card installed within a compact PC system, demonstrating its 'super compact' size and how it fits into smaller builds.

1.3 Driver Installation

After physical installation, you must install the latest drivers for your graphics card. This ensures proper functionality and optimal performance.

1. **Power On:** Connect your PC to a monitor using one of the available display outputs (DisplayPort or HDMI) and power on your system.
2. **Download Drivers:** Visit the official ZOTAC website or NVIDIA's driver download page. Select your specific graphics card model (GeForce GTX 1660 Super) and your operating system (Microsoft Windows 10 (April 2018 Update or later) / 7 x64).
3. **Install Drivers:** Run the downloaded driver installer and follow the on-screen prompts. A restart may be required after installation.

2. OPERATING THE GRAPHICS CARD

2.1 Display Connections

The ZOTAC GeForce GTX 1660 Super offers multiple display outputs for versatile monitor setups:

- **3 x DisplayPort 1.4:** Supports resolutions up to 7680x4320@60Hz.
- **1 x HDMI 2.0b:** Supports resolutions up to 3840x2160@60Hz.

The card is capable of supporting quad simultaneous displays, allowing for extensive multi-monitor configurations.

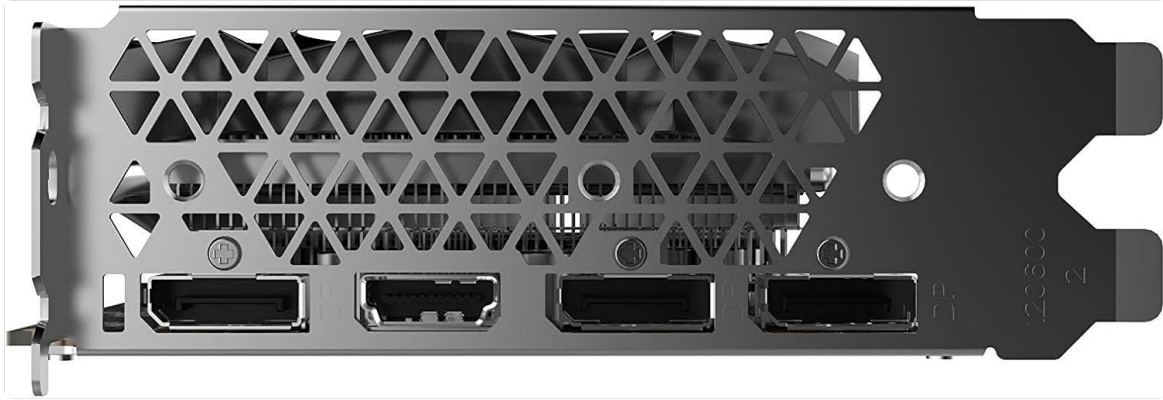


Image: A close-up view of the rear input/output panel of the ZOTAC GeForce GTX 1660 Super, clearly showing the three DisplayPort and one HDMI connectors.

2.2 Key Features and Technologies

Leverage the following features for an enhanced experience:

- **4K, HDR, and VR Ready:** Experience high-resolution content, vibrant HDR visuals, and immersive virtual reality.
- **NVIDIA Ansel:** Capture professional-grade in-game photos with super-resolution, 360-degree, HDR, and stereo captures.
- **NVIDIA G-SYNC Compatible:** Enjoy smooth, tear-free gameplay at refresh rates up to 240 Hz, plus HDR and more.
- **API Support:** Compatible with Microsoft DirectX 12 API, Vulkan API, and OpenGL 4.5.

3. MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your graphics card.

3.1 Cooling System

The ZOTAC GeForce GTX 1660 Super features an advanced cooling system designed for efficient heat dissipation:

- **Dual Fan Design:** Two fans provide effective airflow over the heatsink.
- **3 x 6mm Copper Heatpipes:** Direct copper contact for maximum heat extraction from the GPU.
- **Wide Array Aluminum Heatsink:** A full-body heatsink maximizes heat dissipation.
- **Curved Fan Blades & Wide Fan Blades:** Optimized design to improve airflow and static pressure, enhancing cooling performance while maintaining quiet operation.

COOLER, QUIETER AND STRONGER GAME PERFORMANCE

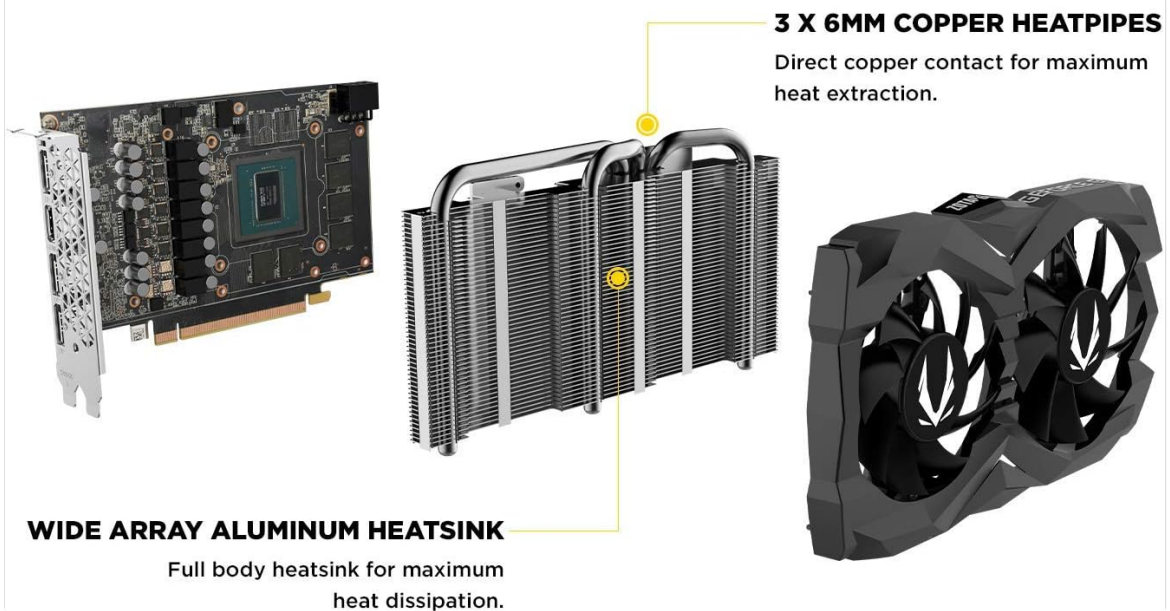


Image: An exploded view illustrating the cooling components of the ZOTAC GeForce GTX 1660 Super, including the copper heatpipes and the wide array aluminum heatsink, designed for efficient heat extraction.

CURVED FAN BLADES

Static Pressure Optimized design improve airflow staying power

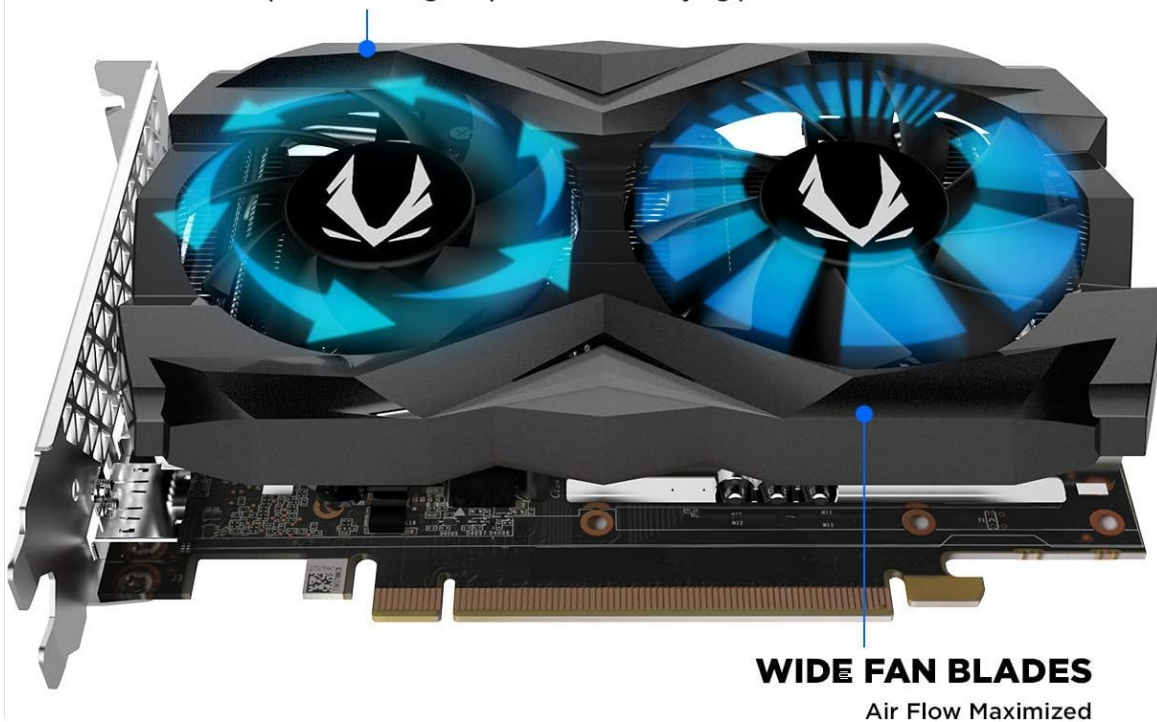


Image: A close-up of the ZOTAC GeForce GTX 1660 Super's fan blades, highlighting their curved and wide design for optimized static pressure and improved airflow.

3.2 Cleaning and Care

- **Dust Removal:** Periodically clean dust from the fans and heatsink using compressed air. Ensure the system is powered off and unplugged before cleaning.
- **Environmental Factors:** Operate the card in a well-ventilated environment to prevent overheating. Avoid exposing the card to extreme temperatures or humidity.
- **Driver Updates:** Regularly update your graphics drivers to benefit from performance improvements, bug fixes, and new features.

4. TROUBLESHOOTING

If you encounter issues with your ZOTAC GeForce GTX 1660 Super, consider the following common troubleshooting steps:

- **No Display/Black Screen:**

- Ensure the graphics card is fully seated in the PCI Express slot.
- Verify that the 8-pin power connector is securely attached to the card.
- Check monitor cables and connections. Try a different display output or cable.
- Confirm your power supply unit meets the recommended 450W requirement.

- **Driver Issues/Crashes:**

- Perform a clean installation of the latest NVIDIA drivers. Uninstall existing drivers before installing new ones.
- Ensure your operating system (Windows 10/7 x64) is up to date.
- Avoid using unofficial software or drivers.

- **Poor Performance/Low FPS:**

- Check for overheating. Ensure proper airflow in your PC case and clean any dust from the card's fans and heatsink.
- Verify that your system's CPU and RAM are not bottlenecking the GPU.
- Ensure your game settings are appropriate for the card's capabilities.

- **Fan Noise:**

- Excessive fan noise can indicate high temperatures. Check cooling and airflow.
- Ensure no cables or obstructions are interfering with the fan blades.

5. PRODUCT SPECIFICATIONS

Detailed technical specifications for the ZOTAC GeForce GTX 1660 Super:

Feature	Specification
GPU	NVIDIA GeForce GTX 1660 SUPER
CUDA Cores	1408
Video Memory	6GB GDDR6
Memory Bus	192-bit
Engine Boost Clock	1785 MHz
Memory Clock	14.0 Gbps

Feature	Specification
PCI Express	3.0
Display Outputs	3 x DisplayPort 1.4, 1 x HDMI 2.0b
Max Screen Resolution	7680 x 4320 @ 60Hz (DisplayPort)
Multi Display Capability	Quad Simultaneous Display
Recommended Power Supply	450W
Max Power Consumption	125W
Power Input	8-pin
DirectX	12 API, Vulkan API
OpenGL	4.5
Cooling	Dual Fan
Slot Size	Dual Slot
Card Length	209.6mm (8.3in)
Supported OS	Microsoft Windows 10 (April 2018 Update or later) / 7 x64



Image: A visual representation of the product specifications table for the ZOTAC GeForce GTX 1660 Super, detailing its technical capabilities and requirements.

6. WARRANTY INFORMATION

ZOTAC International (MCO) Limited provides a warranty for its products. The specific terms and duration of your warranty may vary by region and product registration. Please refer to the official ZOTAC website for the most up-to-date warranty policy and registration procedures. An extended warranty may be available upon product registration. Consult the ZOTAC website for details on how to register your product and extend your warranty coverage.



Image: The cover of the ZOTAC Quick Installation Guide, prominently featuring the 'Extended Warranty' information, indicating additional coverage options for registered products.

7. SUPPORT

For further assistance, technical support, or to download the latest drivers and utilities, please visit the official ZOTAC support resources:

- **Official ZOTAC Website:** www.zotac.com
- **Product Support Page:** Look for your specific model (GTX 1660 Super) on the ZOTAC website for dedicated support, FAQs, and downloads.
- **Installation Manual (PDF):** A detailed installation manual is available for download: [Download PDF](#)

For direct customer service, please refer to the contact information provided on the ZOTAC website for your region.