



UL62368-1 US TPTC004 AS/NZS62368.1 CB CB CE UK

Features

- · Built-in battery charger 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 $^{\circ}$ 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
- · 3 years warranty

Description

LAD-600 series is a 600W 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 91% and built-in AC, battery switch for easy maintenance. In addition, LAD-600 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	
LAD - 600 B U	
	Blank: TTL signal only U: UART Communication only Output voltage(B: 27.6V, C: 41.5V, D: 55.2V) Rated wattage Series name



Applications

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

GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx



SPECIFICATION FOR TTL FUNCTION MODEL (Blank Version)

		LAD-600B		LAD-600C		LAD-600D	
	OUTPUT NUMBER	CH1 CH	H2	CH1	CH2	CH1	CH2
	DC VOLTAGE		7.6V	41.5V	41.5V	55.2V	55.2V
	RATED CURRENT		A(Battery Charger)			7.87A	3A(Battery Charge
	CURRENT RANGE			0 ~ 14.45A		0~10.87A	
	RATED POWER	600.02W		599.67W		600.02W	
OUTPUT	-						
	RIPPLE & NOISE (max.) Note.2	· · · · ·		360mVp-p		360mVp-p	
	VOLTAGE ADJ. RANGE	CH1: 21.6 ~ 29V		CH1: 32.4 ~ 43.5V	1	Ch1: 43.5 ~ 58V	
	VOLTAGE TOLERANCE Note.3	11.070		±1.0%		±1.0%	
	LINE REGULATION	±0.5%		±0.5%		±0.5%	
	LOAD REGULATION	±0.5%		±0.5%		±0.5%	
	SETUP, RISE TIME	2000ms, 50ms/230VAC	2000ms, 50m	s/115VAC at full load			
	HOLD UP TIME (Typ.)	16ms/230VAC 12m	ns/115VAC at full lo	ad			
	BATTERY STATIC DISCHARGE	<100µA					
	CURRENT	τισμΑ					
	VOLTAGE RANGE	90 ~ 132VAC / 180 ~ 264	4VAC by switch	240~370VDC (D	efault switch at 230VA	AC)	
INPUT	FREQUENCY RANGE	47 ~ 63Hz					
	EFFICIENCY (Typ.)	90%		91%		91%	
	AC CURRENT (Typ.)	12A/115VAC 7.5A/	/230VAC				
	INRUSH CURRENT (Typ.)	COLD START 35A/115	VAC 60A/230V	/AC			
	LEAKAGE CURRENT	<0.5mA Peak / 240VAC					
			CH2:90 ~ 110%				
		Protection type : CH1 OI		v. The unit will enter to	UPS mode when CH	1 is around 105%~1	20%
					f CH1 + CH2 reach arc		
	OVERLOAD Note.4	CH1 OI	LP. CH2 without ba		oltage, re-power on to re		
			,	· ·	oes not affect CH1 wo		matically after fault
DEATEATION					ndatory in series conn		•
PROTECTION					,		, , , , , , , , , , , , , , , , , , , ,
	OVER VOLTAGE Note.4	CH1:31 ~ 36V	oup o/=	CH1:47 ~ 55V		CH1:59~69V	
		Protection type : Shut do		•			
	OVER TEMPERATURE Note.4	Protection type : Shut do	own o/p voltage, re	-power on to removed			
	BATTERY REVERSE POLARITY	Protected when reverse	polarity , no damag	ge, recovers automation	cally after fault condition	on is removed	
	BATTERY CUTOFF	21.5V±0.5V		32V±0.5V		43V±0.5V	
	AC OK	TTL signal, High / Open	: AC Fail ; Low : AC	OK ; Ice : max. 30mA	@ 50VDC		
	BATTERY DISCONNECT/						
	REVERSE POLARITY	TTL signal, High / Open	: Battery connect/n	ormal ; Low : Battery	disconnect/reverse pol	arity; Ice : max. 30m	nA@ 50VDC
FUNCTION	BATTERY LOW	TTL signal, High / Open	: Battery normal ; L	ow : Battery low; Ice :	max. 30mA@ 50VDC		
	BATTERY FULL	TTL signal, High / Open	: Battery charging	: Low : Battery full : Ice	e : max. 30mA@ 50VD	С	
	DISCHARGE	TTL signal, High / Open	, , ,			-	
	WORKING TEMP.						
	WORKING TEMP.	-20 ~ +60°C (Refer to "Derating Curve")					
		20 ~ 95% RH non-condensing					
	WORKING HUMIDITY		ensing				
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-30 ~ +85°C, 10 ~ 95% F	ensing]			
ENVIRONMENT	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C)	ensing RH non-condensing	·			
ENVIRONMENT	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./	ensing RH non-condensing 1cycle, 60min. eacl	h along X, Y, Z axes			
ENVIRONMENT	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6	ensing RH non-condensing 1cycle, 60min. eacl 52368-1,AS/NZS62	h along X, Y, Z axes 368.1, EAC TP TC 004	t approved; Design ref	er to GB 17945-201	0
ENVIRONMENT	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./	ensing RH non-condensing 1cycle, 60min. eacl 52368-1,AS/NZS62	h along X, Y, Z axes 368.1, EAC TP TC 004	4 approved; Design ref	er to GB 17945-201	0
ENVIRONMENT	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6	ensing RH non-condensing 1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC	h along X, Y, Z axes 368.1, EAC TP TC 004 G:0.5KVAC			0
ENVIRONMENT	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-F(ensing RH non-condensing 1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC 5:100M Ohms / 500	h along X, Y, Z axes 368.1, EAC TP TC 004 G:0.5KVAC	t approved; Design ref		0
ENVIRONMENT	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter	ensing RH non-condensing 1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC 5:100M Ohms / 500 Sta BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3	Test Level /		0
ENVIRONMENT	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG	ensing RH non-condensing 1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC 5:100M Ohms / 500 Star BS EAC	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020	Test Level / 2), Class A		0
	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter	ensing RH non-condensing (1cycle, 60min. eac) 52368-1,AS/NZS62 G:2KVAC O/P-FC 6:100M Ohms / 500 Sta BS EAC BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3	Test Level / 2), Class A		0
SAFETY &	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated	ensing RH non-condensing (1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC 5:100M Ohms / 500 Star BS EAC BS EAC	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020	Test Level / 2), Class A 2), Class A		0
SAFETY & EMC	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current	ensing RH non-condensing 1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC 5:100M Ohms / 500 Star BS EAC BS EAC	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020	Test Level / 2), Class A 2), Class A		0
SAFETY & EMC	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated	ensing RH non-condensing (1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC 5:100M Ohms / 500 Star BS EAC BS EAC	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020	Test Level / 2), Class A 2), Class A		0
SAFETY & EMC	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current	ensing RH non-condensing 1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC 5:100M Ohms / 500 Sta BS EAC BS EAC	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020	Test Level / 2), Class A 2), Class A	Note	0
SAFETY & EMC	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker	ensing RH non-condensing 1 cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC G:100M Ohms / 500' Sta BS EAC BS EAC BS EAC Sta Sta	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020	Test Level / 2), Class A 2), Class A Test Level /	Note	
SAFETY & EMC	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter	ensing RH non-condensing 1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC S:100M Ohms / 500' Sta BS EAC BS EAC Sta BS EAC BS EAC BS EAC BS EAC BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8K\	Note	
SAFETY & EMC	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD	ensing RH non-condensing (1cycle, 60min. eac) 32368-1,AS/NZS62 G:2KVAC O/P-FC 3:100M Ohms / 500' Sta BS EAC BS EAC Sta BS Sta BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 ndard EN/EN61000-4-2	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8K\	Note Note / air ; Level 2, 6KV (//m ; criteria A	
SAFETY & EMC	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst	ensing RH non-condensing (1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC G:100M Ohms / 500' Sta BS EAC BS EAC Sta BS BS BS BS BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 ndard EN/EN61000-4-2 EN/EN61000-4-3	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8K\ Level 3, 10V Level 3, 2K\	Note Note / air ; Level 2, 6KV (//m ; criteria A / ; criteria A	contact; criteria A
SAFETY & EMC	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge	ensing RH non-condensing (1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC S:100M Ohms / 500' Sta BS EAC BS EAC SS SS BS BS BS BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 EN/EN61000-4-2 EN/EN61000-4-2 EN/EN61000-4-3 EN/EN61000-4-5	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8K\ Level 3, 10V Level 3, 2K\ Level 3, 1KV Level 3, 1KV	Note Note / air ; Level 2, 6KV o //m ; criteria A / ; criteria A //Line-Line ; 2KV/Lir	contact; criteria A
SAFETY & EMC	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted	ensing RH non-condensing (1cycle, 60min. eacl 32368-1,AS/NZS62 G:2KVAC O/P-FC G:100M Ohms / 500' Stal BS EAC BS EAC SS BS BS BS BS BS BS BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 EN/EN61000-4-3 EN/EN61000-4-3 EN/EN61000-4-3 EN/EN61000-4-5 EN/EN61000-4-6	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8KV Level 3, 10V Level 3, 10V Level 3, 1KV Level 3, 10V Level 3, 10V Level 3, 10V	Note Note / air ; Level 2, 6KV of //m ; criteria A //; criteria A //Line-Line ; 2KV/Lir /; criteria A	contact; criteria A
SAFETY & EMC	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field	ensing RH non-condensing (1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC S:100M Ohms / 500' Stal BS EAC BS EAC Stal BS BS BS BS BS BS BS BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 EN/EN61000-4-3 EN/EN61000-4-3 EN/EN61000-4-4 EN/EN61000-4-5 EN/EN61000-4-6 EN/EN61000-4-8	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8K\ Level 3, 10V Level 3, 2KV Level 3, 1KV Level 3, 1KV Level 3, 10V Level 3, 16V Level 3, 16V Level 3, 16V Level 3, 16V Level 3, 16V	Note Note / air ; Level 2, 6KV o //m ; criteria A //Line-Line ; 2KV/Lir /; criteria A /m ; criteria A	contact; criteria A
SAFETY & EMC (Note 5 & 6)	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC IMMUNITY MTBF	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1154.4K hrs min. Tele	ensing RH non-condensing (1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC 5:100M Ohms / 500 Sta BS EAC BS EAC SS BS BS BS BS BS BS BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 EN/EN61000-4-3 EN/EN61000-4-3 EN/EN61000-4-4 EN/EN61000-4-5 EN/EN61000-4-6	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8K\ Level 3, 10V Level 3, 2KV Level 3, 1KV Level 3, 1KV Level 3, 10V Level 3, 16V Level 3, 16V Level 3, 16V Level 3, 16V Level 3, 16V	Note Note / air ; Level 2, 6KV o //m ; criteria A //Line-Line ; 2KV/Lir /; criteria A /m ; criteria A	contact; criteria A
SAFETY & EMC (Note 5 & 6)	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC IMMUNITY MTBF DIMENSION	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1154.4K hrs min. Tele 225*124*41mm (L*W*H	ensing RH non-condensing (1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FG 3:100M Ohms / 500 Star BS EAC BS EAC BS EAC BS BS BS BS BS BS BS BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 EN/EN61000-4-3 EN/EN61000-4-3 EN/EN61000-4-4 EN/EN61000-4-5 EN/EN61000-4-6 EN/EN61000-4-8	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8K\ Level 3, 10V Level 3, 2KV Level 3, 1KV Level 3, 1KV Level 3, 10V Level 3, 16V Level 3, 16V Level 3, 16V Level 3, 16V Level 3, 16V	Note Note / air ; Level 2, 6KV o //m ; criteria A //Line-Line ; 2KV/Lir /; criteria A /m ; criteria A	contact; criteria A
SAFETY & EMC (Note 5 & 6)	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1154.4K hrs min. Telc 225*124*41mm (L*W*H 1.02Kg; 12pcs/13.5Kg/0	ensing RH non-condensing 1 cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC G:100M Ohms / 500' Sta BS EAC BS EAC BS EAC BS BS BS BS BS BS BS BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 EN/EN61000-4-2 EN/EN61000-4-3 EN/EN61000-4-4 EN/EN61000-4-5 EN/EN61000-4-6 EN/EN61000-4-8 Icore); 169.9K hrs n	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8K\ Level 3, 8K\ Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 4, 30A nin. MIL-HDBK-217	Note Note / air ; Level 2, 6KV (/m ; criteria A /; criteria A //Line-Line ; 2KV/Lir ; criteria A /m ; criteria A F (25°C)	contact; criteria A
SAFETY & EMC Note 5 & 6)	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT specia	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1154.4K hrs min. Telc 225*124*41mm (L*W*H 1.02Kg; 12pcs/13.5Kg/0	ensing RH non-condensing (1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FG 3:100M Ohms / 500 Star BS EAC BS EAC BS EAC BS BS BS BS BS BS BS BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 EN/EN61000-4-2 EN/EN61000-4-2 EN/EN61000-4-3 EN/EN61000-4-5 EN/EN61000-4-6 EN/EN61000-4-8 Icore); 169.9K hrs n pout, rated load and 25	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8KV Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 4, 30A hin. MIL-HDBK-217	Note Note / air ; Level 2, 6KV of //m ; criteria A //; criteria A //Line-Line ; 2KV/Lin // ; criteria A //m ; criteria A F (25°C)	contact; criteria A ne-FG ;criteria A
SAFETY & EMC (Note 5 & 6)	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT specia 2. Ripple & noise are measure	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1154.4K hrs min. Telo 225*124*41mm (L*W*H 1.02Kg; 12pcs/13.5Kg/0 Ily mentioned are measu ed at 20MHz of bandwidd	ensing RH non-condensing (1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC 5:100M Ohms / 500' Sta BS EAC BS EAC BS BS BS BS BS BS BS BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 EN/EN61000-4-2 EN/EN61000-4-2 EN/EN61000-4-3 EN/EN61000-4-5 EN/EN61000-4-6 EN/EN61000-4-8 Icore); 169.9K hrs n put, rated load and 25 wisted pair-wire termi	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8KV Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 4, 30A hin. MIL-HDBK-217	Note Note / air ; Level 2, 6KV of //m ; criteria A //; criteria A //Line-Line ; 2KV/Lin // ; criteria A //m ; criteria A F (25°C)	contact; criteria A ne-FG ;criteria A
SAFETY & EMC (Note 5 & 6)	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT specia	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1154.4K hrs min. Telo 225*124*41mm (L*W*H 1.02Kg; 12pcs/13.5Kg/0 Ily mentioned are measu ed at 20MHz of bandwid tolerance, line regulation	ensing RH non-condensing (1cycle, 60min. eacl 32368-1,AS/NZS62 G:2KVAC O/P-FC G:100M Ohms / 500' Stal BS BS BS BS BS BS BS BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 EN/EN61000-4-2 EN/EN61000-4-2 EN/EN61000-4-3 EN/EN61000-4-3 EN/EN61000-4-4 EN/EN61000-4-5 EN/EN61000-4-8 Icore); 169.9K hrs n Dut, rated load and 25 wisted pair-wire termi on.	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8KV Level 3, 8KV Level 3, 10V Level 3, 10V Level 3, 2KV Level 3, 10V Level 3, 10V Level 3, 10V Level 4, 30A nin. MIL-HDBK-217 "°C of ambient temper nated with a 0.1 μ F δ	Note Note Note / air ; Level 2, 6KV (//m ; criteria A //; criteria A //Line-Line ; 2KV/Lir ; criteria A //m ; criteria A //m ; criteria A F (25°C) rature. & 47 μ F parallel cap	contact; criteria A ne-FG ;criteria A pacitor.
SAFETY & EMC (Note 5 & 6)	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC EMISSION MTBF DIMENSION PACKING 1. All parameters NOT specia 2. Ripple & noise are measur 3. Tolerance : includes set up 4. Once the protection is trigg 5. The power supply is consic	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1154.4K hrs min. Telc 225*124*41mm (L*W*H 1.02Kg; 12pcs/13.5Kg/0 Ily mentioned are measu ed at 20MHz of bandwidt tolerance, line regulation line regulation	ensing RH non-condensing (1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC G:100M Ohms / 500 Sta BS EAC BS EAC BS EAC BS BS BS BS BS BS BS BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 2: TP TC 020 EN/EN55032 (CISPR3 2: TP TC 020 EN/EN55032 (CISPR3 2: TP TC 020 EN/EN61000-4-2 EN/EN61000-4-3 EN/EN61000-4-3 EN/EN61000-4-4 EN/EN61000-4-5 EN/EN61000-4-6 EN/EN61000-4-8 Icore); 169.9K hrs n pout, rated load and 25 wisted pair-wire termion. Dected, and the cold r nto a final equipment.	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8K Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 4, 30A nin. MIL-HDBK-217 '°C of ambient temper nated with a 0.1 μ F δ machine will wait for 3 All the EMC tests are	Note Note / air ; Level 2, 6KV (//m ; criteria A // ; criteria A //Line-Line ; 2KV/Lin ; criteria A //m ; criteria A F (25°C) ature. & 47 µ F parallel cap ; minutes before rese been executed by	contact; criteria A ne-FG ;criteria A pacitor. starting.
SAFETY & EMC (Note 5 & 6)	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC EMISSION EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT specia 2. Ripple & noise are measure 3. Tolerance : includes set up 4. Once the protection is trigg 5. The power supply is consic a 360mm*360mm metal pla	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1154.4K hrs min. Telc 225*124*41mm (L*W*H 1.02Kg; 12pcs/13.5Kg/0 Illy mentioned are measu ed at 20MHz of bandwidt tolerance, line regulation ered, the input voltage me ered at component which	ensing RH non-condensing (1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC 5:100M Ohms / 500 Sta BS EAC BS EAC BS EAC BS BS BS BS BS BS BS BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 EN/EN65032 (CISPR3 C TP TC 020 EN/EN61000-4-3 EN/EN61000-4-2 EN/EN61000-4-3 EN/EN61000-4-4 EN/EN61000-4-5 EN/EN61000-4-6 EN/EN61000-4-8 Icore); 169.9K hrs n exted pair-wire termion. nected, and the cold n to a final equipment. nent must be re-confi	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8K\ Level 3, 10V Level 4, 30A nin. MIL-HDBK-217 "°C of ambient temper nachine will wait for 3 All the EMC tests are rmed that it still meets	Note Note / air ; Level 2, 6KV α //m ; criteria A //; criteria A //Line-Line ; 2KV/Lir /; criteria A //m ; criteria A F (25°C) 	contact; criteria A ne-FG ;criteria A pacitor. starting. r mounting the unit or II the radiation tests
SAFETY & EMC (Note 5 & 6)	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC EMISSION EMC EMISSION MTBF DIMENSION PACKING 1. All parameters NOT specia 2. Ripple & noise are measur 3. Tolerance : includes set up 4. Once the protection is trigg 5. The power supply is conside a 360mm*360mm metal pla require an additional 20*300	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1154.4K hrs min. Telo 225*124*41mm (L*W*H 1.02Kg; 12pcs/13.5Kg/0 Ily mentioned are measu et at 20MHz of bandwidt tolerance, line regulation ered, the input voltage me lered a component which the with 1mm of thickness *13 NIZN magnetic class	ensing RH non-condensing (1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC G:100M Ohms / 500' Stal BS EAC BS BS BS BS BS BS BS BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 EN/EN61000-4-2 EN/EN61000-4-2 EN/EN61000-4-3 EN/EN61000-4-3 EN/EN61000-4-5 EN/EN61000-4-6 EN/EN61000-4-6 EN/EN61000-4-8 Icore); 169.9K hrs n pout, rated load and 25 wisted pair-wire termion. nected, and the cold n to a final equipment. nected, and the cold n to a final equipment. Sector and the cold n to a final equipment. Sector and the cold n to a final equipment. Sector and the cold n to the battery output	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8KV Level 3, 8KV Level 3, 10V Level 4, 30A nin. MIL-HDBK-217 ''C of ambient temper nated with a 0.1 µ F 8 machine will wait for 3 All the EMC tests are ine. For guidance on	Note Note Note / air ; Level 2, 6KV of //m ; criteria A // ; criteria A //Line-Line ; 2KV/Lir /; criteria A /m ; criteria A /m ; criteria A /m ; criteria A F (25°C) ature. & 47 μ F parallel cap & been executed by 5 EMC directives. A how to perform the	contact; criteria A ne-FG ;criteria A pacitor. starting. / mounting the unit or II the radiation tests ese EMC tests,
SAFETY & EMC (Note 5 & 6)	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC EMISSION MTBF DIMENSION PACKING 1. All parameters NOT specia 2. Ripple & noise are measure 3. Tolerance : includes set up 4. Once the protection is trigg 5. The power supply is consic a 360mm*360mm metal pla require an additional 20*30 please refer to "EMI testing	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P.3KVAC I/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1154.4K hrs min. Telo 225*124*41mm (L*W*H 1.02Kg; 12pcs/13.5Kg/0 Ily mentioned are measu ed at 20MHz of bandwid tolerance, line regulation ered, the input voltage ne lered a component whick	ensing RH non-condensing 1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC S:100M Ohms / 500' Sta BS EAC BS BS BS BS BS BS BS BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 EN/EN61000-4-2 EN/EN61000-4-2 EN/EN61000-4-3 EN/EN61000-4-3 EN/EN61000-4-4 EN/EN61000-4-5 EN/EN61000-4-5 EN/EN61000-4-8 Icore); 169.9K hrs n put, rated load and 25 wisted pair-wire termion. nent must be re-confit to the battery output ble on https://www.me	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8KV Level 3, 8KV Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 4, 30A nin. MIL-HDBK-217 "C of ambient temper nated with a 0.1 µ F & machine will wait for 3 All the EMC tests are med that it still meets ine. For guidance on anwell.com//Upload/P	Note Note Note / air ; Level 2, 6KV of //m ; criteria A //; criteria A ///Line-Line ; 2KV/Lir ; criteria A //m ; criteria A	contact; criteria A ne-FG ;criteria A pacitor. starting. r mounting the unit or II the radiation tests ese EMC tests, t_en.pdf)
SAFETY & EMC (Note 5 & 6)	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC EMISSION EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT specia 2. Ripple & noise are measur 3. Tolerance : includes set up 4. Once the protection is trigg 5. The power supply is consic a 360mm*360mm metal pla require an additional 20*30 please refer to "EMI testing 6. This power supply does no under the following condition	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1154.4K hrs min. Tele 225*124*41mm (L*W*H 1.02Kg; 12pcs/13.5Kg/0 Illy mentioned are measu ed at 20MHz of bandwidt tolerance, line regulation ered, the input voltage ne fered a component which ate with 1mm of thickness *13 NIZN magnetic class of component power su t meet the harmonic curr ins:	ensing RH non-condensing (1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC G:100M Ohms / 500 Star BS EAC BS EAC BS EAC BS BS BS BS BS BS BS BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 EN/EN61000-4-2 EN/EN61000-4-2 EN/EN61000-4-3 EN/EN61000-4-3 EN/EN61000-4-4 EN/EN61000-4-5 EN/EN61000-4-5 EN/EN61000-4-8 Icore); 169.9K hrs n put, rated load and 25 wisted pair-wire termion. nent must be re-confit to the battery output ble on https://www.me	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8KV Level 3, 8KV Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 4, 30A nin. MIL-HDBK-217 "C of ambient temper nated with a 0.1 µ F & machine will wait for 3 All the EMC tests are med that it still meets ine. For guidance on anwell.com//Upload/P	Note Note Note / air ; Level 2, 6KV of //m ; criteria A //; criteria A ///Line-Line ; 2KV/Lir ; criteria A //m ; criteria A	contact; criteria A ne-FG ;criteria A pacitor. starting. r mounting the unit or II the radiation tests ese EMC tests, t_en.pdf)
SAFETY & EMC (Note 5 & 6)	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC EMISSION EMC EMISSION MTBF DIMENSION PACKING 1. All parameters NOT specia 2. Ripple & noise are measur 3. Tolerance : includes set up 4. Once the protection is trigg 5. The power supply is conside a a60mm*360mm metal pla require an additional 20*300 please refer to "EMI testing 6. This power supply does no under the following condition a) the end-devices is used	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1154.4K hrs min. Telo 225*124*41mm (L*W*H 1.02Kg; 12pcs/13.5Kg/0 Ily mentioned are measu ed at 20MHz of bandwidd tolerance, line regulation ered, the input voltage mo ered, the input voltage mo ered, the mort mickness *13 NIZN magnetic class of component power su t meet the harmonic curr ins:	ensing RH non-condensing (1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC 5:100M Ohms / 500' Star BS EAC BS BS BS BS BS BS BS BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 2: TP TC 020 EN/EN55032 (CISPR3 2: TP TC 020 EN/EN61000-4-2 EN/EN61000-4-2 EN/EN61000-4-3 EN/EN61000-4-4 EN/EN61000-4-5 EN/EN61000-4-6 EN/EN61000-4-6 EN/EN61000-4-8 Icore); 169.9K hrs n pout, rated load and 25 wisted pair-wire termion. nected, and the cold ri- to a final equipment. nected, and the cold ri- to the battery output ble on https://www.me putlined by BS EN/EN	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8KV Level 3, 8KV Level 3, 10V Level 4, 30A nin. MIL-HDBK-217 ''C of ambient temper nated with a 0.1 µ F 8 machine will wait for 3 All the EMC tests are ine. For guidance on anwell.com//Upload/P l61000-3-2. Please do	Note Note Note / air ; Level 2, 6KV of //m ; criteria A //; criteria A ///Line-Line ; 2KV/Lir ; criteria A //m ; criteria A	contact; criteria A ne-FG ;criteria A pacitor. starting. r mounting the unit or II the radiation tests ese EMC tests, t_en.pdf)
SAFETY & EMC (Note 5 & 6)	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT specia 2. Ripple & noise are measur 3. Tolerance : includes set up 4. Once the protection is trigg 5. The power supply is consic a 360mm*360mm metal pla require an additional 20*300 please refer to "EMI testing 6. This power supply does no under the following conditic a) the end-devices is used b) the end-devices is used b) the end-devices is com	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P. I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1154.4K hrs min. Telo 225*124*41mm (L*W*H 1.02Kg; 12pcs/13.5Kg/0 Ily mentioned are measu ed at 20MHz of bandwid tolerance, line regulation ered, the input voltage ne lered a component which tate with 1mm of thickness of component power su t meet the harmonic curr ins: within the European Uni	ensing RH non-condensing 1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC S:100M Ohms / 500' Sta BS EAC BS EAC BS BS BS BS BS BS BS BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 EN/EN61000-4-2 EN/EN61000-4-2 EN/EN61000-4-3 EN/EN61000-4-3 EN/EN61000-4-3 EN/EN61000-4-4 EN/EN61000-4-5 EN/EN61000-4-6 EN/EN61000-4-8 ICore); 169.9K hrs n Deut, rated load and 25 wisted pair-wire termion. net must be re-confit to the battery output be on https://www.me boutlined by BS EN/EN Drogreater rated nomin	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8KV Level 3, 8KV Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 4, 30A nin. MIL-HDBK-217 "C of ambient temper nated with a 0.1 µ F & machine will wait for 3 All the EMC tests are med that it still meets ine. For guidance on ianwell.com//Upload/P ine. Com//Upload/P i61000-3-2. Please do nal voltage, and	Note Note Note / air ; Level 2, 6KV of //m ; criteria A //; criteria A ///Line-Line ; 2KV/Lir ; criteria A //m ; criteria A	contact; criteria A ne-FG ;criteria A pacitor. starting. r mounting the unit or II the radiation tests ese EMC tests, t_en.pdf)
SAFETY & EMC (Note 5 & 6)	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC EMISSION EMC EMISSION MTBF DIMENSION PACKING 1. All parameters NOT specia 2. Ripple & noise are measur 3. Tolerance : includes set up 4. Once the protection is trigg 5. The power supply is consic a 360mm*360mm metal pla require an additional 20*300 please refer to "EMI testing 6. This power supply does no under the following conditic a) the end-devices is used b) the end-devices is conn c) the power supply is:	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P. I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1154.4K hrs min. Telo 225*124*41mm (L*W*H 1.02Kg; 12pcs/13.5Kg/0 Ily mentioned are measu ed at 20MHz of bandwid tolerance, line regulation ered, the input voltage ne lered a component which tate with 1mm of thickness of component power su t meet the harmonic curr ins: within the European Uni	ensing RH non-condensing (1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC G:100M Ohms / 500 Sta BS EAC BS EAC BS BS BS BS BS BS BS BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 EN/EN61000-4-2 EN/EN61000-4-2 EN/EN61000-4-3 EN/EN61000-4-3 EN/EN61000-4-3 EN/EN61000-4-4 EN/EN61000-4-5 EN/EN61000-4-6 EN/EN61000-4-8 ICore); 169.9K hrs n Deut, rated load and 25 wisted pair-wire termion. net must be re-confit to the battery output be on https://www.me boutlined by BS EN/EN Drogreater rated nomin	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8KV Level 3, 8KV Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 4, 30A nin. MIL-HDBK-217 "C of ambient temper nated with a 0.1 µ F & machine will wait for 3 All the EMC tests are med that it still meets ine. For guidance on ianwell.com//Upload/P ine. Com//Upload/P i61000-3-2. Please do nal voltage, and	Note Note Note / air ; Level 2, 6KV of //m ; criteria A //; criteria A ///Line-Line ; 2KV/Lir ; criteria A //m ; criteria A	contact; criteria A ne-FG ;criteria A pacitor. starting. r mounting the unit or II the radiation tests ese EMC tests, t_en.pdf)
ENVIRONMENT SAFETY & EMC (Note 5 & 6) OTHERS	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC EMISSION EMC EMISSION MTBF DIMENSION PACKING 1. All parameters NOT specia 2. Ripple & noise are measur 3. Tolerance : includes set up 4. Once the protection is trigg 5. The power supply is consic a 360mm*360mm metal pla require an additional 20*30 please refer to "EMI testing 6. This power supply does no under the following conditic a) the end-devices is used b) the end-devices is used b) the end-devices is used b) the end-devices is conn c) the power supply is: - i Exception: Power supply is:	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P, I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1154.4K hrs min. Telc 225*124*41mm (L*W*H 1.02Kg; 12pcs/13.5Kg/0 Ily mentioned are measu ed at 20MHz of bandwidt tolerance, line regulation ered, the input voltage nd ate with 1mm of thickness *13 NIZN magnetic class of component power su t meet the harmonic curr installed in end-devices v within the European Uni ected to public mains su installed in end-devices v within the following	ensing RH non-condensing (1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC 5:100M Ohms / 500' Sta BS EAC BS EAC BS BS BS BS BS BS BS BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 2: TP TC 020 EN/EN55032 (CISPR3 2: TP TC 020 EN/EN65032 (CISPR3 2: TP TC 020 EN/EN61000-4-2 EN/EN61000-4-3 EN/EN61000-4-3 EN/EN61000-4-4 EN/EN61000-4-5 EN/EN61000-4-6 EN/EN61000-4-6 EN/EN61000-4-8 Icore); 169.9K hrs n pout, rated load and 25 wisted pair-wire termion. nected, and the cold r to a final equipment. nent must be re-confit to the battery output be on https://www.me poutlined by BS EN/EN por greater rated nomin ntinuous input power ot need to fulfill BS E	Test Level / 2), Class A Test Level / Level 3, 8K Level 3, 8K Level 3, 10V Level 4, 30A nin. MIL-HDBK-217 ''C of ambient temper nated with a 0.1 μ F & machine will wait for 3 All the EMC tests are rmed that it still meets line. For guidance on anwell.com//Upload/P l61000-3-2. Please do nal voltage, and greater than 75W, or	Note Note Note / air ; Level 2, 6KV of //m ; criteria A //; criteria A ///Line-Line ; 2KV/Lir ; criteria A //m ; criteria A	contact; criteria A ne-FG ;criteria A pacitor. starting. r mounting the unit or II the radiation tests ese EMC tests, t_en.pdf)
SAFETY & EMC (Note 5 & 6)	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC EMISSION MTBF DIMENSION PACKING 1. All parameters NOT specia 2. Ripple & noise are measure 3. Tolerance : includes set up 4. Once the protection is trigg 5. The power supply is consic a 360mm*360mm metal pla require an additional 20*300 please refer to "EMI testing 6. This power supply does no under the following conditic a) the end-devices is used b) the end-devices is used c) the power supply is: - i Exception: Power supplies a) professional	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P. I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1154.4K hrs min. Telo 225*124*41mm (L*W*H 1.02Kg; 12pcs/13.5Kg/0 Ily mentioned are measu ed at 20MHz of bandwidt tolerance, line regulation ered, the input voltage me lered a component whick tolerance, line regulation ered, the input voltage me lered a component whick tolerance, line regulation ered, the input voltage me lered a component whick tolerance, line regulation ered, the input voltage me lered a component whick tolerance da componen	ensing RH non-condensing 1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC S:100M Ohms / 500' Sta BS EAC BS BS BS BS BS BS BS BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 3:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 EN/EN61000-4-2 EN/EN61000-4-3 EN/EN61000-4-3 EN/EN61000-4-3 EN/EN61000-4-4 EN/EN61000-4-5 EN/EN61000-4-5 EN/EN61000-4-8 ICore); 169.9K hrs n Deut, rated load and 25 wisted pair-wire termion. nent must be re-confit to the battery output be on https://www.me butlined by BS EN/EN por greater rated nomin ntinuous input power ot need to fulfill BS E eater than 1000W;	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8KV Level 3, 8KV Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 4, 30A nin. MIL-HDBK-217 "°C of ambient temper nated with a 0.1 µ F & machine will wait for 3 All the EMC tests are med that it still meets line. For guidance on anwell.com//Upload/P i61000-3-2. Please do nal voltage, and greater than 75W, or N/EN61000-3-2	Note Note Note / air ; Level 2, 6KV of //m ; criteria A //; criteria A ///Line-Line ; 2KV/Lir ; criteria A //m ; criteria A	contact; criteria A ne-FG ;criteria A pacitor. starting. r mounting the unit or II the radiation tests ese EMC tests, t_en.pdf)
SAFETY & EMC (Note 5 & 6)	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC EMISSION MTBF DIMENSION PACKING 1. All parameters NOT specia 2. Ripple & noise are measure 3. Tolerance : includes set up 4. Once the protection is trigg 5. The power supply is consic a 360mm*360mm metal pla require an additional 20*300 please refer to "EMI testing 6. This power supply does no under the following conditic a) the end-devices is used b) the end-devices is used c) the power supply is: - i Exception: Power supplies a) professional	-30 ~ +85°C, 10 ~ 95% F ±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./ UL62368-1, BS EN/EN6 I/P-O/P:3KVAC I/P-FG I/P-O/P. I/P-FG, O/P-FG Parameter Conducted Radiated Harmonic Current Voltage Flicker Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field 1154.4K hrs min. Telc 225*124*41mm (L*W*H 1.02Kg; 12pcs/13.5Kg/0 Ily mentioned are measu ed at 20MHz of bandwidt tolerance, line regulation tolerance, line regulation tered, the input voltage ne lered a component which ate with 1mm of thickness *13 NIZN magnetic clarg of component power su t meet the harmonic curr ms: within the European Uni ected to public mains su installed in end-devices w belong to part of a lightin used within the following equipment with a total rat controlled heating eleme	ensing RH non-condensing (1cycle, 60min. eacl 52368-1,AS/NZS62 G:2KVAC O/P-FC G:100M Ohms / 500 Sta BS EAC BS EAC BS BS BS BS BS BS BS BS BS BS	h along X, Y, Z axes 368.1, EAC TP TC 004 S:0.5KVAC VDC / 25°C/ 70% RH ndard EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 EN/EN55032 (CISPR3 C TP TC 020 EN/EN61000-4-2 EN/EN61000-4-3 EN/EN61000-4-3 EN/EN61000-4-3 EN/EN61000-4-4 EN/EN61000-4-5 EN/EN61000-4-6 EN/EN61000-4-6 EN/EN61000-4-8 EN/EN61000-4-8 EN/EN61000-4-8 EN/EN61000-4-8 EN/EN61000-4-8 EN/EN61000-4-8 EN/EN61000-4-8 EN/EN61000-4-9 EN/EN6100-4-9 EN/EN6100-	Test Level / 2), Class A 2), Class A Test Level / Level 3, 8KV Level 3, 8KV Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 3, 10V Level 4, 30A nin. MIL-HDBK-217 36°C of ambient temper nated with a 0.1 μ F & machine will wait for 3 All the EMC tests are med that it still meets line. For guidance on anwell.com//Upload/P 461000-3-2. Please do nal voltage, and greater than 75W, or N/EN61000-3-2 ual to 200W 200W	Note Note Note / air ; Level 2, 6KV of //m ; criteria A // criteria A //Line-Line ; 2KV/Lir /; criteria A //m ;	contact; criteria A ne-FG ;criteria A pacitor. starting. / mounting the unit o II the radiation tests ese EMC tests, t_en.pdf) ar supply



600W Economical Security/Fire Alarm PSU with Battery Charger/UPS

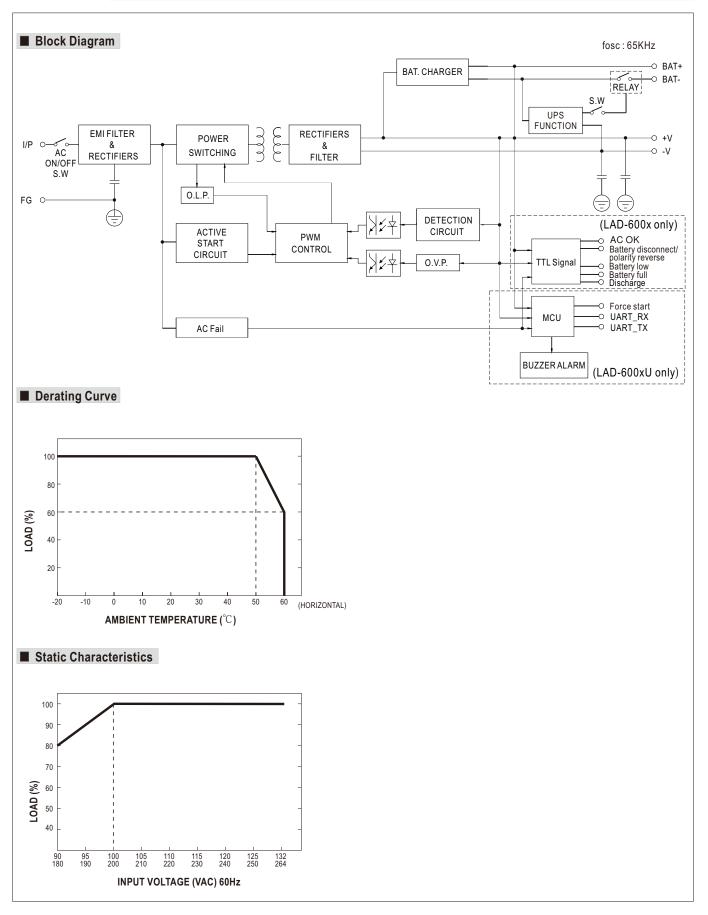
LAD-600 series

SPECIFICATION FOR UART COMMUNICATION FUNCTION MODEL (U Version) LAD-600BU MODEL LAD-600CU LAD-600DU **OUTPUT NUMBER** CH1 CH2 CH1 CH2 CH1 CH2 DC VOLTAGE 27 6V 41 5V 55 2V 27 6V 41 5V 55 2V RATED CURRENT 18.74A 3A(Battery Charger) 11.45A 3A(Battery Charger) 7.87A 3A(Battery Charger) CURRENT RANGE 0~21.74A 0~10.87A 0~14.45A RATED POWER 600.02W 599.67W 600.02W RIPPLE & NOISE (max.) Note.2 270mVp-p 360mVp-p 360mVp-p OUTPUT VOLTAGE ADJ. RANGE CH1·216~29V CH1: 32 4 ~ 43 5V CH1: 43.5 ~ 58V VOLTAGE TOLERANCE Note.3 ±1.0% ±1.0% ±1.0% LINE REGULATION +0.5%+0.5%+0.5%-----LOAD REGULATION ±0.5% ±0.5% ±0.5% 2000ms, 50ms/230VAC SETUP, RISE TIME 2000ms, 50ms/115VAC at full load HOLD UP TIME (Typ.) 16ms/230VAC 12ms/115VAC at full load BATTERY STATIC DISCHARGE <100µA CURRENT 90 ~ 132VAC / 180 ~ 264VAC by switch **VOLTAGE RANGE** 240 ~ 370VDC (Default switch at 230VAC) FREQUENCY RANGE 47 ~ 63Hz EFFICIENCY (Typ.) 90% 91% 91% INPUT AC CURRENT (Typ.) 12A/115VAC 7.5A/230VAC INRUSH CURRENT (Typ.) COLD START 35A/115VAC 60A/230VAC LEAKAGE CURRENT <0.5mA Peak / 240VAC CH1:105~135% CH2.90 ~ 110% Protection type : CH1 OLP, CH2 with battery: The unit will enter to UPS mode when CH1 is around 105%~120%, OVERLOAD when total output of CH1 + CH2 reach around 125%~135% output shuts down Note.4 CH1 OLP, CH2 without battery:Shut down o/p voltage,re-power on to removed CH2 : Constant current limiting; fault condition does not affect CH1 working, recovers automatically after fault condition is removed (External fuse is mandatory in series connection with battery for protection) PROTECTION CH1:59~69V CH1:31~36V CH1:47~55V OVER VOLTAGE Note.4 Protection type : Shut down o/p voltage, re-power on to removed OVER TEMPERATURE Note.4 Protection type : Shut down o/p voltage, re-power on to removed BATTERY REVERSE POLARITY Protected when reverse polarity , no damage, recovers automatically after fault condition is removed **BATTERY CUTOFF** 21 5V+0 5V 32V±0.5V 43V+0.5V115VAC Input : Signals AC failure and activates when input voltage <75VAC Recover the main power supply when input voltage >87VAC AC OK 230VAC Input : Signals AC failure and activates when input voltage <165VAC FUNCTION Recover the main power supply when input voltage >175VAC Battery disconnected, battery reverse polarity , signal failure **CHARGER CIRCUIT FAIL** Battery low(fire alarm system selectable by UART) **BUZZER ALARM** AC fail, Battery low, battery disconnected, battery reverse connect, overload status (evacuation system selectable by UART) -20 ~ +60°C (Refer to "Derating Curve") WORKING TEMP. 20~95% RH non-condensing WORKING HUMIDITY -30 ~ +85°C, 10 ~ 95% RH non-condensing STORAGE TEMP., HUMIDITY ENVIRONMENT TEMP. COEFFICIENT ±0.03%/°C (0 ~ 50°C) VIBRATION 10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes SAFETY STANDARDS 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 ISOLATION RESISTANCE I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH Parameter Standard Test Level / Note BS EN/EN55032 (CISPR32), Conducted Class A EAC TP TC 020 EMC EMISSION BS EN/EN55032 (CISPR32). **SAFETY &** Radiated Class A EAC TP TC 020 EMC Harmonic Current (Note 5 & 6) Voltage Flicker Parameter Standard Test Level / Note ESD BS EN/EN61000-4-2 Level 3, 8KV air ; Level 2, 6KV contact; criteria A Radiated BS EN/EN61000-4-3 Level 3. 10V/m : criteria A EFT / Burst BS EN/EN61000-4-4 Level 3, 2KV ; criteria A **EMC IMMUNITY** BS EN/EN61000-4-5 Surge Level 3, 1KV/Line-Line ;2KV/Line-FG ;criteria A BS EN/EN61000-4-6 Conducted Level 3, 10V ; criteria A Magnetic Field BS EN/EN61000-4-8 Level 4, 30A/m ; criteria A MTBF 1019.6K hrs min. Telcordia SR-332 (Bellcore); MIL-HDBK-217F (25°C) 144.4K hrs min. OTHERS DIMENSION 225*124*41mm (L*W*H) 1.02Kg; 12pcs/13.5Kg/0.78CUFT PACKING All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μ F & 47 μ F parallel capacitor. Tolerance : includes set up tolerance, line regulation and load regulation. Once the protection is triggered, the input voltage needs to be disconnected, and the cold machine will wait for 3 minutes before restarting. 5. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. All the radiation tests require an additional 20*30*13 NIZN magnetic clasp or magnetic ring to the battery output line. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf 6.This power supply does not meet the harmonic current requirements outlined by BS EN/EN61000-3-2. Please do not use this power supply NOTE under the following conditions: a) the end-devices is used within the European Union, and b) the end-devices is connected to public mains supply with 220Vac or greater rated nominal voltage, and c) the power supply is: - installed in end-devices with average or continuous input power greater than 75W, or - belong to part of a lighting system Exception: Power supplies used within the following end-devices do not need to fulfill BS EN/EN61000-3-2 a) professional equipment with a total rated input power greater than 1000W; b) symmetrically controlled heating elements with a rated power less than or equal to 200W 7. 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). X Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx



600W Economical Security/Fire Alarm PSU with Battery Charger/UPS

LAD-600 series

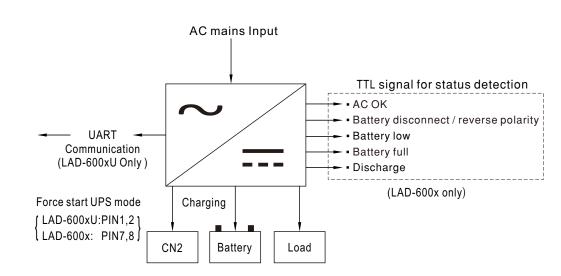




Suggested Application

1.DC-UPS function

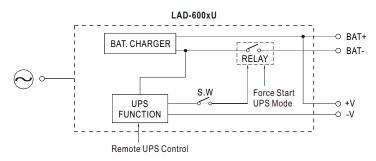
When AC voltage drops below 75/165VAC, The UPS function will activate and power source switch battery backup.



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-600xU 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 8 1
Pin 1 & 2	Status		
Short	Forced start		
Open	Normal		16 8 8 15
		-	

Note:

1st priority of UPS mode: Force start UPS function by internal relay.



[™] 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-600xU with UART communication. When PIN 3 and PIN 4 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.

Pi	n 3 & 4	Status	
Sł	nort	Remote UPS control	
O	pen	Normal	



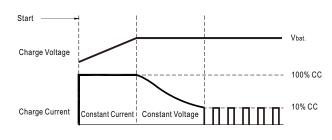
Note:

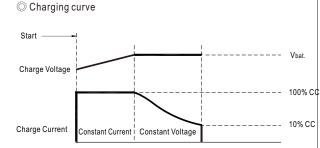
2nd priority of UPS mode: UPS function can be activate by controlling with this signal, since the controller is still normal, the relay can be controlled through communication protocol.

2.2 Charging Curve for Different Battery(U version only)









O Apply to Li-ion batteries

2.3 Mode Selection for Buzzer(U version only)

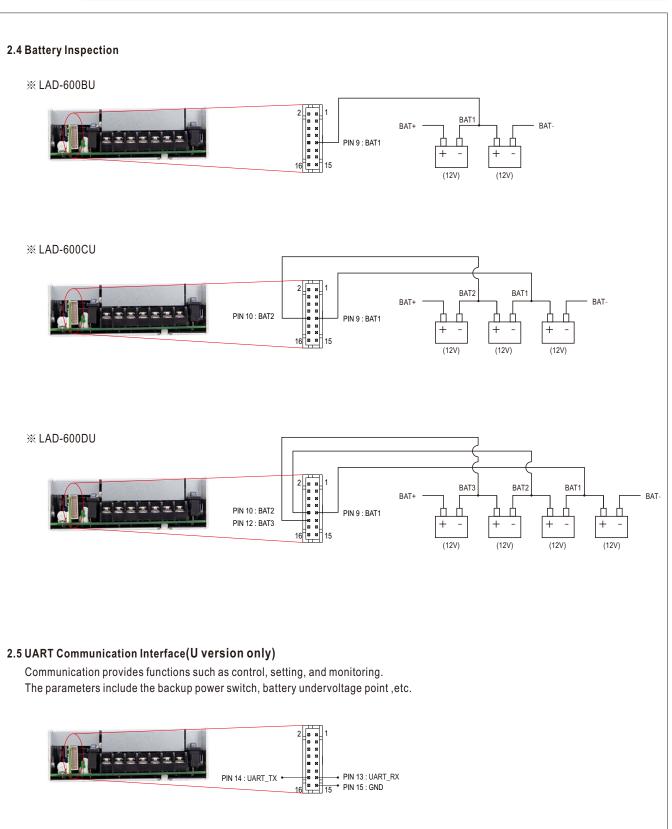
O Apply to Lead-acid batteries



Note:

LAD-600BU Open circuit for fire alarm, Short circuit for evacuation ; LAD-600CU/DU Open circuit for evacuation, Short circuit for fire alarm.

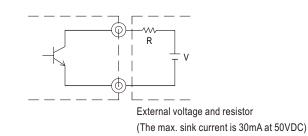






3. Function signals by TTL and UART

- 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

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



LAD-600 series

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

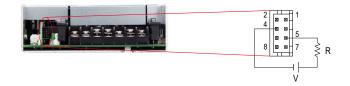


Signal for UART Version
Battery Low is achievable through UART communication protocol,please refer to for more detail:
<u>http://www.meanwell.com/manual.html</u>

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: <u>http://www.meanwell.com/manual.html</u>



LAD-600 series

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

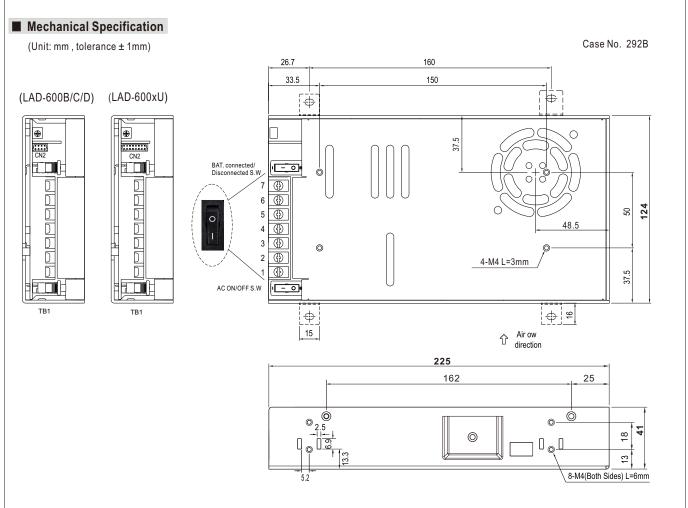
Pin 7 & 8	Status
Short	Forced start UPS mode
Open	Normal

	0	_	— 4
e	2	8	a 1
w w w		⊠	ø -
		⊠	8
	8	8	8 7
		8	

• 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>





% Connector Pin No. Assignment(CN2) (LAD-600x)

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

% Terminal Pin No. Assignment(TB1)

Pin No.	Assignment	
1	AC/L	
2	AC/N	
3	FG ±	
4	DC OUTPUT -V	
5	DC OUTPUT +V	
6	BAT -	
7	BAT +	

 \triangle

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

% Connector Pin No. Assignment(CN2) (LAD-600xU)

Pin No.	Assignment	Mating Housing	Terminal
1,2	Short : forced start		TKP DHT-1S(LF) or equivalent
1,2	Open : normal		
3,4	Short : Remote UPS control		
5,4	Open : normal		
FC	Short : Li- ion batteries		
5,6	Open : Lead-acid (Pb) batteries		
7,8	Fire alarm/ Evacuatione option		
9	BAT1		
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



