









(NGE100: Universal Version)

(NGE100U: US Version)



























Applications

· Mobile phone





■ Features

- · One model for multi-devices
- MEAN WELL Patent Application Number: 202330347779.4
- Universal version: Interchangeable AC plug(NGE100); US version: Non-interchangeable AC folding plug(NGE100U) · Earphone
- · Global certified
- · 90~264Vac Universal AC input
- USB-2C2A, independent 4-port fast charging
- · Each USB-C port offers max.100W
- Support QC2.0, QC3.0, PD3.0
- · Auto-detection 5V/9V/12V/15V/20V
- · Protections: Short circuit / Overload / Over temperature
- · No load power consumption < 0.3W
- · Energy efficiency Level VI
- · Compact size (62*30*85.5mm)
- Type-C cable with charging and data transmission included (100cm)
- · 3 years warranty

Description

The NGE100 series is a 100W universal fast charger with gallium nitride (GaN) technology. This product offers 2 models to choose from: the universal version NGE100, which can be paired with 7 types of AC plugs (EU, US, UK, AU, CN, KR, IN), making it ideal for business travel. Additionally, there is a US version, NGE100U, equipped with a 90-degree vertically folding US plug that is suitable for countries with 2 flat pins.

The NGE100 utilizes gallium nitride (GaN) technology and complies with Level VI of energy efficiency standards. It has a no-load power consumption of less than 0.3W and boasts an efficiency of up to 88%. With compact dimensions (62*30*85.5 mm), it features two USB-C and two USB-A charging ports, allowing simultaneous charging of multiple devices. The charger supports various fast charging protocols, including PD3.0 and QC3.0. Upon plugging in a device, it automatically recognizes and adjusts the charging voltage (5V/9V/12V/15V/20V) and allocates charging power. All ports support independent fast charging, and either USB-C1 or C2 supports a rapid 100W charge, making it suitable for charging various electronic devices such as smartphones, tablets, laptops, gaming consoles, cameras, AirPods, and more.

Furthermore, this product not only has built-in short circuit/overload/over temperature protections, but also has a 94V-0 high flame-retardant casing; obtained safety certifications from CB, DEKRA, UL, PSE, BSMI, CCC, RCM, KC, BIS, EAC, CE, UKCA, and FCC along with a 3 years warranty, it is a reliable, safe, and durable green charger.

Model Encoding



Tablet

- Laptop

- · Game devices

MW Search: https://www.meanwell.com/serviceGTIN.aspx



		1						
SPECIFICATION		NGE100 ○ ○ =Blank, U						
OUTPUT		O = Blank, U						
USB C1 (100W max.)		PD3.0, 5V , 9V , 12V , 15V	//3 \\ 20\//5 \\					
,								
USB C2 (100W max.)		PD3.0, 5V , 9V , 12V , 15V	· · · · · · · · · · · · · · · · · · ·					
USB A1 (18W max.)		QC3.0, 5V/3A, 9V/2A, 12V/1.5A, 20V/0.9A						
USB A2 (18W max.)		QC3.0, 5V/3A, 9V/2A, 12V/1.5A, 20V/0.9A						
TOTAL POWER		100W max.						
FOR 5V ONLY(45W max.)	Note.2	USB C1: 5V/3A , USB C2: 5V/3A , USB A1: 5V/1.5A , USB A2: 5V/1.5A						
DC VOLTAGE	Note.3	5V 9V 12V 15V			15V		20V	
RIPPLE & NOISE (max.)	Note.4	200mVp-p	200mVp-p	200mVp-p	200mVp-p	1	200mVp-p	
VOLTAGE TOLERANCE	Note.5	±5.0%	±5.0%	±4.0%	±4.0%		±4.0%	
LINE REGULATION	Note.6	±1.0%	<u>+</u> 1.0%	±1.0%	±1.0%		±1.0%	
LOAD REGULATION	Note.7	±5.0%	±5.0%	±4.0%	±4.0%		±4.0%	
SETUP, HOLD UP TIME		1000ms,30ms/230Vac 20	00ms,10ms/115Vac at U	SB C1 20V/5A				
INPUT								
VOLTAGE RANGE	Note.8	90 ~ 264Vac						
FREQUENCY RANGE		47 ~ 63Hz						
POWER FACTOR		PF>0.92/230Vac; PF>0.98	8/115Vac					
EFFICIENCY (Typ.)		88% / 20V 5A	77110740					
AC CURRENT								
INRUSH CURRENT (max.)		1.6A/115Vac 0.8A/230Vac						
LEAKAGE CURRENT (max	1	65A/115Vac 95A/230Vac						
PROTECTION	•1	0.5mA/240Vac						
PROTECTION		101 - 1509/ roted output n	011101					
OVERLOAD		101 ~ 150% rated output po		11 6 6 10 100				
		Protection type: Hiccup mode, recovers automatically after fault condition is removed						
OVER TEMPERATURE		Shut down o/p voltage, recovers automatically after temperature goes down						
ENVIRONMENT								
WORKING TEMP.		-30 ~ +70 °C (Refer to "Derating Curve")						
WORKING HUMIDITY		20% ~ 90% RH non-condensing						
STORAGE TEMP., HUMIDIT	Υ	$-20 \sim +85^{\circ}\mathrm{C}$, $10 \sim 95\%$ RH non-condensing						
TEMP. COEFFICIENT		±0.03% / °C (0~40°C)						
VIBRATION		10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes						
SAFETY & EMC Note.9								
OAFFTV OTANDARDO		UL62368-1, DEKRA BS EN/EN62368-1, BSMI CNS15598-1, PSE J62368-1, CCC GB4943.1-2022, RCM AS/NZS 62368-1,						
SAFETY STANDARDS KC KC62368-1,BIS IS13252(part1):2010/IEC60950-1:2005, EAC TPTC004 appro				004 approved (P	lease refer to n	ext page for more details)		
WITHSTAND VOLTAGE		I/P-0/P:3KVac						
ISOLATION RESISTANCE		I/P-O/P :100M Ohms / 500VDC / 25 °C/ 70% RH						
		Parameter	Standard		Te	st Level / Note		
		Conducted emission	BS EN/EN55032(CISPR32)FCC PART 15 / CISPR22, CAN ICES-3(B)/NMB-3(B) GB/T 9254.1-2021, KC C9832		CI	Class B		
EMC EMISSION		Radiated emission	BS EN/EN55032(CISPR CISPR22, CAN ICES-3(GB/T 9254.1-2021, KC C	3)/NMB-3(B)	CI	Class B		
		Harmonic current	BS EN/EN61000-3-2,GE	17625.1-2022	Cl	Class A		
		Voltage flicker	BS EN/EN61000-3-3					
		Parameter	Standard	Standard		Test Level /Note		
		ESD	BS EN/EN61000-4-2		Le	Level 3, 8KV air; Level 2, 4KV contact		
		RF field susceptibility	BS EN/EN61000-4-3		Le	Level 2, 3V/m		
		EFT bursts	BS EN/EN61000-4-4		Le	Level 2, 1KV		
EMC IMMUNITY		Surge susceptibility	BS EN/EN61000-4-5		Le	Level 3, 1KV/L-N		
		Conducted susceptibility	BS EN/EN61000-4-6		Le	Level 2, 3V		
		Magnetic field immunity				,		
		Voltage dips , interruption	BS EN/EN61000-4-11			>95% dip 0.5 periods, 30% dip 25 periods,		
OTHERS		>95% interruptions 250 periods						
OTHERS		226 4Vhronin 1411 1/DD	V 247E(25°C)	2 Whrom: T-1	dia TD/OD 200 /	(Pollogra) (OF°C	1	
MTBF		336.4Khrsmin. MIL-HDBK-217F(25°C) 3008.3Khrsmin. Telcordia TR/SR-332 (Bellcore) (25°C)						
DIMENSION	MAIN BODY	62*30*85.5mm (L*W*H)						
PACKING	POWER UNIT	NGE100: 362g ; 28pcs/ 13.8Kg / 1.65CUFT NGE100U: 249g ; 28pcs/ 10.6Kg / 1.65CUFT						
(Refer to page 7)	AC PLUGS	7	types of AC Plugs for NGE100					
	Type-C Cable	Included for NGE100 / NGE100U						
NOTE								

- 2.DC voltage: The output voltage set at point measure by plug terminal & 50% load. 3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1 μ F & 47 μ F capacitor. 4.Tolerance: includes set up tolerance, line regulation, load regulation.

- 4. Toterance: includes set up tolerance, line regulation, load regulation.

 5. Line regulation is measured from low line to high line at rated load.

 6. Load regulation is measured from 0% to 100% rated load

 7. Derating may be needed under low input voltage. Please check the derating curve for more details.

 8. The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."

 (as available on https://www.meanwell.com//Upload/PDF/EMI_statement_en.pdf)
- 9.Design meet US DoE Level VII (from Docket number EERE-2020-BT-STD-0006).
- ※ Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx



■ Interchangeable AC Plug Specifically for NGE100

Model NO.	NGE100 (Universal Version)						NGE100U (US Version)		
AC plug	EU	US		hangeable ble; AC Pil	• .	KR	IN	Non-Interchangeable Type (Foldable AC Pin)	
Certificate	CB DEKRA A CO							CB : Dus A :	

■ Interchangeable AC Plug Installation Steps (Convertible with NGE100 only)

Step1	Step2
Slide in AC converter along the guided rail between the metal prongs until it is locked in (with a "click" sound).	Check if the new plug type is stable and correct before use.

Note:

NGE100 is interchangeable type, it needs to be used along with one of the AC inlet plug (EU,US,UK,AU,CN,KR,IN).

■ Recommended Configuration

For 1 Port Charging



For 2 Ports Charging



For 3 Ports Charging

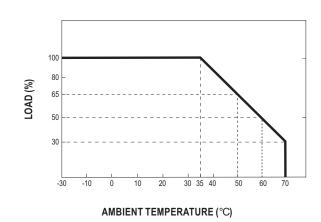


For 4 Ports Charging

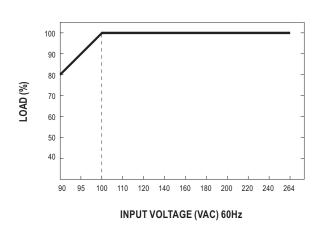


- 1. USB C1/C2 Type-C support PD (Power Delivery) 2.0 and 3.0; USB A1/A2 Type-A support QC (Quick Charge) 3.0
- 2. Due to the fast charge protocol identification and power allocation, when multiple ports are used at the same time, normal charging will be resumed after 1 to 3 interruptions, which is a protocol allocation security protection.

■ Derating Curve



■ Static Characteristics



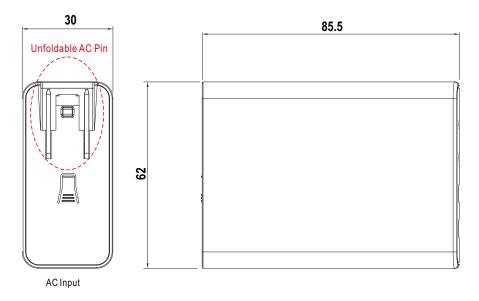


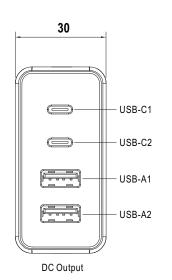
■ Mechanical Specification

(Unit: mm , tolerance ± 1mm)

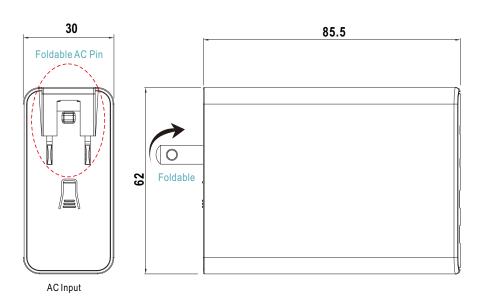
Case No.NGE100

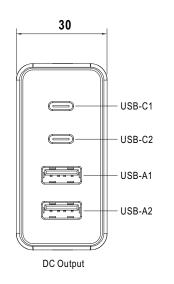
X NGE100 (Universal Version - AC Pin fixed; With interchangeable plugs)





X NGE100U (US Version - Foldable AC Pin; With non-interchangeable plug)







■ Application

※ One For Multi-Devices



iOS& Android Phone



Tablet



Laptop



Game Console



Headset



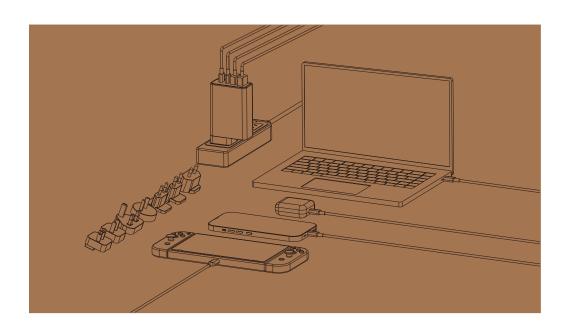
Fan



Humidifier



More Devices





■ Accessory List

X NGE100 : Includes 7 types of AC Plugs(EU, US, UK, AU, CN, KR, IN) \(\) a 100cm USB Type-C cable \(\) a drawstring accessory pouch NGE100U: Includes a 100cm USB Type-C cable

Model NO.	Item	Photo				
NGE100	AC Plugs (EU, US, UK, AU, CN, KR, IN)					
	100cm USB Type-C cable					
	Drawstring Accessory Pouch					
NGE100U	100cm USB Type-C cable					

■ Packing

Model NO.	Dimension	Photo			Max.Q'TY	One
	(L*W*H)	Outer	Inside	Package weight	/Carton (pcs)	Carton G.W
NGE100	128mm 57mm	NGE100 100W Fact Charger The second A	HOA AC Plug Type C Colde Included	466g	28pcs	13.8Kg
NGE100U	190 mm 51mm	NGE100U TOOK Fast Charager	Type-C cable included	353g	28pcs	10.6Kg

■ Installation Manual

Please refer to: http://www.meanwell.com/manual.html