

(Document Rev 10/7/21)

AP14G02K0282-XX Power Supply & Battery Charger

Overview

AC-DC Power Supply and Battery Charger, Water Resistant Single Phase AC 50 - 60Hz (85 to 264Vac), +28 Output, 2000W (2200W Max for 5 minutes)

Market(s)

Defense, Industrial

Typical Application(s)

Outdoor, vehicles, naval and others.

Product Highlights

AP14G02K0282 is an AC/DC power supply & battery charger with

nominal output of 28 VDC / 72 Amp., with reliable construction and electronics best suited for harsh environments. Waterproof housing, high performance and superb reliability make the AP14G02K0282 the ideal DC power source for use in vehicles, naval, open-air applications and many others. This unit provides users with 85/88% efficiency, rugged performance, and high power output.

Parameter

Vin max range

Temperature

Input Power

Max output

Output power

Features

- AC 85-264 VAC wide-input range.
- 2,000w 28VDC two channels power supply.
- 10% bonus power (2,200w) for up to 5 min.
- Ruggedized & waterproof (IP 65 / 67).
- Extreme operating temps -40°C to +60°C.
- 100% convection cooling, no external or internal fans required.

About Us

Aegis Power Systems, Inc. specializes in the design, development, and manufacture of AC-DC and DC-DC power supplies for high-performance, rugged, critical, and specialty applications. Markets served include defense, industrial, communications, aircraft, shipboard, rack mount, embedded computing, and electric vehicle applications. Contact us to find out if this item can be configured or redesigned to meet your specific technology need.



Table 1: Maximum Continuous Operating Ratings

Rating

85 to 264

-40 to +60

2415

2000

2200

Unit

Vac

°C

W

W

W

Notes

(115Vac)

Continuous

Short Term (5min)

Line to Neutral

-40 to +100 Non-operating



SPECIFICATIONS	(Typical at 25°C, nominal line and 100% load, unless otherwise specified.)	
Input Voltage	oltage 85Vac - 264Vac, 50Hz, 60Hz	
Input Current	put Current 21A / 10A (115 / 230Vac at 72Amps output power)	
Power Factor	wer Factor 0.99 / 0.96 at 115 / 230Vac	
Output Power	Dutput Power 2000W, 2200W Short Term Maximum	
Output Specs	It Specs See table 2 for details	
Efficiency	85@ 115Vac, 88@ 230Vac, Typ. at 28V at 72A	
Output Ripple	See Table 2.	
Current Limit	it 40A for each output (by Circuit breaker)	
Temperature	Temperature -40°C to +60°C Operating	
Derating 34W/°C at 230Vac: +55°C to +80°C		
	21W/°C at 115Vac: +55°C to +60C	
Cooling	convection Cooling	
Package	kage Enclosed case IP65/67 rated.	
Dimensions	imensions 18.82" L x 7.6" W x 11.14" H	
Weight	eight 44lbs. maximum	
Connectors	See Table 3	
Shock and Vibration	ock and Vibration MIL-STD-810G	
Ingress Protection	IP65/67	
EMI	MIL-STD-461F	
Country of Origin	Israel	

Specifications subject to change without notice.



Table 2: Voltage Output (Nominal)

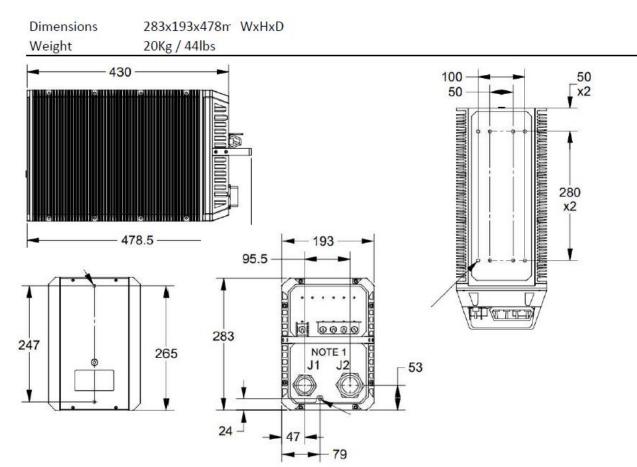
AP14G02K0282		
V	'oltage	+28Vdc
С	urrent	72A Continuous
Ρ	ower	2016W
R	ipple	90mVpk-pk*

* 20MHz Bandwidth Limited.

Table 3: Connector Specifications

AP14G02K0282 Accessory		
02K028CB-IN	Input Cable	
02K028CB-OT	Output Cable	
02K028CN-IN	Input Mating Connector	
02K028CN-OT	Output Mating Connector	





Dimensions