

Manuals+

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

manuals.plus /

› [UGREEN](#) /

› [UGREEN 45W GaN USB-C Fast Charger User Manual](#)

UGREEN X524

UGREEN 45W GaN USB-C Fast Charger

Model: X524 - User Manual

1. PRODUCT OVERVIEW

The UGREEN 45W GaN USB-C Fast Charger (Model X524) is engineered for high-speed and efficient power delivery to a wide range of devices. Its compact design, enabled by advanced GaNII technology, makes it an ideal travel companion without compromising on charging performance or safety.



Figure 1: Front view of the UGREEN 45W GaN USB-C Fast Charger.

Key features include:

- **45W Power Delivery:** Capable of fast charging smartphones, tablets, and even some laptops.
- **GaNII Technology:** Utilizes Gallium Nitride (GaN) for a smaller, more efficient, and cooler charging experience.
- **Compact Design:** Approximately 50% smaller than traditional 45W chargers, making it highly portable.

- **Multi-Protocol Support:** Compatible with PD3.0, PPS, QC3.0, SCP, and AFC for broad device compatibility.
- **Advanced Safety Features:** Built-in protections against overcharge, overheating, overcurrent, and short circuits.

2. SETUP AND CONNECTION

Setting up your UGREEN 45W GaN USB-C Fast Charger is straightforward. Follow these steps to begin charging your devices.

1. **Unpack the Charger:** Carefully remove the charger from its packaging.
2. **Locate a Power Outlet:** Find a standard AC power outlet (100-240V).
3. **Plug in the Charger:** Insert the charger's prongs into the power outlet.
4. **Connect Your Device:** Use a compatible USB-C to USB-C cable (not included) to connect your device to the charger's USB-C port. For optimal charging speed, a 5A charging cable is recommended for devices supporting Super Fast Charging 2.0.



コンパクト & 軽量

外出先でも充電！



Figure 2: The compact design allows for easy storage and portability, fitting conveniently into bags or pockets.



Max出力45W

Galaxy S25 ultra

67%まで
30分で

Figure 3: Connect your device to the charger and plug it into a wall outlet to begin fast charging.

3. OPERATING INSTRUCTIONS

The UGREEN 45W GaN USB-C Fast Charger automatically detects the connected device and delivers the optimal

charging current for efficient and safe power delivery.

3.1 Fast Charging Capabilities

This charger supports various fast charging standards, including Power Delivery (PD3.0), Programmable Power Supply (PPS), Quick Charge (QC3.0), Super Charge Protocol (SCP), and Adaptive Fast Charging (AFC). This ensures compatibility and optimized charging speeds for a wide range of devices from different manufacturers.

Galaxy Super Fast Charging 2.0に対応

約1時間でフル充電

45W



注：最適な充電速度を得るには、5Aの充電ケーブルが必要です。

Figure 4: The charger provides up to 45W output, capable of charging devices like the Galaxy S25 Ultra to 67% in 30 minutes.

3.2 Universal Compatibility

The charger is designed to work seamlessly with numerous devices, including but not limited to:

- **Smartphones:** iPhone 16/15/14/13/12 series, Galaxy S24/S23/S22/S21/S20/S10/S9/S8, Google Pixel series.

- **Tablets:** iPad Pro, iPad Air, iPad mini series.
- **Laptops:** MacBook Air, and other USB-C compatible laptops (check laptop's power requirements).
- **Other Devices:** AirPods Pro, Nintendo Switch, and various other USB-C powered gadgets.

ユニバーサルな 互換性



スマートフォン

Galaxy S24/S23/S22
iPhone 16/15/14/13/12
Pixel 9/8/7/6



Tablet

iPad Air シリーズ
iPad Pro シリーズ
iPad Mini シリーズ



その他

Airpods



Figure 5: The charger offers broad compatibility across various device types, from smartphones to tablets and earbuds.

3.3 Usage Scenarios

Its compact size and powerful output make it suitable for various environments:

- **Work:** Powering laptops or tablets for productivity.
- **Home:** Conveniently charging all your personal devices.
- **Travel:** Lightweight and portable for on-the-go charging needs.



Figure 6: Versatile for use in various settings, including work, home, and during travel.

4. MAINTENANCE AND SAFETY

To ensure the longevity and safe operation of your UGREEN 45W GaN USB-C Fast Charger, please follow these maintenance and safety guidelines.

4.1 General Care

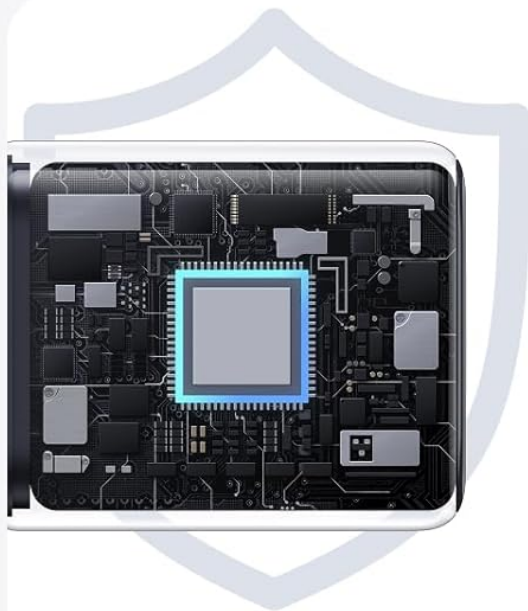
- Keep the charger dry. Do not expose it to moisture or liquids.
- Clean the charger with a soft, dry cloth. Do not use harsh chemicals or abrasive materials.
- Avoid dropping or subjecting the charger to strong impacts.
- Store the charger in a cool, dry place when not in use.

4.2 Safety Precautions

The charger is equipped with multiple protection systems to ensure safe operation. These include:

- **Overcharge Protection:** Prevents damage to your device's battery from excessive charging.
- **Overheat Protection:** Monitors internal temperature to prevent overheating.
- **Overcurrent Protection:** Safeguards against excessive current flow.
- **Short-Circuit Protection:** Automatically cuts off power in case of a short circuit.

マルチプロテクトテクノロジー



難燃性素材



過電圧保護



過熱保護



過電流保護



短絡保護

Figure 7: The charger incorporates multi-protection technology for enhanced safety.

Additionally, the charger is made from fire-resistant PC material (UL94-V0 rated) and is PSE certified, ensuring compliance with safety standards.

常時温度 検知機能

ThermalGuardテクノロジー搭載

238+

1秒あたり温度の読み取り

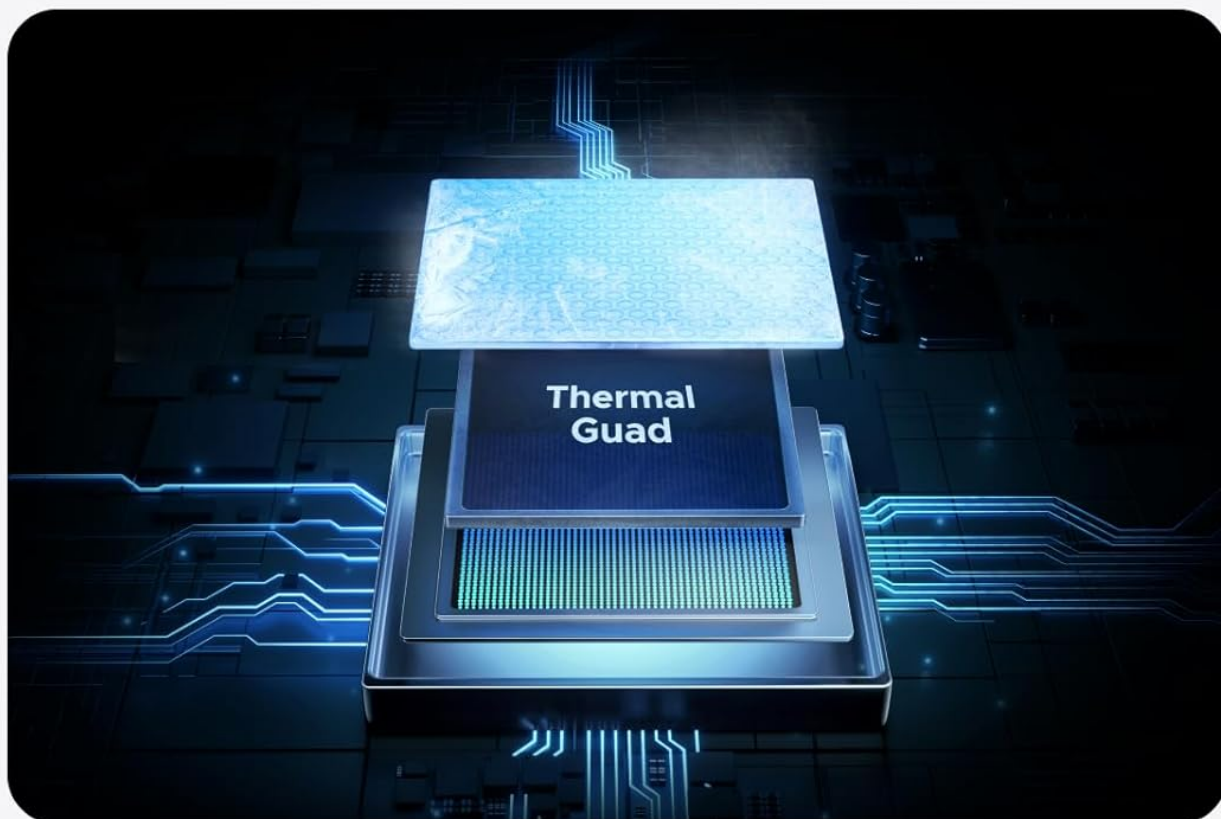


Figure 8: ThermalGuard technology continuously monitors temperature, ensuring stable and safe operation.

5. TROUBLESHOOTING

If you encounter any issues with your UGREEN 45W GaN USB-C Fast Charger, please refer to the following

common problems and solutions.

Problem	Possible Cause	Solution
Charger is not charging device.	Loose connection, incompatible cable, faulty outlet, device issue.	Ensure cable is securely connected. Try a different USB-C cable. Test with another power outlet. Verify device is functioning correctly.
Slow charging speed.	Cable not supporting fast charging, device not supporting fast charging, high background usage on device.	Use a high-quality USB-C cable (e.g., 5A rated). Ensure your device supports the fast charging protocols (PD/QC/PPS). Close unnecessary apps on your device.
Charger feels warm during use.	Normal operation during high power output.	This is normal. The GaN technology helps manage heat efficiently. If it becomes excessively hot or emits smoke/odor, unplug immediately and contact support.
Device not recognized.	Cable issue, device port issue.	Try a different cable. Ensure the device's charging port is clean and undamaged.

If the problem persists after trying these solutions, please contact UGREEN customer support for further assistance.

6. SPECIFICATIONS

Feature	Detail
Brand	UGREEN
Model Number	X524
Total USB Ports	1 (USB-C)
Connectivity Technology	USB
Connector Type	USB Type C
Wattage	45 W
Input Voltage	100 Volts (AC)
Output Current	2.25 Amps
Product Dimensions	3.5 x 4.4 x 3.5 cm
Item Weight	95 grams
Compatible Devices	Laptops, Smartphones, Tablets
Compatible Phone Models	iPhone16/15/14/13, Galaxy S24/S23/S22/S21/S20/S10/S9/S8, MacBook Pro/iPad Pro/Switch

Feature	Detail
Safety Certifications	PSE Certified, UL94-V0 Fire-resistant PC material

7. WARRANTY AND SUPPORT

UGREEN provides comprehensive support for its products.

7.1 Warranty Period

This product comes with a **24-month warranty period** from the date of purchase. Please retain your proof of purchase for warranty claims.

Note: The warranty does not cover damage caused by intentional misuse or third-party modifications.

7.2 Customer Support

For any inquiries, technical assistance, or warranty claims, please contact UGREEN customer support through the official UGREEN website or your point of purchase. Provide your product model number (X524) and a detailed description of the issue for faster service.