

#### C14 20V Single Output 330W GaN Power Adapter



#### **Features**

- GaN (Gallium Nitride) Technology
- DoE Level VI Compliance
- 5,000 Meters Operating Altitude
- Peak Load Capability
- 1" Low Profile Splash-Proof Case with IEC 60320 C14 Inlet

#### **Applications**

Laptops and Ultrabooks

#### **Description**

The Phihong AA330U-200B(A)-R 20V output GaN Power Adapter, delivering 330 Watts in a case measuring 7.08 x 3.22 x 1.00" while meeting Level VII efficiency proposed in 2023 by the US Department of Energy, represents a cutting-edge advancement in power supply technology. Leveraging Gallium Nitride (GaN) technology, this adapter provides superior efficiency and performance compared to traditional silicon-based adapters.

The GaN technology enables a compact and lightweight design, enhancing portability without compromising power output. With reduced heat generation and increased energy efficiency, the Phihong 330W GaN power adapter provides dependable performance to demanding portable device applications, making it ideal for powering demanding high-performance laptops.

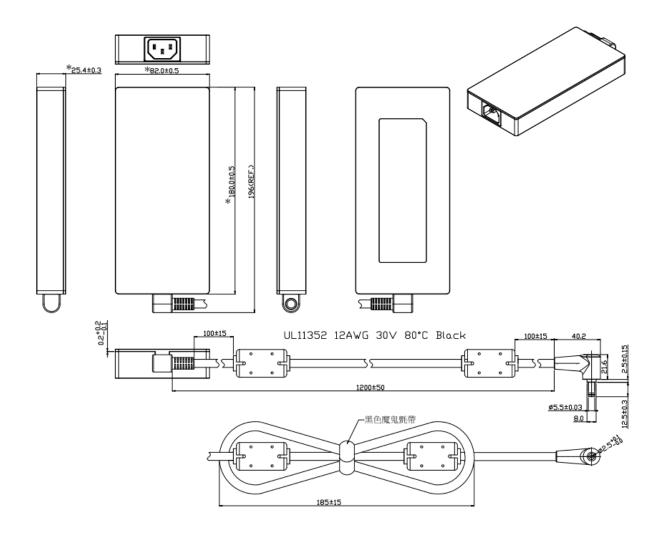


### Specifications<sup>1</sup>

Model		AM330U-200B(A)			
Output	DC Output Voltage	20V			
	Max Current	16.5A²			
	Output Power	330.0W			
	Regulation	± 5% Line & Load			
	Ripple & Noise P-P(max) <sup>3</sup>	380mV			
Input	AC Input Voltage Range	90 to 264VAC			
	AC Input Frequency	47 to 63Hz			
	AC Input Current	4.5A (RMS) max. at 100VAC/60Hz			
	Power Factor Correction	PF ≥ 0.9 @ AC 115V/230V, Full Load			
	No Load Power Consumption at 115VAC & 230VAC Input	≤0.15W @ 115VAC Input, ≤0.21W @ 230VAC Input			
	115VAC Average Efficiency⁴	≥89.00%			
	230VAC Average Efficiency <sup>4</sup>	≥89.00%			
	230VAC 10% Load Efficiency <sup>4</sup>	≥79.00%			
	Leakage Current	200uA Max. @ 240Vac, 50/60Hz			
Protection	Over-Voltage	<27V, auto-recovery			
	Short Circuit	Latch off and no component damage			
	Over-Current	<28A, auto-recovery			
Environmental	Operating Temperature <sup>5</sup>	-5°C to +60°C, derate above +40C			
	Non-Operating Temperature	-20° to +70°C			
	Operating Humidity	20% to 95% RH max			
Safety Approvals and EMC (Pending)	Dielectric Withstand (HI-POT)	Primary to Secondary: 3000VAC, 10mA max. 1 min.			
	Insulation Resistance	Primary to Secondary: Min. 20M OHM at 500 VDC			
	Standards	cULus 62368-1, IEC 62368-1			
	EMI Emissions	FCC Part 15 Class B, CAN ICES-003(B)/NMB-003(B), CISPR 32			
	Harmonic Current Emissions	IEC 61000-3-2			
	Voltage Fluctuations & Flicker	IEC 61000-3-3			
	Immunity	EN 55035/CISPR 35: IEC 61000-4-2 (±15kV air, ±8kV contact), IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5 (±1kV L-L, ±2kV L-FG), IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11			
Mechanical	Dimensions (L x W x H)	180.0mm (7.08n) x 82.0mm (3.22in) x 25.4mm (1.00in)			
	Weight	850g (ref.)			
	Cable Length & Gauge	1200mm 12AWG			
	DC Output Connector	2.5mm x 5.5mm x 12.5mm Right Angle Barrel Connector			
MTBF	Telcordia	>80K Hours min. at 264VAC/50Hz, max. load, 25°C			
Notes	<ol> <li>The specifications defined are at ambient temperature of 25C, unless otherwise specified.</li> <li>Refer to peak loads specifications charts.</li> <li>20MHz bandwidth frequency oscilloscope and output terminated with a 47uF aluminum electrolytic capacitor and a 0.1uF ceramic capacitor (nominal line voltage, full load).</li> <li>Efficiency is measured after 30 minutes burn-in.</li> <li>Refer to derating curve.</li> </ol>				



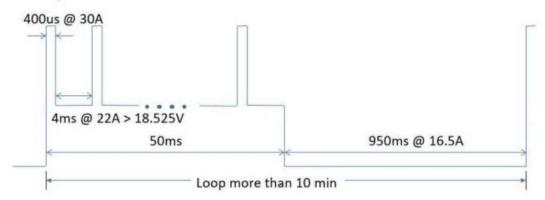
### Outline Drawing (mm)



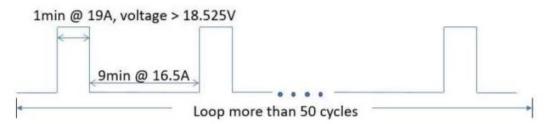


#### **Peak Power Specification Charts**

#### Peak load spec 1:

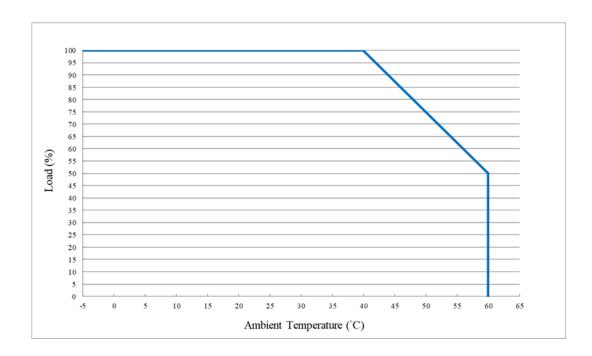


#### Peak load spec 2:





## Derating Curve





# Supplier's Declaration of Conformity 47 CFR § 2.1077 Compliance Information

MODEL AM330U-200B(A)-R

Phihong USA Corporation 47800 Fremont Boulevard Fremont, CA 94538 Telephone: (510) 445-0100

www.phihong.com

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1)
This device may not cause harmful interference, and (2) this device must accept any interference received,
including interference that may cause undesired operation.

### **C14 Line Cords**



### Sold Separately

Model		AC30UNA-R	AC30UEU-R	AC30UUK-R
	Plug Type	North America NEMA 5-15P	Continental Europe CEE 7VIII	United Kingdom BS 1363
	Connector	IEC320 C13	IEC320 C13	IEC320 C13
	Wire Size	18 AWG	0.75mm	1.0mm
Specifications	Temperature	60°C	60°C	70 °C
	Amperage Rating	10A	6A	10A
	Voltage Rating	125V	250V	250V
	Cable Length	1830mm	1830mm	2500mm
Safety Approvals		CSA; UL	CEBEC; DEMKO; DVE; FIMKO; GOST; IMQ; KEMA; NEMKO; NF; OVE; SEMKO	BSI; Safety Mark
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### C14 Line Cords



#### **Outline Drawing**

