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Multi-Industry Mobile Charging Solutions – NGE100(U) Series

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As society rapidly evolves and technology advances at an unprecedented pace, fast-paced mobility has become a common aspect of daily life. We rely on various electronic devices to stay connected, complete tasks, and enjoy entertainment, making efficient and convenient charging solutions essential. MEAN WELL's **NGE100(U) Series - Universal 4-Port USB GaN** (Gallium Nitride) **Fast Charger** is designed to meet these needs with its powerful power distribution, broad compatibility, and safe, stable design—making it an ideal choice for users worldwide. This article explores the key advantages and practical applications of the series.

Key Advantages:

1. Global Compatibility with Interchangeable Plugs

The NGE100(U) supports global voltage compatibility (90–264VAC), making it suitable for power standards across different countries and regions. One of its key features is its interchangeable plug design. The international version includes various fixed AC plug types (EU, US, UK, AU, CN, KR, IN), ensuring compatibility with outlets worldwide. This is especially beneficial for business travelers and international users, eliminating the need to carry multiple chargers. Additionally, the US version

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of the NGE100(U) features a foldable AC plug, making it even easier to store and carry—clearly designed with user convenience in mind.



(NGE100: Universal Version)



(NGE100U: US Version)

2. Powerful Power Distribution for Multi-Device Charging

The NGE100(U) delivers a total output of up to 100W (actual output depends on connected devices and charging cables; using the included USB Type-C to Type-C fast charging cable ensures full 100W output). It supports mainstream fast charging protocols, including PD (Power Delivery) 3.0 and QC (Quick Charge) 2.0 and 3.0, meeting the high-efficiency charging needs of laptops, tablets, smartphones, and more.

Both USB-C1 and USB-C2 support up to 100W single-port output, making them ideal for high-power devices. USB-A1 and USB-A2 support 18W fast charging, providing rapid power delivery for smartphones, headphones, and other accessories.

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The table below compares QC and PD charging protocol versions and highlights their key features:

Quick Charge Version Comparison

Version	Release date	Voltage	Maximum Current	Maximum Power	New features
2.0	2014	Class A: 5V、9V、12V Class B: 5V、9V、12V、20V	3A、2A、1.67A	18W	• HVDCP (High Voltage Dedicated Charging Port) • Dual Charge (optional)
3.0	2016	3.6-20V in 0.2 V increments	2.6A、4.6A	36W	• HVDCP+ • Dual Charge+ (optional) • INOV 1.0 & 2.0 • Battery Saver Technologies

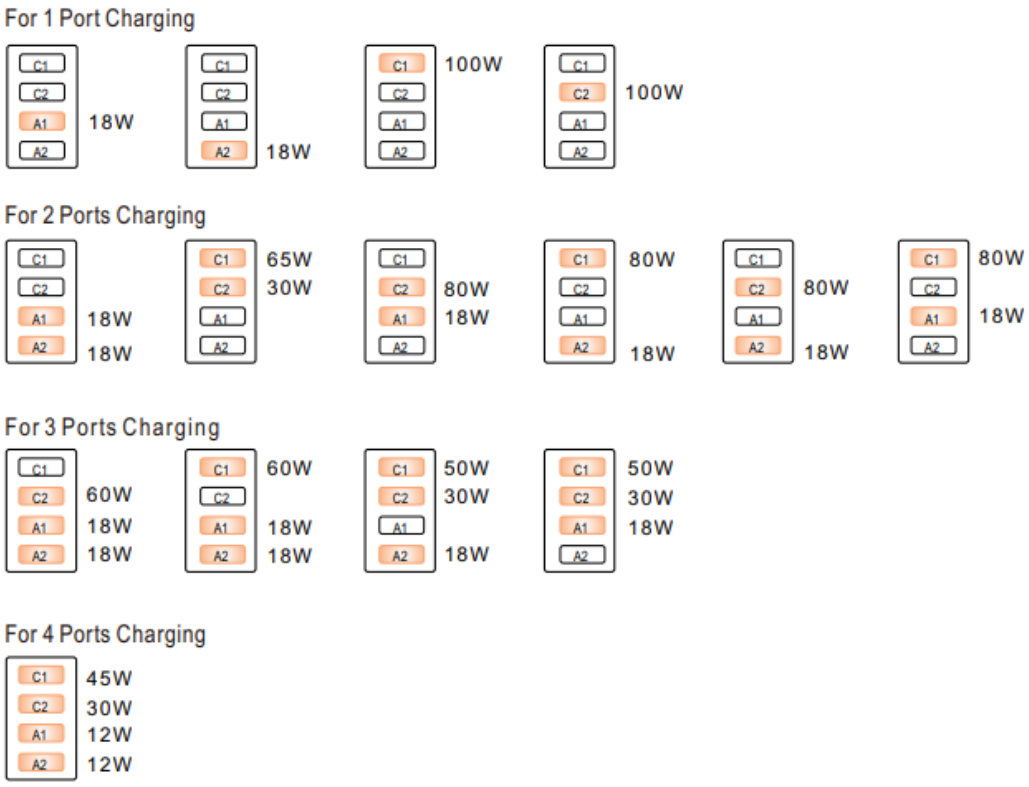
Power Delivery 2.0/3.0 Power rules

Power X (W)	Current(A)			
	5V	9V	15V	20V
0.5≤X≤15	X÷ 5	-	-	-
15≤X≤27	3A	X÷ 9		
27≤X≤45		3A	X÷ 15	
45≤X≤60			3A	X÷ 20
60≤X≤100				

Note: When using multiple ports simultaneously, charging may pause 1 to 3 times due to protocol detection and power allocation before resuming normal operation - this is a built-in safety feature of the power distribution protocol.

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The diagram below provides a detailed explanation of the maximum power supported by each port when charging with different numbers of ports.:



3. Safe and Reliable with Comprehensive Certifications

The NGE100(U) prioritizes safety and has passed multiple international safety certifications, including CB, DEKRA, UL, CCC, PSE, BSMI, RCM, KC, BIS, EAC, CE, UKCA, and FCC. It also includes the following protections:

- **Short-Circuit:** Prevents current surges caused by short circuits.
- **Overload:** Protects devices from damage due to power overload.
- **Overtemperature:** Effectively controls temperature to prevent failures caused by overheating.
- **94V-0 Flame-Retardant Casing:** Made of high-quality heat-resistant materials to ensure durability and fire resistance.

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Target Markets and Applications:

With its outstanding performance and wide applicability, the NGE100(U) meets the needs of various users:

- **Business Professionals**: Frequent travelers can rely on a single NGE100(U) charger for global charging, eliminating the need for multiple chargers and reducing luggage weight.
- **Tech Enthusiasts**: Users with multiple digital devices can benefit from the NGE100(U)'s multi-port design, allowing simultaneous charging of phones, laptops, earphones, tablets, and more—enhancing efficiency and keeps space organized.
- **Home Users**: The NGE100(U) can serve as a shared home charging solution, reducing the need for multiple chargers, minimizing socket usage, and maintaining a tidy living environment.

As a high-performance, convenient, and safe GaN charger, the NGE100(U) offers global compatibility, intelligent power distribution, and robust safety features—making it an ideal choice for modern mobile lifestyles. Whether for business professionals, tech enthusiasts, or families, the NGE100(U) provides an efficient and convenient charging experience.

For related product and application requirements, please contact MEAN WELL distributors or MEAN WELL application engineers. Also, do not forget to stay tuned for online products and solutions courses on MEAN WELL virtual EXPO.



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