

Innovative Specialty DC Power Systems



CONTACT

1580 No. Kellogg Dr. Anaheim, California, 92807

(714) 917-0749

www.jasperelectronics.com sales@jasperelectronics.com

Model GPAD501MXX-1Y Convection / Conduction Cooled Power Supply

90-264 VAC / Single 500W Output



GENERAL OVERVIEW

Jasper's highly efficient and compact Low-Noise (Fanless) Convection / Conduction Cooled Power Supplies are the ideal choice for low-voltage, high-current, high-power density applications including medical equipment, IT, sensitive electronics, and other applications where audible noise and maintenance must be kept to a minimum. Because there are no fans to fail or require periodic cleaning, maintenance is reduced and MTBF is enhanced. Units can also be optionally ruggedized against shock, vibration, and humidity to meet MIL-STDs such as MIL-STD-810 and MIL-STD-167 for military applications.

These Jasper GPAD-Series supplies, available from 200-500 Watts continuous output power, can be used in either convection cooling or conduction cooling configurations. The factory recommends conduction cooling when used in ambient temperatures over +50°C. All models have a 3 year warranty. Please see below for more details.

FEATURES ON SELECT MODELS INCLUDE:

- Wide operating temperature: -20 to +70°C
- Power factor: ≥0.95
- Output over voltage, over current, short circuit and over temperature protection
- Flame retardant and moisture-proof design
- Low leakage current ≤0.7mA
- LED Lamp working status indication
- High efficiency
- Compact size of 255x50x30mm (LxWxH)
- Two supplies can be used in parallel

PARTIAL 500W GPAD MODEL SELECTION

MODEL	INPUT VOLTAGE (VAC)	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT (A)	RATED POWER (W)	DIMENSION (LxWxH)
GPAD501M12-1C	90-264	12	0-42	500	255 x 50 x 30mm
GPAD501M15-1A	90-264	15	0-33	500	255 x 50 x 30mm
GPAD501M24-1A	90-264	24	0-21	500	255 x 50 x 30mm
GPAD501M28-1F	90-264	28	0-18	500	255 x 50 x 30mm
GPAD501M36-1F	90-264	36	0-14	500	255 x 50 x 30mm
GPAD501M48-1A	90-264	48	0-10.5	500	255 x 50 x 30mm
GPAD501M54-1J	90-264	54	0-9	500	255 x 50 x 30mm







PARTIAL 400W GPAD MODEL SELECTION WITH CURRENT SHARING

MODEL	INPUT VOLTAGE (VAC)	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT (A)	RATED POWER (W)	DIMENSION (LxWxH)
GPAD501M12-1C	90-264	12	0-42	500	255 x 50 x 30mm
GPAD501M15-1A	90-264	15	0-33	500	255 x 50 x 30mm
GPAD501M24-1A	90-264	24	0-21	500	255 x 50 x 30mm
GPAD501M28-1F	90-264	28	0-18	500	255 x 50 x 30mm
GPAD501M36-1F	90-264	36	0-14	500	255 x 50 x 30mm
GPAD501M48-1A	90-264	48	0-10.5	500	255 x 50 x 30mm
GPAD501M54-1J	90-264	54	0-9	500	255 x 50 x 30mm

TECHNICAL SPECIFICATIONS

INPUT CHARACTERISTICS							
Parameter		Min	Тур	Мах	Unit	Remark	
Input Voltage Range		90	220	264	VAC		
Input Curi	rent			6.5	A		
Inrush Cu	rrent			50	A	220 VAC input, rated load	
Input Free	quency Range	47	50	63	Hz		
Power Fac	tor	0.95				220 VAC input, rated load	
Harmonic	Distortion			15	%	230 VAC input, rated / half load	
OUTPUT	CHARACTERISTICS	5	Į	,			
	Parameter	Min	Тур	Max	Unit	Remark	
Output	GPAD501M12-1C		+12V		VDC	The output voltage is set according to requirements	
Voltage	GPAD501M15-1A		+15V		VDC		
	GPAD501M24-1A		+24V		VDC		
	GPAD501M28-1F		+28V		VDC		
	GPAD501M36-1F		+36V		VDC		
GPAD501M48-1A			+48V		VDC		
	GPAD501M54-1J		+54V		VDC		
Output	GPAD501M12-1C	0		42	A	The output voltage is set according to requirements	
Current	GPAD501M15-1A	0		33	A		
	GPAD501M24-1A	0		21	A		
	GPAD501M28-1F	0		18	A		
	GPAD501M36-1F	0		14	A		
	GPAD501M48-1A GPAD501M54-1J	0		10.5 9	A		
Output Po		0		500	A W		
Efficiency			90		%	220VAC input, rated loss	
Ripple & Noise (Peak-Peak)				240	m Vp-p	Rated input and load range. output is decoupled by a high frequency 0.1 μ F cap and one 10 μ F electrolytic capacitors. Bandwidth set at 20MHz	
Load Regulation				±2	%		
Line Regulation				±0.5	%		
Temperature Coefficient				±0.03	%/°C		

*Specifications subject to change without notice.





ON / OFF Overs	hoot			±1	0	%					
Dynamic Response Overshoot					5			25%~50%~25%, 50%~75%~50% load change, rate 0.1 A / us, cycle time			
								s			
Dynamic Response Recovery Time				200		ūS					
Start-Up Time				2		S	220) VAC input, rated	load		
Isolation Time*	*						cur	rent sharing effec	can be used in parallel. In order to obtain a better at when in use, it is necessary to connect the cur- f the two power supplies in parallel.		
	** O p	tion for m	odel	with c	urrer	nt shari		-	le: GPAD501M12-1CF		
PROTECTION											
Parameter		Mi	n	Тур	Ma	ax l	Unit		Remark		
Over Voltage	GPAD501M12-	1C 14					VDC	220VAC input, h	nalf load, hiccup mode		
Protect	GPAD501M15-	1A 17					VDC	1			
	GPAD501M24-	1A 26					VDC	-			
	GPAD501M28-						VDC	-			
	GPAD501M26-							-			
							VDC				
	GPAD501M48-						VDC	-			
	GPAD501M54-				VDC						
Over Current	GPAD501M12-	1C 44					А	Hiccup mode, s	elf recovery		
Protect	GPAD501M15-						A	4			
	GPAD501M24-	1A 23					Α	4			
	GPAD501M28-	1F 20					A	-			
	GPAD501M36-						А				
	GPAD501M48-	1A 13					A				
	GPAD501M54-	-				A					
Short Circuit Pr	otect		Can withstand permanent short. Self recover.								
Over Temperat			Hiccup mode, self recovery								
High Temperat			t is dis	ssipated	l thro	ough th	ne pow	er supply chassis	. Avoid touching chassis while in operation		
SAFETY AND	INSULATION C	LASS						· · · · · · · · · · · · · · · · · · ·			
Parameter				Sta	ndar	d Requ	iireme	ent	Remark		
Input-Output				′≤10mA					No arcing, no breakdown		
Input-Earth				′≤10mA							
Output-Earth				≤10mA	/1 m	in					
Ground Contin		<0.1							Test Current: 32A, Test duration: 120S		
Insulation Resistance			MΩ						Normal atmospheric pressure, Relative humidity <90%, non-condensing, Test voltage: 500VDC		
Leakage Current			m A						264VAC/ 50HZ Input		
EMC TEST											
Test Item				Т	est F	Require	ement		Standard		
ESD		Air [Discha	arge, ±8	KV				IEC 61000-4-2 (Criterion A)		
		Con	tact D	Discharg	le, ±6	5KV			IEC 61000-4-2 (Criterion A)		
Radiated RF field (RS)				lHz~2G e 80% <i>F</i>			ength	: 3V/m;	IEC 61000-4-3 (Criterion A)		
Immunity to Conducted Disturbance (CS)				MHz ~ e modu				ength: 3V/m, kHz)	IEC 61000-4-6 (Criterion A)		

*Specifications subject to change without notice.





Surge Line-Line: 1 KV, Line-Earth: 2KV IEC 61000-4-5 (Criterion A) Conducted Emission (CE) Class B Class B CSPR22; ENVIRONMENTAL Parameter Min Typ Max Unit Remark Operating Temperature -30 C 70 C Need to mount a heat-sink, the temperature of the heat-sink Storage Temperature -40 L 85 C C Relative Humidity 20 S % Non-condensing Conduction heat sink, the temperature of the heat-sink Storage Relative Humidity 20 S % Non-condensing Conduction heat dissipation Storage Relative Humidity 20 S % Non-condensing Conduction heat dissipation Altitude Image Sooo m Frequencinon dissipation Natural conduction heat dissipation Vibration Frequencinon: 150 m/s/s Duration: 11 ms Natural conduction heat dissipation Storage Relative Humidity Collision waveform: half sine wave/ Acceleration: 180 m/s2; Pulse Width: Gns; G-phase, impact 100 times Static Pressure Test Tu-Mpiled pressure. Un	Fast Transient / Burst	± 2kV , Repeat frequency:5KHz & 100KHz IEC 61000-4-4 (Criterion A)							
Radiated Emission (RE) Class B INS5022; G9924 ENVIRONMENTAL Parameter Min Typ Max Unit Remark Operating Temperature -30 70 °C Need to mount a heat-sink. He temperature of the heat-sink Storage Temperature -40 85 °C Need to mount a heat-sink. He temperature of the heat-sink. Storage Relative Humidity 20 95 % Non-condensing Storage Relative Humidity 20 95 % Non-condensing Altitude - 5 95 % Non-condensing Cooling - - 50000 m For 3000-4000m, operating temperature decrease 1°C for every increase of 200m. Vibration Freq: 10Hz-55Hz (Sinusoldal), Amplitude: 0.35 mm Natural conduction heat dissipation Storage Temperature - 10 Natural conduction heat dissipation Inspect (Collision) Collision waveform: half sine wave; Acceleration: 180m/52; Pulse Width: 6ms; 6-phase, impact 100 times Static Pressure Test TL-Apple pressure, Unit: N. W: Package weight. Unit. g. Statis not gave; Select the maximum stacking layers; F. Selety factor, usually select 3: Duration: 180m/52; 95% S0 × 30 MetetHumid	Surge	Line-Line: 1	l KV, Lin	e-Earth:	IEC 61000-4-5 (Criterion A)				
Natioated ministor (nc) Case 5 GB9234 ENVIRONMENTAL Remark GB9234 Operating Temperature 3-0 70 C Need to mount a heat-sink, the temperature of the heat-sink cannot exceed 65°C Storage Temperature -4-0 8 5 C Non-condensing Storage Relative Humidity 20 95 96 Non-condensing Storage Relative Humidity 5 95 96 Non-condensing Storage Cooling 1 1 Natural conduction heat dissipation Vibration Freq: 10Hz-55Hz (Sinusoidal), Amplitude: 0.35 mm Natural conduction heat dissipation Static Pressure Test T.=Wr(51 PF9.8)(N) TLApplied pressure, Unit N: Wt: Package weight. Unitkg: S: Allow stacking layers, select the maximum stacking layers; S: Safet pricer,	Conducted Emission (CE)	Class B CISPR22;							
ParameterMinTypMaxUnitRemarkOperating Temperature-3070°CNeed to mount a heat sink, the temperature of the heat-sink cannot exceed 65°CStorage Temperature-4085°CRelative Humidity2095%Non-condensingStorage Relative Humidity595%Non-condensingAltitude1595%Non-condensingAltitude595%Non-condensingCooling1595%Non-condensingColling1595%Non-condensingColling1595%Non-condensingColling11Natural conduction heat dissipationVibrationFree; 10H2~55H2 (Sinusoidal), Amplitude: 0.35 mmShockAcceleration: 150 m/s?, Duration: 11 msImpact CollisionCollision wareform: half sine ware; Acceleration: 180m/s2; Pulse Width: 6ms; 6-phase, impact 100 timesStatic Pressure TestTL-Wt('S-1)*P.9.8(N)TL: Applied pressure, Unit: N.W: Package weight. Unit:kg: S: Allow stacking layers, select the maximum stacking layers; 5: Safety factor, usually select 5: Duration: 2h,Moisture ProofGBr/2423.41939Anti-MoldGBr/2423.41939Anti-MoldGBr/2423.41939Anti-MoldGBr/2423.41939Anti-MoldGBr/2423.41939Anti-MoldGBr/2423.41939Anti-MoldGBr/2423.41939Anti-MoldGBr/2423.41939Anti-MoldGBr/2423.	Radiated Emission (RE)	I UIdas D							
Operating Temperature -30 70 °C Need to mount a heat-sink, the temperature of the heat-sink cannot exceed 65°C Storage Temperature -40 85 °C Relative Humidity 20 95 % Non-condensing Storage Relative Humidity 5 95 % Non-condensing Altitude 5000 m For 3000-4000m, operating temperature decrease 1°C for every increase of 200m Cooling 1 0 Natural conduction heat dissipation Vibration Freq: 10Hz-55Hz (Sinusoidal), Amplitude: 0.35 mm Non-condensing Stock Acceleration: 150 m/s/, Duration: 11 ms Impact (Collision) Collision waveform: half sine wave: Acceleration: 180m/s2; Pulse Width: 6ms; 6-phase, impact 100 times Static Pressure Test TL - Applied pressure, Unit: N. WI: Package weight. Unit kg: S: Allow stacking layers; F: Safety factor, usually select 5: Duration: 2h, Moisture Proof GB/T2423.16-1999 Molt est, level 2 MTBF ≥150.000h EVERY ALLOW Lx W + M (mm) MECHANICAL 255 x 50 x 30 EVERY ALLOW Output Negative L x W + H (mm) 255 x 50 x 30 <t< th=""><th>ENVIRONMENTAL</th><th></th><th></th><th></th><th></th><th></th></t<>	ENVIRONMENTAL								
Storage Temperature Image: Cannot exceed 65°C Storage Temperature -40 85 °C Relative Humidity 20 95 % Non-condensing Storage Relative Humidity 5 95 % Non-condensing Altitude 1 5 95 % Non-condensing Altitude 1 2 0 m For 3000-4000m, operating temperature decrease 1°C for every increase of 200m Cooling 1 2 0 Natural conduction heat dissipation Vibration Freq: 10Hz-55Hz (Sinusoidal), Amplitude: 0.35 mm Shock Acceleration: 150 m/s ² , Duration: 11 ms Impact (Collision) Collision waveform: half sine wave; Acceleration: 180m/s2; Pulse Width: 6ms; 6-phase, impact 100 times Static Pressure Test TL-Wt(5-1) FP.9(N)/TL Note tacking layers; FS afety factor, usually select 5: Duration: 2h, Mostare Proof Molsture Proof GB/T2423.4-1993 Alternating damp heat experiment, 24-45°C, 95%RH, 48h MTBF 2150.000h MEREMANICAL LxW M (mm) 255 x 50 x 30 Meremating damp heat experiment, 24-45°C, 95%RH, 48h Motiteret, Input <th>Parameter</th> <th>Min</th> <th>Тур</th> <th>Max</th> <th>Unit</th> <th>Remark</th>	Parameter	Min	Тур	Max	Unit	Remark			
Construction Int Int <thint< th=""> <th< th=""><th>Operating Temperature</th><th>-30</th><th></th><th>70</th><th>°C</th><th></th></th<></thint<>	Operating Temperature	-30		70	°C				
Storage Relative Humidity59596Non-condensingAltitudeI59596Non-condensingAltitudeI5000mFor 3000-4000m, operating temperature decrease 1°C for every increase of 200mCoolingINatural conduction heat dissipationVibrationFreq: 10Hz55Hz (Sinusoidal), Amplitude: 0.35 mmShockAcceleration: 15 0m /s², Duration: 11 msImpact (Collision)Collision waveform: half sine wave; Acceleration: 180m/s2; Pulse Width: 6ms; 6-phase, impact 100 timesStatic Pressure TestTL=Wt(S1)PF-98(N) TL=Applied pressure, Unit: N: Wt: Package weight. Unit:kg: S: Allow stacking layers, select the maximum stacking layers; F: Safety factor, usually select 5: Duration: 2h_Moisture ProofGB/T2423.41993Anti-MoldGB/T2423.41993GB/T2423.41993Alternating damp heat experiment, 24-45°C, 95%GH, 48hAnti-MoldGB/T2423.41993MTEF>150,000hMECHANICALL x W x H (mm)255 x 50 x 30Weight (Kg)0.55KgPIN DEFINITIONImput TerminalInput TerminalDescriptionQuiput PositiveV+Output PositiveV+Output PositiveV+Output PositiveV+Output NegativeV-Output NegativeV-Output NegativeV-Output NegativeV-Output NegativeV-Output NegativeV-Output NegativeV-Output NegativeV-Outpu	Storage Temperature	-40		85	°C				
Altitude Description For 3000-4000m, operating temperature decrease 1°C for every increase of 200m Additive Impact (Collision) Freq: 10Hz-55Hz (Sinusoidal), Amplitude: 0.35 mm Shock Acceleration: 150 m/s², Duration: 11 ms Natural conduction heat dissipation Shock Acceleration: 150 m/s², Duration: 11 ms Impact (Collision) Collision waveform: half sine wave; Acceleration: 180m/s2; Pulse Width: 6ms; 6-phase, impact 100 times Static Pressure Test TL-HWT(5-1) FP-9.8(N) TL: Applied pressure, Unit: N: WE: Package weight. Unitkg: S: Allow stacking layers, select the maximum stacking layers; F: Safety factor, usually select 5: Duration: 2h_o Moisture Proof GB/T2423.16-1999 Mold test, level 2 MTEF ≥150,000h MECHANICAL L xW xH (mm) 255 x 50 x 30 Struct Meight (Kg) 0.55Kg PIN DEFINITION Input Terminal Description Pin Function Maximum Torque Output Positive V+ 0.8N.M	Relative Humidity	20		95	%	Non-condensing			
Cooling Increase of 200m Increase	Storage Relative Humidity	5		95	%	Non-condensing			
Vibration Freq: 10Hz~55Hz (Sinusoida), Amplitude: 0.35 mm Shock Acceleration: 150 m/s ² , Duration: 11 ms Impact (Collision) Collision waveform: half sine wave; Acceleration: 180m/s ² ; Pulse Width: 6ms; 6-phase, impact 100 times Static Pressure Test TL=Wrt(S-1) YF9.8(N) TL:Applied pressure, Unit: N: Wt: Package weight. Unit:kg: S: Allow stacking layers, select the maximum stacking layers; F: Safety factor, usually select 5: Duration: 2h ₀ Moisture Proof GB/T2423.4-1993 Alternating damp heat experiment, 24~45°C, 95%RH, 48h Anti-Mold GB/T2423.16-1999 Mold test, level 2 MTBF ≥150,000h MECHANICAL L X W XH (mm) 255 x 50 x 30 Weight (Kg) 0.55Kg PIN DEFINITION Input Terminal Description Pin Function Maximum Torque Qutput Positive V+ 0.8N.M 0.8N.M Output Terminal Output Positive V+ 0.8N.M Output Regative V- 0.8N.M 0.4N.M Output Positive V+ 0.8N.M 0.4N.M Output Regative V- 0.8N.M NA Busindicround (Output Kegative <th>Altitude</th> <th></th> <th></th> <th>5000</th> <th>m</th> <th></th>	Altitude			5000	m				
Shock Acceleration: 150 m/s ² , Duration: 11 ms Impact (Collision) Collision waveform: half sine wave; Acceleration: 180m/s2; Pulse Width: 6ms; 6-phase, impact 100 times Static Pressure Test TL=Wt(S-1) FP.9.8(N) TL: Applied pressure, Unit: N: WI: Package weight, Unit:kg: S: Allow stacking layers, select the maximum stacking layers; F: Safet y factor, usually select 5: Duration: 2h, Moisture Proof GB/T2423.4-1993 Alternating damp heat experiment, 24~45°C, 95%RH, 48h Anti-Mold GB/T2423.16-1999 Mold test, level 2 MTBF ≥150,000h MECHANICAL L x W x H (mm) 255 x 50 x 30 Weight (Kg) 0.55Kg PIN DEFINITION Input Terminal Description Pin Function Maximum Torque Output Positive V+ Output Regative V- Output Negative V- Output Current Sharing Signal Terminal Signal Ground (Output Ground) GND (Output Ground) Prover Supply Status Indication S+	Cooling					Natural conduction heat dissipation			
Impact (Collision) Collision waveform: half sine wave; Acceleration: 180m/s2; Pulse Width: 6ms; 6-phase, impact 100 times Static Pressure Test TL=Wt*(S-1)*F*9.8(N) TL: Applied pressure, Unit: N: Wt: Package weight. Unit:kg: S: Allow stacking layers, select the maximum stacking layers; F: Safety factor, usually select 5: Duration: 2h_a Moisture Proof GB/T2423.41993 Alternating damp heat experiment, 24~45°C, 95%RH, 48h Anti-Moid GB/T2423.16-1999 Moid test, level 2 MTBF ≥150,000h Meight (Kg) 0.55Kg PIN DEFINITION Input Terminal Description Pin Function AC Input L 0.5N.M Output Versitive V+ 0.8N.M Output Positive V+ 0.8N.M Output Negative V- Output Negative V- Output Negative V- Output Negative V- Output Regative V- Output Negative V- Output Negative V- Output	Vibration	Freq: 10Hz~55Hz (Sinusoidal), Amplitude: 0.35 mm							
Static Pressure Test TL=Wt'(S-1)'F'9.8(N) TL: Applied pressure, Unit: N: Wt: Package weight, Unit:kg: S: Allow stacking layers, select the maximum stacking layers; F: Safety factor, usually select 5: Duration: 2h _o Moisture Proof GB/T2423.4-1993 Anti-Moid GB/T2423.4-1993 MTBF >150,000h MECHANICAL L x W x H (mm) 255 x 50 x 30 Weight (Kg) 0.55Kg PIN DEFINITION Input Terminal Description AC Input L AC Input L Output Terminal Output Positive Output Negative V+ Output Negative V- Ping Ging Ground (Output Ground) SHARE Bus Signal Ground (Output Ground) Signal Ground (Output Ground) GND Power Supply S+	Shock								
Description Pin Function Maximum stacking layers, select the maximum stacking layers, select the maximum stacking layers, scafety factor, usually select 5: Duration: 2h, Moisture Proof GB/T2423.4-1993 Alternating damp heat experiment, 24~45°C, 95%RH, 48h Anti-Mold GB/T2423.16-1999 Mold test, level 2 MTBF 0 0 MECHANICAL User Status User Status L x W x H (mm) 255 x 50 x 30 User Status User Status PIN DEFINITION Description Pin Function Maximum Torque Input Terminal Description Pin Function Maximum Torque Output Terminal Output Positive V+ 0.8N.M Output Terminal Output Positive V+ 0.8N.M Output Negative V- 0.8N.M NA Signal Ground GIND NA NA Signal Ground GIND NA NA Power Supply Status Indication S+ SHARE NA	Impact (Collision)	Collision waveform: half sine wave; Acceleration: 180m/s2; Pulse Width: 6ms; 6-phase, impact 100 times							
Anti-Mold GB/T2423.16-1999 Mold test, level 2 MTBF ≥150,000h MECHANICAL L L x W x H (mm) 255 x 50 x 30 Weight (Kg) 0.55Kg PIN DEFINITION Description Pin Function Maximum Torque AC Input L 0.5N.M AC Input L 0.5N.M Output Terminal Output Positive V+ 0.8N.M Output Negative V- 0.8N.M Output Negative V- 0.8N.M Current Sharing Signal Terminal Current Sharing SHARE NA Signal Ground (Output Ground) GND NA Status Indication S+ S+	Static Pressure Test	TL: Applied pressure, Unit: N: Wt: Package weight. Unit:kg: S: Allow stacking layers, select the maximum							
MTBF ≥150,000h MECHANICAL Lx W x H (mm) Lx W x H (mm) 255 x 50 x 30 Weight (Kg) 0.55Kg PIN DEFINITION Description Pin Function Maximum Torque Input Terminal Description Vinceton 0.5N.M AC Input L 0.5N.M Protective Earth PE Output Positive V+ 0.8N.M Output Negative V- 0.40.00.8N.M Output Negative V- 0.40.00.8N.M Signal Ground (Output Kegative SHARE NA Signal Ground (Output Ground) GND SHARE NA Power Supply Status Indication S+ S+ S+	Moisture Proof	GB/T2423.4-1993 Alternating damp heat experiment, 24~45°C, 95%RH, 48h							
MECHANICALL x W x H (mm)255 x 50 x 30Weight (Kg)0.55KgPIN DEFINITIONInput TerminalDescriptionPin FunctionMaximum TorqueAC InputL0.5N.MAC InputNProtective EarthPEOutput TerminalOutput PositiveV+Output VesitiveV+Output NegativeV-Output NegativeV-Output NegativeV-Output NegativeV-Signal Ground (Output Ground)GNDPower Supply Status IndicationS+	Anti-Mold	GB/T2423.16-1999 Mold test, level 2							
LxWxH(mm) 255 x 50 x 30 Weight (Kg) 0.55Kg PIN DEFINITION Pin Function Maximum Torque Input Terminal Description Pin Function Maximum Torque AC Input L 0.5N.M AC Input N Protective Earth PE Output Terminal Output Positive V+ 0.8N.M Output Negative V+ 0.8N.M Output Negative V- 0.400000000000000000000000000000000000	MTBF	≥150,000h							
Weight (Kg) 0.55Kg PIN DEFINITION Description Pin Function Maximum Torque Input Terminal Description Pin Function Maximum Torque AC Input L 0.5N.M AC Input N Protective Earth PE Output Terminal Output Positive V+ 0.8N.M Output Negative V- Output Negative V- Current Sharing Signal Terminal Current Sharing Bus SHARE Bus NA Signal Ground (Output Ground) GND NA	MECHANICAL								
Display Terminal Description Pin Function Maximum Torque AC Input L 0.5N.M AC Input N 0.5N.M Protective Earth PE Output Terminal Output Positive V+ Output Negative V+ Output Negative V- Output Negative V- Output Negative V- Output Ground GND Signal Ground GND Power Supply S+	L x W x H (mm)	255 x 50 x 3	255 x 50 x 30						
Input TerminalDescriptionPin FunctionMaximum TorqueAC InputL0.5N.MAC InputN0.5N.MAC InputN0.5N.MProtective EarthPEOutput PositiveV+Output PositiveV+Output NegativeV-Output NegativeV-Output NegativeV-Output Sharing Signal TerminalCurrent Sharing BusSignal Ground (Output Ground)GNDPower Supply Status IndicationS+	Weight (Kg)	0.55Kg							
AC Input L 0.5N.M AC Input N 0.5N.M Protective Earth PE 0.8N.M Output Terminal Output Positive V+ 0.8N.M Output Negative V+ 0.400000000000000000000000000000000000	PIN DEFINITION								
AC Input N Protective Earth PE Output Terminal Output Positive V+ Output Negative V+ Output Negative V- Output Negative V- Output Negative V- Signal Ground (Output Ground) GND Power Supply Status Indication S+	Input Terminal	Descript	tion	Pin Fu	Inction	Maximum Torque			
Protective EarthPEOutput TerminalOutput PositiveV+0.8N.MOutput PositiveV+0.8N.MOutput NegativeV-Output NegativeOutput NegativeV-Output NegativeOutput NegativeV-Output NegativeCurrent Sharing Signal TerminalCurrent Sharing BusSHARE Signal Ground (Output Ground)NAPower Supply Status IndicationS+		AC Inp	ut		L	0.5N.M			
Output TerminalOutput PositiveV+0.8N.MOutput PositiveV+0.400000000000000000000000000000000000		AC Inp	ut		N				
Output Positive V+ Output Negative V- Output Negative V- Output Negative V- Current Sharing Signal Terminal Current Sharing Bus Signal Ground (Output Ground) GND Power Supply Status Indication S+		Protective	Earth	F	PE				
Output Negative V- Output Negative V- Current Sharing Signal Terminal Current Sharing Bus SHARE NA Signal Ground (Output Ground) GND Power Supply Status Indication S+	Output Terminal	Output Po	sitive	\	/+	0.8N.M			
Output Negative V- Current Sharing Signal Terminal Current Sharing Bus SHARE Signal Ground (Output Ground) GND Power Supply Status Indication S+		Output Pc	sitive	\	/+				
Current Sharing Signal Terminal Current Sharing Bus SHARE NA Signal Ground (Output Ground) GND Image: Current Sharing Bus SHARE NA Power Supply Status Indication S+ S+ S+ S+		Output Ne	gative	, v	V-				
Bus Signal Ground (Output Ground) GND Power Supply Status Indication S+		Output Ne	gative	, v	V-				
(Output Ground) Power Supply Status Indication	Current Sharing Signal Terminal			SH	ARE	NA			
Status Indication				G	ND				
		Status Indi	cation		5+				

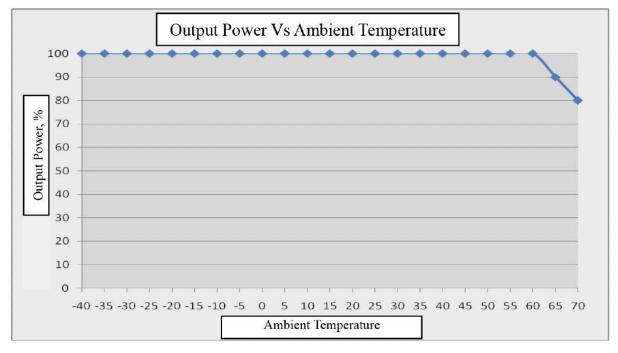
*Specifications subject to change without notice.

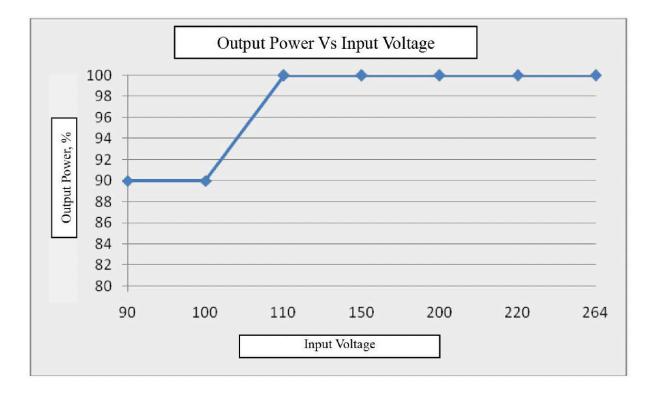




DERATING CURVE

Output Power vs Ambient Temperature & Input Voltage is as follows:









PACKAGING AND SHIPPING

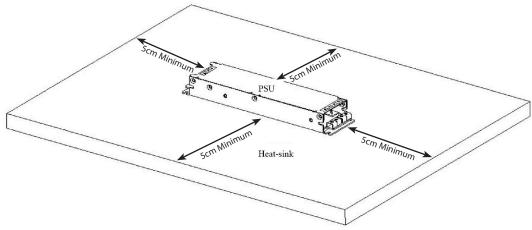
JE ships FOB Origin from the Anaheim, CA factory or our other subsidiary facilities.

LIMITED WARRANTY POLICY

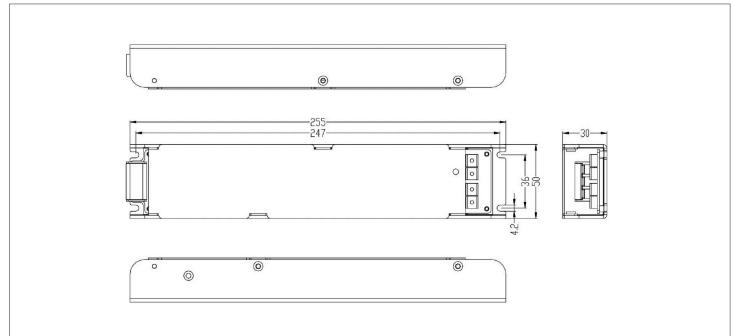
All Jasper Electronics (JE) standard GPAD model power supplies and products are guaranteed to be free of defects in workmanship and materials for a minimum of three (3) years from the date of original shipment, when operated within specification. Non-standard (custom) power supplies and products may be warranted on an individual basis. The unused portion of this warranty is fully transferable with the original equipment in which the power supply is installed. Please see our website for full warranty statement.

CONVECTION vs. CONDUCTION CONFIGURATION

In stock form, Jasper GPAD Supplies dissipate heat by natural convection. The factory recommends that conduction cooling be used for applications with ambient temperatures in excess of +50°C. For conduction cooling, please ensure that there is a heatsink (or casing) at the bottom of the power supply, and that its surface is smooth. The heatsink / casing surface must be sealed to the bottom of the power supply by adding thermal compound or silicone oil. In some applications, the GPAD supplies are mounted to liquid cooled metallic cold plates to remove heat. Generally, the recommended heatsink size is 400mm x 300mm x 20mm (L x W x H). Note: If the recommended external heat dissipation conditions are not met, the unit may shut down to protect itself against overheating. Please reduce the load accordingly in order to prevent an overheating condition.



GPAD MECHANICAL OUTLINE





1580 No. Kellogg Dr., Anaheim, California, 92807 USA (714) 917-0749 • www.jasperelectronics.com • sales@jasperelectronics.com





INNOVATIVE SPECIALTY DC POWER SYSTEMS

Standard and Custom Power Supplies from 5W to 10KW

TRAFFIC CONTROL POWER SUPPLIES



- 70-400+ Watts / 120 and 220 VAC Models Available
- CALTRANS TEES, NYSDOT, CDOT, GDOT Compliant for 332, 334, 336, 342, 344, and 346 Series cabinets
- RoHS and NEMA Compliant
- Custom labeling and barcoding available
- Ruggedization against shock / vibration / humidity available

CUSTOM POWER DISTRIBUTION ASSEMBLIES (PDAs)



- Compliant with TEES 2020
- 1U smaller than the PDA2-LX and PDA3-LX
- User accessible slots as specified
- Custom labeling and barcoding available
- Ruggedization against shock / vibration / humidity available

COMPACT PCI



- AC or DC input, 175W 500W DC output, active PFC
- 3U x 8HP, 6U x 8HP sizes
- PICMG 2.11 compliant, UL/CSA, NEMKO/TUV/CE certified, ROHS compliant
- Ruggedization against shock/ vibration/ humidity optional

Primary Applications: Industrial Computing, Military, Satellite Comm, Test, Transportation, Telecom, Aerospace

SPECIALTY HOT-SWAPPABLE POWER SUPPLIES



- 200-1500W, Universal Input, 5-54VDC Output
- Hot Swap. N+1, 90+% Efficiency
- 1U Form Factors
- 30+ Variations for Various Applications Including Nuclear
- Ruggedization against shock/ vibration/ humidity optional

Primary Applications: Medical Equipment, Military, Test, Automotive, Computing, Audio, Sensitive Electronics

RACK POWER SYSTEMS



- 200W-1500W, 2-8 slots, single or mixed output voltages, up to 10KW total
- Single, dual, or individual unit AC or DC input
- Internally or externally redundant DC outputs
- Standard 19" and 23" size or user-specified configurations also available
- Ruggedization against shock/ vibration/ humidity optional

Primary Applications: Medical Equipment, Military, Test, Automotive, Computing, Audio, Sensitive Electronics

LOW NOISE CONVECTION / CONDUCTION COOLED POWER SUPPLIES



- 200W-500W, 90—264VAC full range input with 12-54 VDC Output
- Wide operating temperature range / high efficiency
- Small form factors
- Ruggedization against shock/ vibration/ humidity optional

Primary Applications: Medical Equipment, Military, IT, Sensitive Electronics

Jasper

Electronics

MEDICAL ADAPTERS



- 6W-250W, Efficiency levels V & VI
- Desktop, Wall-mount, and Interchangeable AC
 plug types
- Large selection of output connectors additional cable lengths available
- UL60601 (medical) approved adapters available
- Ruggedization against shock/ vibration/ humidity optional

CUSTOMS & MODIFIED STANDARDS



- 75W-2KW
- Single to 7 outputs
- Designed and built to custom or semi-custom specifications
- Ruggedization against shock/ vibration/ humidity optional
- Custom electrical specs, chassis, paint, labeling, connectors, interface all available

Primary Applications: Medical Equipment, Military, Test, Automotive, Computing, Audio, Sensitive Electronics



ASR ISO9001:2015

American Systems REGISTRAR



(714) 917-0749 • www.jasperelectronics.com • sales@jasperelectronics.com