



# CULE2368-1 US IFIT AS/NZS62368-1 CB CE LK

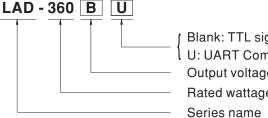
## Features

- Built-in battery charger and UPS function
- TTL signals for status detection: AC OK, Battery disconnect, Battery reverse polarity, Battery low, Battery full and Discharge (Blank version only)
- · UART Communication (U version only)
- Built-in buzzer alarm (U version only)
- Built-in AC and battery circuit ON/OFF switchs enhance safetyness during maintenance
- · Forced UPS mode for battery maintenance
- Protections: Short circuit / Overload / Over voltage / Over temperature / Battery low voltage / Battery reverse polarity (No damage)
- -20 ~ +60  $^\circ \rm C$  wide operating temperature
- Output voltage adjustable (-20%~+5%) for CH1 by VR
- · Suitable for lead acid and lithium-ion batteries
- · Design refer to GB17945/GB4717(U version only) system requirement
- 1U low profile (30 mm)
- · 3 years warranty

## Description

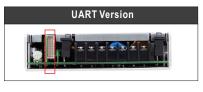
LAD-360 series is a 360W economical AC/DC low profile security power supply with UPS function. Adopting the input range from 90Vac to 264Vac (115Vac/230Vac selectable by switch) and supports output 27.6V, 41.5V and 55.2Vdc. With high efficiency up to 86.5% and built-in AC, battery switch for easy maintenance. In addition, LAD-360 series not only provide TTL signals for AC OK, battery disconnect, battery reverse polarity (No damage), battery low detection, battery full and discharge, but also possess UART version so the users can monitor and control the status of the units, that enhance easy way for integration into security and fire systems directly.

## Model Encoding



Blank: TTL signal only U: UART Communication only Output voltage(B: 27.6V, C: 41.5V, D: 55.2V) Rated wattage Series name

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## Applications

- Fire emergency and evacuation system
- Public safety battery back-up
- · Security system
- · Uninterruptible DC-UPS system
- Central monitoring system
- Industrial automation

#### File Name:LAD-360-SPEC 2023-05-15

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## **TRC ELECTRONICS, INC. 1.888.612.9514**



## SPECIFICATION FOR TTL FUNCTION MODEL (Blank Version)

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MODEL		LAD-360B		LAD-360C		LAD-360D		
	OUTPUT NUMBER	CH1	CH2	CH1	CH2	CH1	CH2	
	DC VOLTAGE	27.6V	27.6V	41.5V	41.5V	55.2V	55.2V	
	RATED CURRENT	11.5A	1.5A(Battery Charger)			5.03A	1.5A(Battery Charge	
	CURRENT RANGE	0~13A		0~8.64A		0~6.53A		
	RATED POWER							
OUTPUT		358.8W		358.56W		360.46W		
	RIPPLE & NOISE (max.) Note.2			240mVp-p		240mVp-p		
	VOLTAGE ADJ. RANGE	CH1: 21.6 ~ 29V		CH1: 32.4 ~ 43.5V		CH1: 43.5 ~ 58V		
	VOLTAGE TOLERANCE Note.3	±1.0%		±1.0%		±0.5%		
	LINE REGULATION	±0.5%		±0.5%		±0.5%		
	LOAD REGULATION	±0.5%		±0.5%		±0.5%		
	SETUP, RISE TIME	2000ms, 50ms/230V/	AC 2000ms, 50m	s/115VAC at full load				
	HOLD UP TIME (Typ.)	16ms/230VAC 12ms/115VAC at full load						
	BATTERY STATIC DISCHARGE							
	CURRENT	<100µA						
	VOLTAGE RANGE	90 ~ 132VAC / 180 ~	264VAC by switch	240 ~ 370VDC (I	Default switch at 230VA	.C)		
	FREQUENCY RANGE	47 ~ 63Hz						
INPUT	EFFICIENCY (Typ.)	86%		86.5%		86.5%		
	AC CURRENT (Typ.)		230VAC	00.376		00.3 /6		
	INRUSH CURRENT (Typ.)			(1.0				
		COLD START 60A/1	15VAC 60A/230V	/AC				
	LEAKAGE CURRENT	<0.5mA/240VAC						
		CH1:105 ~ 135%	CH2:90 ~ 110%					
		Protection type : CH'	1 OLP, CH2 with batter	•	to UPS mode when CH			
	OVERLOAD				of CH1 + CH2 reach arc		tput shuts down	
				•	oltage, re-power on to r			
		CH2		0.	does not affect CH1 wo	0.	,	
PROTECTION			condition is remove		andatory in series conn		r protection)	
	OVER VOLTAGE	CH1:31~36V		CH1:47 ~ 55V		CH1:59~69V		
	STER TOLINGE		t down o/p voltage, re-					
	OVER TEMPERATURE	Protection type : Shu	t down o/p voltage, re-	-power on to removed	Ł			
	BATTERY REVERSE POLARITY	Protected when reve	rse polarity , no damad	e. recovers automat	ically after fault conditio	on is removed		
	BATTERY CUTOFF	21.5V±0.5V	, ,, , ,	32V±0.5V		43V±0.5V		
	AC OK		en : AC Fail ; Low : AC			40720.07		
	BATTERY DISCONNECT/	TTE signal, Tight Op	CIT. AO T AIT, LOW . AC	OR, 100 . max. 00m	A@ 30720			
	REVERSE POLARITY	TTL signal, High / Op	en : Battery connect/n	normal ; Low : Battery	disconnect/reverse pol	larity; Ice : max. 30m	A@ 50VDC	
FUNCTION	BATTERY LOW	TTL signal High / Or	on · Battory normal · I	ow Battery low: Ico	: max. 30mA@ 50VDC			
			•	•		-		
	BATTERY FULL				ce : max. 30mA@ 50VD	С		
	DISCHARGE		en : Charge ; Low : Di	scharge ; Ice : max. 3	IOmA@ 50VDC			
	WORKING TEMP.	-20 ~ +60°C (Refer to	o "Derating Curve")					
	WORKING HUMIDITY	20 ~ 95% RH non-co	ndensing					
INVIRONMENT	STORAGE TEMP., HUMIDITY	-30 ~ +85°C, 10 ~ 95	% RH non-condensing	3				
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C	2)					
	VIBRATION	10 ~ 500Hz, 5G 10m	, in./1cycle, 60min. eacl	h along X, Y, Z axes				
	SAFETY STANDARDS			-	04 approved; Design ref	for to GB 17945-2010	1	
	WITHSTAND VOLTAGE		P-FG:2KVAC 0/P-F0		approvou, beorginie		5	
	ISOLATION RESISTANCE		FG:100M Ohms / 500					
		Parameter	Standard		Test Level / Note			
		Conducted	BS EN/EN5503		Class A			
			EAC TP TC 02	0				
SAFETY &	EMC EMISSION	Radiated	BS EN/EN5503		Class A			
EMC		Harman's O	EAC TP TC 02	0				
Note 4 & 5)		Harmonic Current						
		Voltage Flicker						
		Parameter	Standard		Test Level / Note			
		ESD	BS EN/EN6100	00-4-2	Level 3, 8KV air ; Leve	2, 6KV contact; crit	eria A	
		Radiated	BS EN/EN6100	00-4-3	Level 3, 10V/m ; criteria	A		
		EFT / Burst	BS EN/EN6100		Level 3, 2KV ; criteria A			
	EMC IMMUNITY	Surge	BS EN/EN6100		Level 3, 1KV/Line-Line		аA	
		Conducted	BS EN/EN6100		Level 3, 10V ; criteria A			
		Magnetic Field	BS EN/EN6100		Level 4, 30A/m ; criteria			
	MTBF		Telcordia SR-332 (Bell	lcore); 153.3K hrs	min. MIL-HDBK-217	F (25°C)		
OTHERS	DIMENSION	215*115*30mm (L*W	/*H)					
	PACKING	0.75Kg; 15pcs/12.25	Kg/0.7CUFT					
NOTE	<ol> <li>Ripple &amp; noise are measure</li> <li>Tolerance : includes set up</li> <li>The power supply is consid a 360mm*360mm metal pla The final equipment must b "EMI testing of component y</li> <li>This power supply does not under the following condition a) the end-devices is used b) the end-devices is conne c) the power supply is: - ii - 1</li> <li>Exception: Power supplies used within</li> </ol>	ally mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. red at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf & 47µf parallel capacitor. to tolerance, line regulation and load regulation. dered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit or ate with 1mm of thickness. Radiation testing requires adding 13"26"30NIZN magnetic loops or buckles to the battery output w be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "power supplies." (as available on http://www.meanwell.com) to meet the harmonic current requirements outlined by BS EN/EN61000-3-2. Please do not use this power supply ons: J within the European Union, and tested to public mains supply with 220Vac or greater rated nominal voltage, and installed in end-devices with average or continuous input power greater than 75W, or belong to part of a lighting system nt the following end-devices do not need to fulfill BS EN/EN61000-3-2						
NOTE	The final equipment must b "EMI testing of component [ 5. This power supply does not under the following condition a) the end-devices is used b) the end-devices is conne c) the power supply is: - ii - 1 Exception: Power supplies used within a) professional equipment w b) symmetrically controlled 1 6. The ambient temperature do	supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the un 60mm metal plate with 1mm of thickness. Radiation testing requires adding 13°26°30NIZN magnetic loops or buckles to the battery outp quipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to g of component power supplies." (as available on http://www.meanwell.com) supply does not meet the harmonic current requirements outlined by BS EN/EN61000-3-2. Please do not use this power supply						

File Name:LAD-360-SPEC 2023-05-15

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MODEL		LAD-360BU		LAD-360CU		LAD-360DU					
	OUTPUT NUMBER		0110		0110		0110				
	DC VOLTAGE	CH1 27.6V	CH2 27.6V	CH1 41.5V	CH2 41.5V	CH1 55.2V	CH2 55.2V				
	RATED CURRENT										
		11.5A	1.5A(Battery Charger)		1.5A(Battery Charger)	5.03A	1.5A(Battery Charge				
	CURRENT RANGE	0~13A		0~8.64A		0~6.53A					
	RATED POWER	358.8W		358.56W		360.46W	1				
OUTPUT	ITPUT RIPPLE & NOISE (max.) Note.2 150mVp-p 240mVp-p					240mVp-p					
	VOLTAGE ADJ. RANGE	CH1: 21.6 ~ 29V		CH1: 32.4 ~ 43.5	5V	CH1: 43.5 ~ 58V					
	VOLTAGE TOLERANCE Note.3	±1.0%		±1.0%		±0.5%					
	LINE REGULATION	±0.5%		±0.5%		±0.5%					
	LOAD REGULATION	±0.5%		±0.5%		±0.5%					
	SETUP, RISE TIME	2000ms, 50ms/230VAC 2000ms, 50ms/115VAC at full load									
	HOLD UP TIME (Typ.)										
	BATTERY STATIC DISCHARGE		121115/115VAC at 101110	au							
	CURRENT	<100µA									
	VOLTAGE RANGE	90 ~ 132VAC / 180 ~	264VAC by switch	240 ~ 370VDC	(Default switch at 230VA	C)					
	FREQUENCY RANGE	47 ~ 63Hz	2011100090111011	210 010100	(Boldali official di 200 fri						
	EFFICIENCY (Typ.)										
NPUT		86%	10000110	86.5%		86.5%					
	AC CURRENT (Typ.)		/230VAC								
	INRUSH CURRENT (Typ.)	COLD START 60A/	115VAC 60A/230\	/AC							
	LEAKAGE CURRENT	<0.5mA/240VAC									
		CH1:105 ~ 135%	CH2:90 ~ 110%								
		Protection type : CH	1 OLP, CH2 with batter	ry: The unit will en	ter to UPS mode when CH	1 is around 105%~1	20%,				
	OVERLOAD			when total outp	out of CH1 + CH2 reach arc	ound 125%~135% o	utput shuts down				
	OVEREDAD	СН	1 OLP, CH2 without ba	ttery:Shut down o	/p voltage,re-power on to re	emoved					
		СН	2 : Constant current lin	niting; fault conditi	ion does not affect CH1 wo	rking,recovers auto	matically after fault				
DOTECTION			condition is remove	ed (External fuse is	s mandatory in series conn	ection with battery f	or protection)				
PROTECTION		CH1:31 ~ 36V		CH1:47 ~ 55V		CH1:59~69V					
	OVER VOLTAGE		ut down o/p voltage, re		oved						
	OVER TEMPERATURE		ut down o/p voltage, re								
	BATTERY REVERSE POLARITY				natically after fault condition	n is removed					
		21.5V±0.5V	ise polarity, no dama		fidlically after fault contrilio						
	BATTERY CUTOFF		1 404 11 11 11	32V±0.5V	1	43V±0.5V					
			als AC failure and activ		•						
	AC OK		over the main power su		•						
			als AC failure and activ		•						
UNCTION		Reci	over the main power su	ipply when input v	oltage >175VAC						
	CHARGER CIRCUIT FAIL		d, battery reverse pola								
	BUZZER ALARM		m system selectable b	• •							
	BOZZER ALARM	AC fail, Battery low,	battery disconnected,	battery reverse co	nnect, overload status (eva	acuation system sel	ectable by UART)				
	WORKING TEMP.	-20 ~ +60°C (Refer to "Derating Curve")									
	WORKING HUMIDITY	20 ~ 95% RH non-condensing									
NVIRONMENT	STORAGE TEMP., HUMIDITY	-30 ~ +85°C, 10 ~ 9	5% RH non-condensing	q							
	TEMP. COEFFICIENT	±0.03%/°C (0~50°	C)	-							
	VIBRATION										
	SAFETY STANDARDS					to GB 17945-2010	10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes				
	WITHSTAND VOLTAGE			UL62368-1, BS EN/EN62368-1, AS/NZS62368.1, EAC TP TC 004 approved; Design refer to GB 17945-2010, GB4717							
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC					GB4717				
					DU		GB4717				
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P	-FG:100M Ohms / 500	VDC / 25°C/ 70%	-		GB4717				
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P	-FG:100M Ohms / 500 Standard	VDC / 25°C/ 70%	RH Test Level / Note		GB4717				
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P	-FG:100M Ohms / 500 Standard BS EN/EN5503	VDC / 25°C/ 70% 32 (CISPR32),	-		GB4717				
		I/P-O/P, I/P-FG, O/F Parameter	-FG:100M Ohms / 500 Standard BS EN/EN5503 EAC TP TC 02	VDC / 25°C/ 70% 32 (CISPR32), 0	Test Level / Note		GB4717				
SAFETY &	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/F Parameter	-FG:100M Ohms / 500 Standard BS EN/EN5503 EAC TP TC 02 BS EN/EN5503	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32),	Test Level / Note		GB4717				
		I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated	-FG:100M Ohms / 500 Standard BS EN/EN5503 EAC TP TC 02 BS EN/EN5503 EAC TP TC 02	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32),	Test Level / Note       Class A       Class A		GB4717				
MC		I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current	-FG:100M Ohms / 500 Standard BS EN/EN5503 EAC TP TC 02 BS EN/EN5503 EAC TP TC 02 	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32),	Test Level / Note       Class A       Class A		GB4717				
EMC		I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated	-FG:100M Ohms / 500 Standard BS EN/EN5503 EAC TP TC 02 BS EN/EN5503 EAC TP TC 02	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32),	Test Level / Note       Class A       Class A		GB4717				
MC		I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current	-FG:100M Ohms / 500 Standard BS EN/EN5503 EAC TP TC 02 BS EN/EN5503 EAC TP TC 02 	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32),	Test Level / Note       Class A       Class A		GB4717				
MC		I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker	-FG:100M Ohms / 500 Standard BS EN/EN5503 EAC TP TC 02 BS EN/EN5503 EAC TP TC 02 	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0	Test Level / Note       Class A       Class A	2, 6KV contact; crite					
MC		I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter	-FG:100M Ohms / 500 Standard BS EN/EN5503 EAC TP TC 02 BS EN/EN5503 EAC TP TC 02   Standard	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 0 00-4-2	Test Level / Note       Class A       Class A             Test Level / Note						
MC	EMC EMISSION	I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD	FG:100M Ohms / 500           Standard           BS EN/EN5503           EAC TP TC 02           BS EN/EN5504           EAC TP TC 02                 Standard           BS EN/EN503           BS EN/EN504           BS EN/EN504           BS EN/EN504           BS EN/EN504	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 0 0 0 0 0 0 -4-2 0 -4-3	Test Level / Note       Class A       Class A             Test Level / Note       Level 3, 8KV air ; Level       Level 3, 10V/m ; criteria	A					
EMC		I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst	-FG:100M Ohms / 500 Standard BS EN/EN5503 EAC TP TC 02 BS EN/EN5003 EAC TP TC 02   Standard BS EN/EN6100 BS EN/EN6100 BS EN/EN6100	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 00-4-2 00-4-2 00-4-3 00-4-4	Test Level / Note       Class A       Class A             Test Level / Note       Level 3, 8KV air ; Level       Level 3, 10V/m ; criteria       Level 3, 2KV ; criteria A	A	eria A				
EMC	EMC EMISSION	I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge	-FG:100M Ohms / 500 Standard BS EN/EN5503 EAC TP TC 02 BS EN/EN5003 EAC TP TC 02  Standard BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 00-4-2 00-4-2 00-4-3 00-4-4 00-4-5	Test Level / Note       Class A       Class A             Test Level / Note       Level 3, 8KV air ; Level       Level 3, 10V/m ; criteria       Level 3, 1KV/Line-Line ;	A	eria A				
EMC	EMC EMISSION	I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted	-FG:100M Ohms / 500 Standard BS EN/EN5503 EAC TP TC 02 BS EN/EN5003 EAC TP TC 02  Standard BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 00-4-2 00-4-2 00-4-3 00-4-3 00-4-5 00-4-6	Test Level / Note         Class A         Class A               Test Level / Note         Level 3, 8KV air ; Level         Level 3, 8KV air ; Level         Level 3, 10V/m ; criteria         Level 3, 1KV/Line-Line ;         Level 3, 10V ; criteria A	A 2KV/Line-FG ;criter	eria A				
EMC	EMC EMISSION	I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field	-FG:100M Ohms / 500 Standard BS EN/EN5503 EAC TP TC 02 BS EN/EN5003 EAC TP TC 02  Standard BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 00-4-2 00-4-2 00-4-3 00-4-3 00-4-4 00-4-5 00-4-6 00-4-8	Test Level / Note         Class A         Class A            Test Level / Note         Level 3, 8KV air ; Level         Level 3, 8KV air ; Level         Level 3, 10V/m ; criteria         Level 3, 1KV/Line-Line ;         Level 3, 10V ; criteria A         Level 3, 30A/m ; criteria A	A 2KV/Line-FG ;criter A	eria A				
EMC	EMC EMISSION	I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted	-FG:100M Ohms / 500 Standard BS EN/EN5503 EAC TP TC 02 BS EN/EN5003 EAC TP TC 02  Standard BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 00-4-2 00-4-2 00-4-3 00-4-3 00-4-4 00-4-5 00-4-6 00-4-8	Test Level / Note         Class A         Class A            Test Level / Note         Level 3, 8KV air ; Level         Level 3, 8KV air ; Level         Level 3, 10V/m ; criteria         Level 3, 1KV/Line-Line ;         Level 3, 10V ; criteria A         Level 3, 30A/m ; criteria A	A 2KV/Line-FG ;criter A	eria A				
EMC Note 4 & 5)	EMC EMISSION	I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field	FG:100M Ohms / 500 Standard BS EN/EN5503 EAC TP TC 02 BS EN/EN5003 EAC TP TC 02  Standard BS EN/EN6100 BS EN/EN610	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 00-4-2 00-4-2 00-4-3 00-4-3 00-4-4 00-4-5 00-4-6 00-4-8	Test Level / Note         Class A         Class A            Test Level / Note         Level 3, 8KV air ; Level         Level 3, 8KV air ; Level         Level 3, 10V/m ; criteria         Level 3, 1KV/Line-Line ;         Level 3, 10V ; criteria A         Level 3, 30A/m ; criteria A	A 2KV/Line-FG ;criter A	eria A				
EMC Note 4 & 5)	EMC EMISSION EMC IMMUNITY MTBF	I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1160.5K hrs min.	FG:100M Ohms / 500 Standard BS EN/EN500 EAC TP TC 02 EAC TP TC 02  Standard BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 Telcordia SR-332 (Bel V*H)	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 00-4-2 00-4-2 00-4-3 00-4-3 00-4-4 00-4-5 00-4-6 00-4-8	Test Level / Note         Class A         Class A            Test Level / Note         Level 3, 8KV air ; Level         Level 3, 8KV air ; Level         Level 3, 10V/m ; criteria         Level 3, 10V/m ; criteria         Level 3, 1KV/Line-Line ;         Level 3, 10V ; criteria A         Level 3, 10V ; criteria A         Level 3, 10V ; criteria A         Level 3, 00V ; criteria A         Level 4, 30A/m ; criteria A	A 2KV/Line-FG ;criter A	eria A				
EMC Note 4 & 5)	EMC EMISSION EMC IMMUNITY MTBF DIMENSION	I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1160.5K hrs min. 215*115*30mm (L*V, 0.75Kg; 15pcs/12.20	FG:100M Ohms / 500 Standard BS EN/EN500 EAC TP TC 02 EAC TP TC 02  Standard BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 Telcordia SR-332 (Bel V*H) SKg/0.7CUFT	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 00-4-2 00-4-3 00-4-4 00-4-5 00-4-6 00-4-8 Icore); 126.5KH	Test Level / Note         Class A         Class A            Test Level / Note         Level 3, 8KV air ; Level         Level 3, 8KV air ; tevel         Level 3, 2KV ; criteria         Level 3, 2KV ; criteria         Level 3, 10V/m ; criteria         Level 3, 10V/m ; criteria         Level 3, 30Am ; criteria         rs min.	A 2KV/Line-FG ;criter A F (25°C)	eria A				
EMC Note 4 & 5)	EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING	I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1160.5K hrs min. 215*115*30mm (L*\ 0.75Kg; 15pcs/12.2:	FG:100M Ohms / 500 Standard BS EN/EN5503 EAC TP TC 02 EAC TP TC 02  Standard BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 Telcordia SR-332 (Bel V'H) SKg/0.7CUFT asured at 230VAC inp	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 00-4-2 00-4-3 00-4-3 00-4-4 00-4-5 00-4-6 00-4-6 lcore); 126.5K H	Test Level / Note         Class A         Class A         Class A            Test Level / Note         Level 3, 8KV air ; Level         Level 3, 8KV air ; Level         Level 3, 1KV/Line-Line ;         Level 3, 1KV/Line-Line ;         Level 3, 1KV/Line-Line ;         Level 4, 30A/m ; criteria A         Level 4, 30A/m ; criteria         d 25°C of ambient temper	A 2KV/Line-FG ;criter A F (25°C) rature.	eria A				
EMC Note 4 & 5)	EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT specia 2. Ripple & noise are measure 3. Tolerance : includes set up	I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1160.5K hrs min. 215*115*30mm (L*V 0.75Kg; 15pcs/12.22 Ily mentioned are me ad at 20MHz of banc tolerance, line regula	FG:100M Ohms / 500 Standard BS EN/EN500 EAC TP TC 02 BS EN/EN500 EAC TP TC 02 Standard BS EN/EN610 Telcordia SR-332 (Bel V"H) SKg/0.7CUFT assured at 230VAC in r	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 00-4-2 00-4-3 00-4-4 00-4-5 00-4-5 00-4-6 00-4-8 Icore); 126.5K H put, rated load an wisted pair-wire to on.	Test Level / Note         Class A         Class A         Class A            Test Level / Note         Level 3, 8KV air ; Level         Level 3, 8KV air ; tevel         Level 3, 10V/m ; criteria         Level 3, 10V/m ; criteria A         Level 3, 10V/m ; criteria A         Level 3, 10V/m ; criteria         Level 3, 10V/m ; criteria         Level 4, 30A/m ; criteria         Lev	A 2KV/Line-FG ;criter A F (25°C) rature. I7µf parallel capacit	eria A				
EMC Note 4 & 5)	EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT specia 2. Ripple & noise are measure 3. Tolerance : includes set up 4. The power supply is consid	I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1160.5K hrs min. 215*115*30mm (L*\\ 0.75Kg; 15pcs/12.2: Ily mentioned are me ad at 20MHz of banc tolerance, line regula	FG:100M Ohms / 500 Standard BS EN/EN5503 EAC TP TC 02 BS EN/EN5003 EAC TP TC 02 EAC TP TC 02  Standard BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 Telcordia SR-332 (Bel V*H) SKg/0.7CUFT asured at 230VAC in width by using a 12** tition and load regulati inch will be installed in	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 00-4-2 00-4-3 00-4-3 00-4-4 00-4-5 00-4-6 00-4-6 00-4-8 lcore); 126.5K H put, rated load an wisted pair-wire to on.	Test Level / Note         Class A         Class A            Test Level / Note         Level 3, 8KV air ; Level         Level 3, 8KV air ; Level         Level 3, 1KV/Line-Line ;         Level 3, 1KV/Line-Line ;         Level 3, 0A/m ; criteria A         Level 3, 1KV/Line-Line ;         Level 3, 0A/m ; criteria ars min.         MIL-HDBK-217         d 25°C of ambient tempererminated with a 0.1µf & 4         tent. All the EMC tests are	A 2KV/Line-FG ;criter A F (25°C) rature. r7µf parallel capacit	ria A ia A tor.				
EMC Note 4 & 5)	EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT specia 2. Ripple & noise are measure 3. Tolerance : includes set up 4. The power supply is consid a 360mm "360mm metal pla	I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1160.5K hrs min. 215*115*30mm (L*V 0.75Kg; 15pcs/12.2 Ily mentioned are mad at 20MHz of banc tolerance, line regula ered a component w te with 1mm of thick	FG:100M Ohms / 500           Standard           BS EN/EN550;           EAC TP TC 02           BS EN/EN500;           EAC TP TC 02           EAC TP TC 02              Standard           BS EN/EN6100           BS EN/EN6100     <	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 32 (CISPR32), 0 00-4-2 00-4-2 00-4-3 00-4-4 00-4-5 00-4-5 00-4-5 00-4-5 00-4-5 00-4-6 00-4-5 126.5K H put, rated load an wisted pair-wire to onto a final equipm prequires adding requires adding	Test Level / Note         Class A         Class A         Class A            Test Level / Note         Level 3, 8KV air ; Level         Level 3, 8KV air ; Level         Level 3, 10V/m ; criteria         Level 3, 1KV/Line-Line ;         Level 3, 1KV/Line-Line ;         Level 4, 30A/m ; criteria A         Level 4, 30A/m ; criteria riteria         Ised 4, 30A/m ; criteria A         Level 4, 30A/m ; c	A 2KV/Line-FG ;criter A F (25°C) rature. 7/µf parallel capacit been executed by loops or buckles to	eria A				
EMC Note 4 & 5)	EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT specia 2. Ripple & noise are measure 3. Tolerance : includes set up 4. The power supply is consid	I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1160.5K hrs min. 215*115*30mm (L*V 0.75Kg; 15pcs/12.2 Ily mentioned are me ad at 20MHz of banc tolerance, line regula ered a component w te with 1mm of thick e re-confirmed that it	FG:100M Ohms / 500 Standard BS EN/EN5002 EAC TP TC 02 BS EN/EN5002 EAC TP TC 02 EAC TP TC 02  Standard BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 Telcordia SR-332 (Bel V*H) 5Kg/0.7CUFT assured at 230VAC ing thich will be installed in ness. Radiation testing still meets EMC direct	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 00-4-2 00-4-3 00-4-4 00-4-5 00-4-5 00-4-8 Icore); 126.5K I put, rated load an wisted pair-wire t on. to a final equipm g requires adding g requires adding	Test Level / Note         Class A         Class A         Class A            Test Level / Note         Level 3, 8KV air ; Level         Level 3, 8KV air ; Level         Level 3, 10V/m ; criteria         Level 3, 10V/m ; criteria         Level 3, 10V/r ; criteria         Level 3, 10V ; criteria         Level 3, 10V ; criteria         Level 3, 10V ; criteria         Level 4, 30A/m ; criteria         Co ac in the top criteria         Level 4, 30A/m ; criteria         Co ac in the top criteria         Lavel 4, 30A/m ; criteria         Level 4, 30A/m ; criteria         Co ac in the	A 2KV/Line-FG ;criter A F (25°C) rature. 7/µf parallel capacit been executed by loops or buckles to	eria A				
EMC Note 4 & 5)	EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT specia 2. Ripple & noise are measure 3. Tolerance : includes set up 4. The power supply is consid a 360mm*360mm metal pla The final equipment must b "EMI testing of component 5. This power supply does noi	I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1160.5K hrs min. 215*115*30mm (L*V) 0.75Kg; 15pcs/12,2 Ily mentioned are me d at 20MHz of banc tolerance, line regula ered a component wite with fmm of thick e re-confirmed that i power supplies." (as meet the harmonic	FG:100M Ohms / 500 Standard BS EN/EN5503 EAC TP TC 02 BS EN/EN5503 EAC TP TC 02  Standard BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 BS EN/EN6100 Telcordia SR-332 (Bel V*H) Skg/0.7CUFT asured at 230VAC in width by using a 12" tition and load regulati inch will be installed in ress. Radiation testing still meets EMC direct available on http://www	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 00-4-2 00-4-3 00-4-3 00-4-4 00-4-5 00-4-6 00-4-6 00-4-8 lcore); 126.5K H put, rated load an wisted pair-wire to on. to a final equipm g requires adding trives. For guidan w.meanwell.com)	Test Level / Note         Class A         Class A         Class A            Test Level / Note         Level 3, 8KV air ; Level         Level 3, 8KV air ; Level         Level 3, 1KV/Line-Line ;         Level 3, 1KV/Line-Line ;         Level 3, 1KV/Line-Line ;         Level 3, 10V r ; criteria A         Level 3, 0A/m ; criteria ars min.         MIL-HDBK-217         d 25°C of ambient tempererminated with a 0.1µf & 4         Leuet All the EMC tests are ; 13°26°30NIZN magnetic ce on how to perform the	A 2KV/Line-FG ;criter A F (25°C) rature. I7µf parallel capacit been executed by loops or buckles to se EMC tests, plea	tor.				
EMC Note 4 & 5)	EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT specia 2. Tolerance : includes set up 4. The power supply is consid a 360mm*360mm metal pla The final equipment must b "EMI testing of component 5. This power supply does not under the following conditio	I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1160.5K hrs min. 215*115*30mm (L*V 0.75Kg; 15pcs/12.2 Ily mentioned are me ad at 20MHz of banc tolerance, line regula ered a component w the with 1mm of thick e re-confirmed that it power supplies." (as meet the harmonic ns:	FG:100M Ohms / 500 Standard BS EN/EN503 EAC TP TC 02 BS EN/EN503 EAC TP TC 02 EAC TP TC 02 COMMONSTREE Standard BS EN/EN6100 BS EN/EN61	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 00-4-2 00-4-3 00-4-3 00-4-4 00-4-5 00-4-6 00-4-6 00-4-8 lcore); 126.5K H put, rated load an wisted pair-wire to on. 126.5K H visited pair-wire to on. 126.5K H	Test Level / Note         Class A         Class A         Class A            Test Level / Note         Level 3, 8KV air ; Level         Level 3, 8KV air ; Level         Level 3, 1KV/Line-Line ;         Level 3, 1KV/Line-Line ;         Level 3, 1KV/Line-Line ;         Level 3, 10V r ; criteria A         Level 3, 0A/m ; criteria ars min.         MIL-HDBK-217         d 25°C of ambient tempererminated with a 0.1µf & 4         Leuet All the EMC tests are ; 13°26°30NIZN magnetic ce on how to perform the	A 2KV/Line-FG ;criter A F (25°C) rature. I7µf parallel capacit been executed by loops or buckles to se EMC tests, plea	tor.				
EMC (Note 4 & 5)	EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT special 2. Ripple & noise are measure 3. Tolerance : includes set up 4. The power supply is consid a 360mm'360mm metal ple The final equipment must b "EMI testing of component 5. This power supply does noi under the following conditio a) the end-devices is used	I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1160.5K hrs min. 215*115*30mm (L*\) 0.75Kg; 15pcs/12.2: Ily mentioned are me ad at 20MHz of banc tolerance, line regula ered a component wite with 1mm of thick e re-confirmed that it power supplies." (as t meet the harmonic ns:	FG:100M Ohms / 500 Standard BS EN/EN5503 EAC TP TC 02 BS EN/EN5503 EAC TP TC 02 Standard BS EN/EN6100 Telcordia SR-332 (Bel Y'H) Skg/0.7CUFT asured at 230VAC in width by using a 12" tition and load regulati hich will be installed in ress. Radiation testing still meets EMC direct available on http://ww current requirements of Union, and	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 00-4-2 00-4-3 00-4-3 00-4-4 00-4-5 00-4-6 00-4-6 00-4-8 lcore); 126.5K H onumber of the second	Test Level / Note         Class A         Class A         Class A            Test Level / Note         Level 3, 8KV air ; Level         Level 3, 8KV air ; Level         Level 3, 10V/m ; criteria         Level 3, 1KV/Line-Line ;         Level 3, 10V ; criteria A         Level 3, 10V ; criteria a         Level 3, 10V ; criteria a         Level 3, 0A/m ; criteria ars min.         MIL-HDBK-217         d25°C of ambient tempererminated with a 0.1µf & 4         enert. All the EMC tests are ; 13°26°30NIZM magnetic ce on how to perform the:         V/EN61000-3-2. Please do	A 2KV/Line-FG ;criter A F (25°C) rature. I7µf parallel capacit been executed by loops or buckles to se EMC tests, plea	tor.				
EMC Note 4 & 5)	EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT specia 2. Ripple & noise are measure 3. Tolerance : includes set up 4. The power supply is consid a 360mm*360mm metal pla The final equipment must b "EMI testing of component 5. This power supply does not under the following conditio a) the end-devices is used b) the end-devices is connu-	I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1160.5K hrs min. 215*115*30mm (L*V, 0.75Kg; 15pcs/12.2: Ily mentomHz of banc tolerance, line regula ered a component w et with 1mn of thick e re-confirmed that is power supplies." (as meet the harmonic ns: within the European acted to public mains	FG:100M Ohms / 500 Standard BS EN/EN500; EAC TP TC 02 BS EN/EN500; EAC TP TC 02 Standard BS EN/EN500; BS EN/EN6100 BS EN/EN6100; BS EN/EN610;	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 00-4-2 00-4-3 00-4-4 00-4-5 00-4-6 00-4-5 00-4-6 126.5K I into a final equipm yutisted pair-wire to on, into a final equipm grequires adding tives. For guidan w.meanwell.com) putlined by BS EP or greater rated n	Test Level / Note         Class A         Class A         Class A            Test Level / Note         Level 3, 8KV air ; Level         Level 3, 8KV air ; Level         Level 3, 10V/m ; criteria         Level 3, 1KV/Line-Line ;         Level 3, 1KV/Line-Line ;         Level 3, 1KV/Line-Line ;         Level 3, 30A'm ; criteria A         Level 4, 30A'm ; criteria remains         Level 4, 30A'm ; criteria A         Level 4, 30A'm ; criteria (Comparison)         MIL-HDBK-217         d 25°C of ambient temper         erent. All the EMC tests are in 13°26°30NIZN magnetic ce on how to perform the:         VEN61000-3-2. Please dominal voltage, and	A 2KV/Line-FG ;criter A F (25°C) rature. I7µf parallel capacit been executed by loops or buckles to se EMC tests, plea	tor.				
EMC Note 4 & 5)	EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT specia 2. Tolerance : includes set up 3. Tolerance : includes set up 4. The power supply is consid a 360mm'360mm metal pla The final equipment must b "EMI testing of component 5. This power supply does not under the following conditio a) the end-devices is used b) the end-devices is conm c) the power supply is: - i	I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1160.5K hrs min. 215*115*30mm (L*V, 0.75Kg; 15pcs/12.2: Ily mentomHz of banc tolerance, line regula ered a component w et with 1mn of thick e re-confirmed that is power supplies." (as meet the harmonic ns: within the European acted to public mains	FG:100M Ohms / 500 Standard BS EN/EN5503 EAC TP TC 02 BS EN/EN5503 EAC TP TC 02 Standard BS EN/EN6100 BS EN/E	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 00-4-2 00-4-3 00-4-4 00-4-5 00-4-6 00-4-5 00-4-6 126.5K I into a final equipm yutisted pair-wire to on, into a final equipm grequires adding tives. For guidan w.meanwell.com) putlined by BS EP or greater rated n	Test Level / Note         Class A         Class A         Class A            Test Level / Note         Level 3, 8KV air ; Level         Level 3, 8KV air ; Level         Level 3, 10V/m ; criteria         Level 3, 1KV/Line-Line ;         Level 3, 1KV/Line-Line ;         Level 3, 1KV/Line-Line ;         Level 3, 30A'm ; criteria A         Level 4, 30A'm ; criteria remains         Level 4, 30A'm ; criteria A         Level 4, 30A'm ; criteria (Comparison)         MIL-HDBK-217         d 25°C of ambient temper         erent. All the EMC tests are in 13°26°30NIZN magnetic ce on how to perform the:         VEN61000-3-2. Please dominal voltage, and	A 2KV/Line-FG ;criter A F (25°C) rature. I7µf parallel capacit been executed by loops or buckles to se EMC tests, plea	tor.				
EMC Note 4 & 5)	EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT special 2. Ripple & noise are measure 3. Tolerance : includes set up 4. The power supply is consid a 360mr360mr metal pla The final equipment must b "EMI testing of component 1. This power supply does not under the following conditio a) the end-devices is used b) the end-devices is connu- c) the power supply is: -i 	I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1160.5K hrs min. 215*115*30mm (L*V, 0.75Kg; 15pcs/12.2: Ily mentioned are me ad at 20MHz of band tolerance, line regul ered a component w et with 1mm of thick e re-confirmed that it power supplies." (as the meet the harmonic ns: within the European ected to public mains nstalled in end-devic belong to part of a lig	FG:100M Ohms / 500 Standard BS EN/EN503 EAC TP TC 02 BS EN/EN503 EAC TP TC 02 Standard BS EN/EN503 EAC TP TC 02 Standard BS EN/EN6100 B	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 0 0 0 0 0 0 -4-2 0 0 -4-3 0 0 -4-3 0 0 -4-5 0 0 -4-5 0 0 -4-6 0 0 -4-8 lcore); 126.5K H put, rated load an wisted pair-wire to on. to a final equipm grequires adding trives. For guidan w.meanwell.com) putlined by BS EP or greater rated n ntinuous input por	Test Level / Note         Class A         Class A         Class A         Class A            Test Level / Note         Level 3, 8KV air ; Level         Level 3, 8KV air ; Level         Level 3, 10V/m ; criteria         Level 3, 2KV ; criteria A         Level 3, 10V/m ; criteria         Level 3, 10V ; criteria A         Level 4, 30Am ; criteria B         Level 4, 30AW ; criteria A         Level 4, 30AW ; criteria A         Level 4, 30AW ; criteria B         eminate with a 0.1µf & 4         went All the EMC tests are 13*26*30NIZN magnetic         vEN61000-3-2. Please do         nominal voltage, and         wer greater than 75W, or	A 2KV/Line-FG ;criter A F (25°C) rature. I7µf parallel capacit been executed by loops or buckles to se EMC tests, plea	tor.				
EMC Note 4 & 5)	EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT specia 2. Ripple & noise are measure 3. Tolerance : includes set up 4. The power supply is consid a 360mm'360mm metal pla The final equipment must b "EMI testing of component 5. This power supply does noi under the following conditio a) the end-devices is used b) the used within	I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1160.5K hrs min. 215*115*30mm (L*V 0.75Kg; 15pcs/12.2 Ily mentioned are me ad at 20MHz of banc tolerance, line regul ered a component wite with 1mm of thick tolerance, line regul ered the harmonic ms: within the European estalled in end-devic belong to part of a lig the following end-ded	FG:100M Ohms / 500 Standard BS EN/EN5503 EAC TP TC 02 BS EN/EN5503 EAC TP TC 02 Standard BS EN/EN6100 BS EN/E	VDC / 25°C/ 70%           32 (CISPR32), 0           32 (CISPR32), 0           32 (CISPR32), 0           32 (CISPR32), 0           0           44           00-4-2           00-4-3           00-4-4           00-4-5           00-4-6           00-4-7           00-4-8           Iccore);         126.5K I           visted pair-wire to on.           nto a final equipm g requires adding vurines adding utimed by BS EN           or greater rated n           or greater rated n           vor greater rated n           vor greater rated n	Test Level / Note         Class A         Class A         Class A         Class A            Test Level / Note         Level 3, 8KV air ; Level         Level 3, 8KV air ; Level         Level 3, 10V/m ; criteria         Level 3, 2KV ; criteria A         Level 3, 10V/m ; criteria         Level 3, 10V ; criteria A         Level 4, 30Am ; criteria B         Level 4, 30AW ; criteria A         Level 4, 30AW ; criteria A         Level 4, 30AW ; criteria B         eminate with a 0.1µf & 4         went All the EMC tests are 13*26*30NIZN magnetic         vEN61000-3-2. Please do         nominal voltage, and         wer greater than 75W, or	A 2KV/Line-FG ;criter A F (25°C) rature. I7µf parallel capacit been executed by loops or buckles to se EMC tests, plea	tor.				
SAFETY & EMC (Note 4 & 5) OTHERS	EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT special 2. Ripple & noise are measure 3. Tolerance : includes set up 4. The power supply is consid a 360mr360mr metal pla The final equipment must b "EMI testing of component 1. This power supply does not under the following conditio a) the end-devices is used b) the end-devices is connu- c) the power supply is: -i 	I/P-O/P, I/P-FG, O/F Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1160.5K hrs min. 215*115*30mm (L*V, 0.75Kg; 15pcs/12.2: Ily mentioned are me and at 20MHz of band tolerance, line regul tolerance, line regul tolerance, ine regul tolerance, i	FG:100M Ohms / 500 Standard BS EN/EN5503 EAC TP TC 02 BS EN/EN5503 EAC TP TC 02 Standard BS EN/EN5003 EAC TP TC 02 Standard BS EN/EN6100 Telcordia SR-332 (Bel V*H) SKg/0.7CUFT assured at 230VAC in width by using a 12* t tation and load regulation the will be installed in ness. Radiation testing still meets EMC distalled in ness. Radiation testing still meets EMC distalled in the will be installed in ness. Radiation testing still meets EMC distalled in the will be installed in ness. Radiation testing still meets EMC distalled in the supply with 220Vac. Union, and s supply with 220Vac. ass with average or cool thring system vices do not need to 1	VDC / 25°C/ 70% 32 (CISPR32), 0 32 (CISPR32), 0 32 (CISPR32), 0 00-4-2 00-4-3 00-4-4 00-4-5 00-4-6 00-4-8 Icore); 126.5K I 00-4-8 Icore); 126.5K I 00-4-8 Icore); 126.5K I 00-4-8 Icore); 507 (Jdan yut, rated load an wisted pair-wire to n. ror a final equipm g requires adding g trives. For guidan wmeanwell.com) butlined by BS Eth or greater rated n ntinuous input por fulfill BS EN/EN61 1000W;	Test Level / Note         Class A         Class A         Class A         Class A            Test Level / Note         Level 3, 8KV air ; Level         Level 3, 8KV air ; Level         Level 3, 1KV/Line-Line ;         Level 3, 1KV/Line-Line ;         Level 3, 10V ; criteria A         Level 3, 10V ; criteria and         Level 4, 30A/m ; criteria and         Level 3, 10V ; criteria A         Level 4, 30A/m ; criteria and         Level 4, 30A/m ; criteria and         Level 3, 10V ; criteria and         Level 4, 30A/m ; criteria and         Level 4	A 2KV/Line-FG ;criter A F (25°C) rature. I7µf parallel capacit been executed by loops or buckles to se EMC tests, plea	tor.				

6. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft). ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

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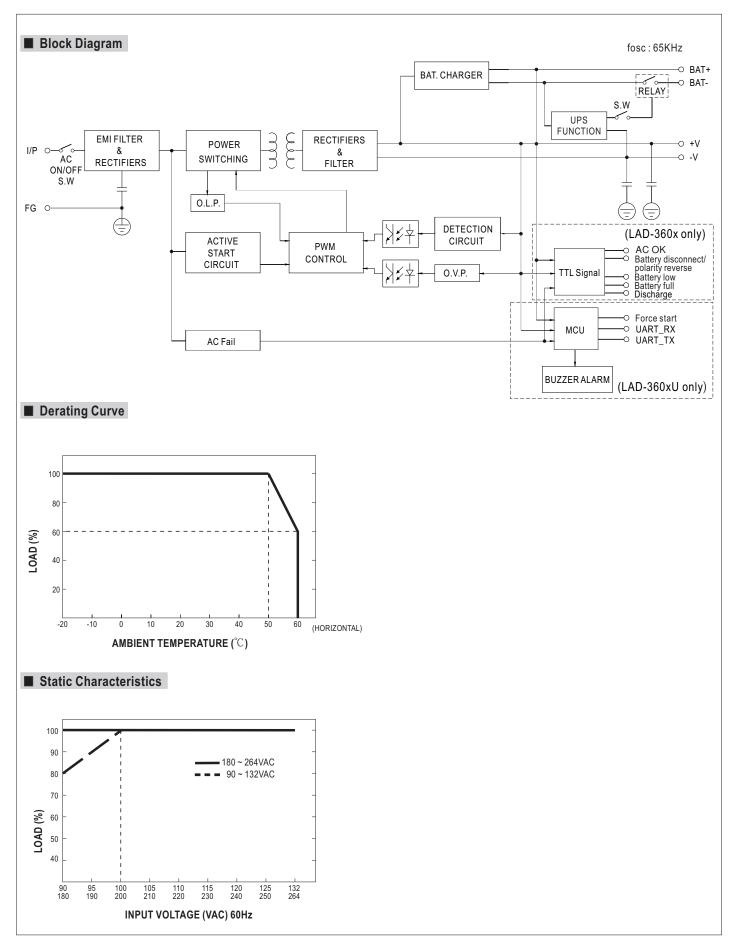
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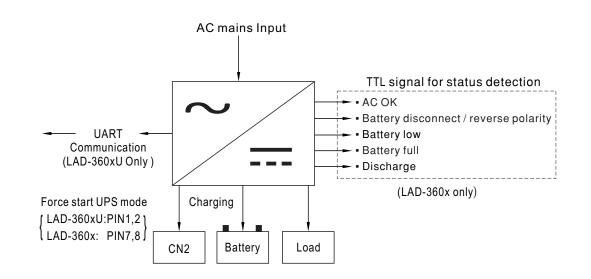
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## Suggested Application

## **1.DC-UPS function**

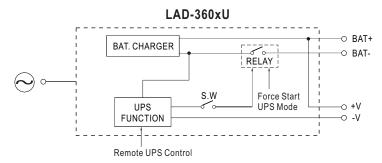
When AC voltage drops below 75/165VAC, The UPS function will activate and power source switch battery backup.



## 2.UART Communication Function (U version only)

The power supply uploads various fault signals, power supply working status, single battery voltage, main voltage, output voltage and output current to the controller through the UART, and changes the power supply working status according to the controller instructions. For details, please refer to the user manual.

## 2.1 Forced Start & Remote UPS Control(U version only)



※ Force start UPS mode:

According to fire safety regulation, UPS power supply must equip with force start UPS function. In case of emergency, maintenance or testing, personal can active the UPS mode of by shorting PIN1 and PIN2 of LAD-360xU to ensure the energy supply to the loads. When operating under UPS mode, the BAT. UVP alarm is still active, but the BAT. UVP protection will be disable, therefore, the battery will be fully discharged until system shuts down.

		2 🗖 🗃 1
Pin 1 & 2	Status	
Short	Forced start	
Open	Normal	16 🔤 📓 15

Note:

1<sup>st</sup> priority of UPS mode: Force start UPS function by internal relay.

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## ※ Remote UPS mode:

According to fire safety regulation, UPS power supply must equip with remote UPS function. So the power supply unit can be linked to the fire alarm system, user's system will be able to detect the status of PIN3 and PIN4 LAD-360xU with UART communication. When PIN 3 and PIN4 is shorted, the power supply will enter remote UPS mode, therefore the UPS mode will be active and the status signal will also send to the fire alarm system for indication. Personal or the system can use the signal as trigger threshold for other alarm systems to decide when and how to enter the emergency sequence. Under this condition, BAT. UVP alarm and protection are still active.

			-
Pin 3 & 4	Status	4 0 0	-
Short	Remote UPS control	8 8	
Open	Normal	0 0	15
		10 477	J

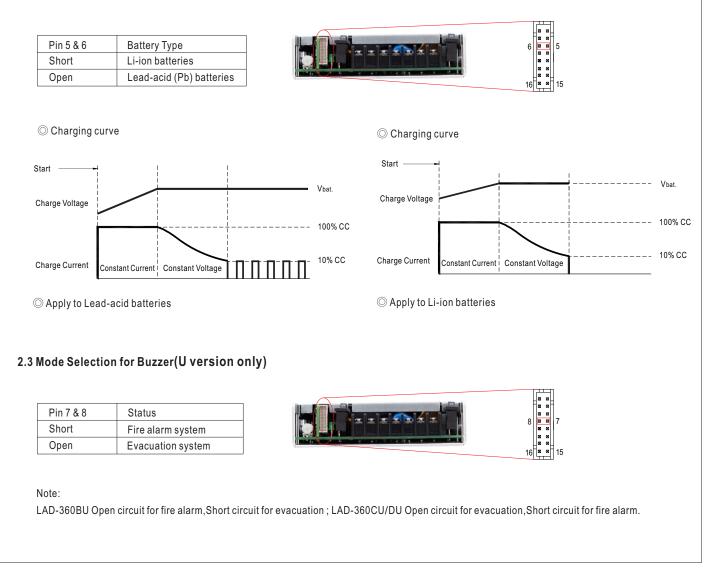
Note:

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 $2^{nd}$  priority of UPS mode: UPS function can be activate by controlling with this signal, since the controller is still normal, the relay can be controlled through communication protocol.

## 2.2 Charging Curve for Different Battery(U version only)

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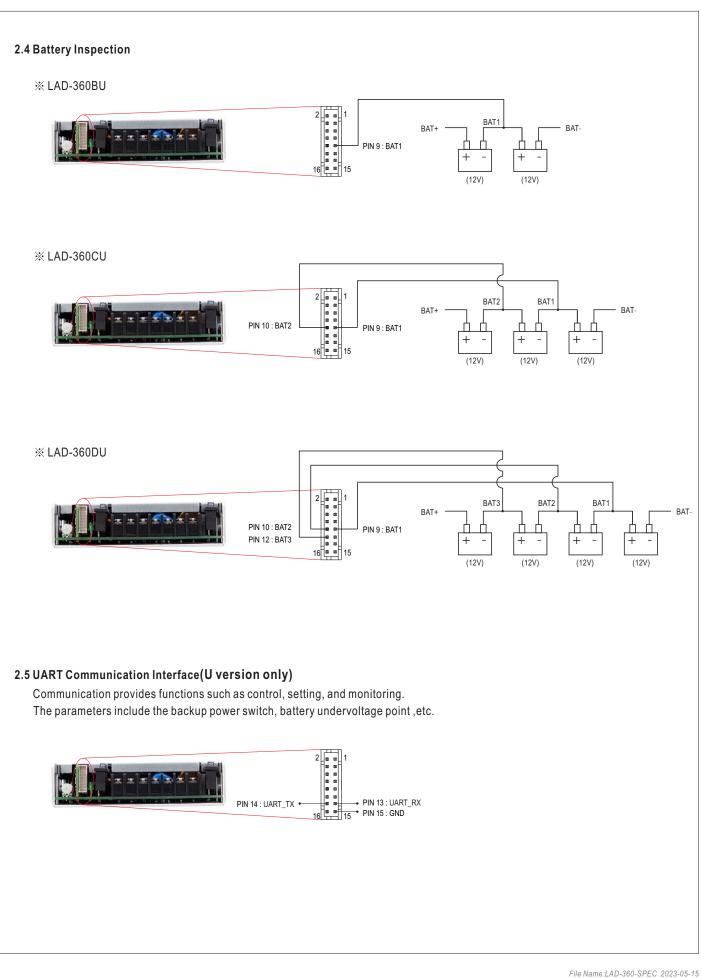
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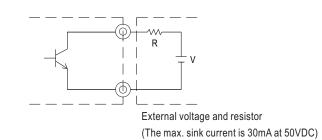


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## 3. Function signals by TTL and UART

- TTL Signal is sent out through pins from CN2.
- External voltage source is required for the TTL signal. The maximum voltage is 50VDC and the maximum sink current is 30mA.



#### 3.1 AC OK : Detection of AC status

• TTL Signal for Blank version

Between pin 1 and pin 4	Description
Low (0.3V max. at 30mA)	The signal is "Low" when the AC input is normal
High or open (External applied voltage 50V max.)	The signal turns to be "High" when the AC input is abnormal



• Signal for UART Version

AC OK is achievable through UART communication protocol, please refer to for more detail: http://www.meanwell.com/manual.html

## 3.2 Battery Disconnected/Reverse Polarity: Battery status detection

• TTL Signal for Blank version

Between pin 2 and pin 4	Description
Low (0.3V max. at 30mA)	The signal is "Low" when the battery is not connected or inversely connected
High or open (External applied voltage 50V max.)	The signal turns to be "High" when the battery is connected or normal



Note. The signals of battery disconnected and reverse polarity can only be detected during the first power transmission, it is can not be detected at any time.

• Signal for UART Version

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Battery Disconnected/Reverse Polarity is achievable through UART communication protocol, please refer to for more detail: <u>http://www.meanwell.com/manual.html</u>

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## 3.3 Battery Low: Battery low detection

• TTL Signal for Blank version

Between pin 3 and pin 4	Description
Low (0.3V max. at 30mA)	The signal is "Low" when the battery is under voltage protected
High or open (External applied voltage 50V max.)	The signal turns to be "High" when the battery is normal



Signal for UART Version
 Battery Low is achievable through UART communication protocol, please refer to for more detail:
 <u>http://www.meanwell.com/manual.html</u>

## 3.4 Battery Full : Battery full detection

• TTL Signal for Blank version

Between pin 4 and pin 5	Description
Low (0.3V max. at 30mA)	The signal is "Low" when the battery is fully charged
High or open (External applied voltage 50V max.)	The signal turns to be "High" when the battery is charged



• Signal for UART Version Battery Full is achievable through UART communication protocol, please refer to for more detail:

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#### 3.5 Discharge: Discharge detection

• TTL Signal for Blank version

Between pin 4 and pin 6	Description
Low (0.3V max. at 30mA)	The signal is "Low" when the power supply is discharging
High or open (External applied voltage 50V max.)	The signal is "High" when the main power is working



 Signal for UART Version
 Discharge is achievable through UART communication protocol, please refer to for more detail: <u>http://www.meanwell.com/manual.html</u>

#### 3.6 Forced Start: Forced start UPS mode

• TTL Signal for Blank version

Pin 7 & 8	Status
Short	Forced start UPS mode
Open	Normal

2 2 1
88-
8 8 8 7

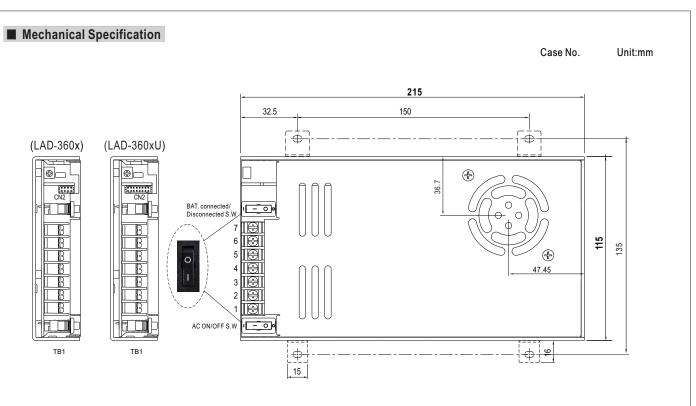
• Signal for UART Version Forced Start is achievable through UART communication protocol,please refer to for more detail: <u>http://www.meanwell.com/manual.html</u>

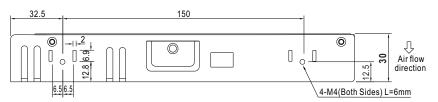
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## % Connector Pin No. Assignment(CN2) (LAD-360x)

Pin No.	Assignment(TTL Signal)	Mating Housing	Terminal
1	AC OK		
2	Battery disconnect/ reverse polarity		
3	Battery low		TKD
4	GND	TKP DH2 or equivalent	TKP or equivalent
5	Battery full	or equivalent	or equivalent
6	Discharge		
7,8	Open : normal Short : forced start UPS mode		

## % Terminal Pin No. Assignment(TB1)

Assignment	
AC/L	
AC/N	
FG 🛓	
DC OUTPUT -V	
DC OUTPUT +V	
BAT -	
BAT +	

⚠

DC OUTPUT -V and BAT - can not be shorted.

#### % Connector Pin No. Assignment(CN2) (LAD-360xU)

Pin No.	Assignment	Mating Housing	Terminal	
1,2	Short : forced start		iort : forced start	
	Open : normal			
3,4	Short : Remote UPS control			
	Open : normal			
5,6	Short : Li- ion batteries			
	Open : Lead-acid (Pb) batteries			
7,8	Fire alarm/ evacuatione option	TKP DH2 or equivalent	ТКР	
9	BAT1		or equivalent	
10	BAT2			
11	NC			
12	BAT3			
13	UART_RX			
14	UART_TX			
15	GND			
16	3.3V			

+3.3V(ref) for testing use only;can't supply power over 1mA for a long time

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## Accessory List

※ Bracket (Optional accessory, Should ordered seperately)

MW's Order No.	Item	Quantity
DGG2MHS012		4pcs/per mode
ation Diagram		
	M4*4	
- 32.5mm -	150mm	-1
6		
		A C C C C C C C C C C C C C C C C C C C
۲	5	
J. J		
č	215mm	
°		
4*M4 L=6 150mm		1

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