

(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.



- 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.



Table 1: Maximum Continuous Operating Ratings

Parameter	Rating	Unit	Notes
Vin max range	85 to 264	Vac	Line to Neutral
Temperature	-40 to +60	°C	-40 to +100 Non-operating
Input Power	2415	W	(115Vac)
Output power	2000	W	Continuous
Max output	2200	W	Short Term (5min)

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.



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SPECIFICATIONS (Typical at 25°C, nominal line and 100% load, unless otherwise specified.)

Input Voltage	85Vac - 264Vac, 50Hz, 60Hz	
Input Current	21A / 10A (115 / 230Vac at 72Amps output power)	
Power Factor	0.99 / 0.96 at 115 / 230Vac	
Output Power	2000W, 2200W Short Term Maximum	
Output Specs	See table 2 for details	
Efficiency	85@ 115Vac, 88@ 230Vac, Typ. at 28V at 72A	
Output Ripple	See Table 2.	
Current Limit	40A for each output (by Circuit breaker)	
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	Enclosed case IP65/67 rated.	
Dimensions	18.82" L x 7.6" W x 11.14" H	
Weight	44lbs. maximum	
Connectors	See Table 3	
Shock 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				
Voltage	+28Vdc			
Current	72A Continuous			
Power	2016W			
Ripple	90mVpk-pk*			

^{* 20}MHz 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	



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Dimensions

