

























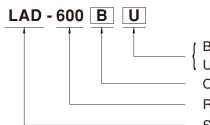


- Built-in battery charger UPS function
- · TTL signals for status detection: AC OK, Battery disconnect, Battery reverse polarity, Battery low, Battery full and Discharge (Blank version only)
- UART Communication (U version only)
- Built-in buzzer alarm (U version only)
- Built-in AC and battery circuit 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°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



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)

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

MODEL		LAD-600B		LAD-600C		LAD-600D	
	OUTPUT NUMBER	CH1	CH2	CH1	CH2	CH1	CH2
	DC VOLTAGE	27.6V	27.6V	41.5V	41.5V	55.2V	55.2V
	RATED CURRENT	18.74A	3A(Battery Charger)		3A(Battery Charger)		3A(Battery Charge
	CURRENT RANGE	0 ~ 21.74A		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		Ch1: 43.5 ~ 58V	
	VOLTAGE ADJ. RANGE VOLTAGE TOLERANCE Note.3				I		
		21.070		±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, 50ms/115VAC at full load					
	HOLD UP TIME (Typ.)	16ms/230VAC	12ms/115VAC at full lo	oad			
	BATTERY STATIC DISCHARGE CURRENT	<100µA					
	VOLTAGE RANGE	00 - 122\/AC / 190 -	264VAC by awitab	240 - 270VDC (D	ofault awitab at 220\/	A C \	
		90 ~ 132VAC / 180 ~	264 VAC by Switch	240 ~ 370VDC (D	efault switch at 230VA	40)	
INPUT	FREQUENCY RANGE	47 ~ 63Hz				91%	
	EFFICIENCY (Typ.)	90%	90% 91%				
	AC CURRENT (Typ.)	12A/115VAC 7	5A/230VAC				
	INRUSH CURRENT (Typ.)	COLD START 35A/	115VAC 60A/230	VAC			
	LEAKAGE CURRENT	<0.5mA Peak / 240\	/AC				
PROTECTION	OVERLOAD Note.4	CH:	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%, when total output of CH1 + CH2 reach around 125%~135% output shuts down 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)				
	OVER VOLTAGE Note.4	CH1:31 ~ 36V		CH1:47 ~ 55V		CH1:59 ~ 69V	
	OVER VOLINGE HOLE.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±0.5V	
	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/normal ; Low : Battery disconnect/reverse polarity; Ice : max. 30mA@ 50VDC					
FUNCTION	BATTERY LOW	TTL signal, High / Open : Battery normal ; Low : Battery low; Ice : max. 30mA@ 50VDC					
	BATTERY FULL	TTL signal, High / Open : Battery charging ; Low : Battery full ; Ice : max. 30mA@ 50VDC					
	DISCHARGE	TTL signal, High / Open : Charge ; Low : Discharge ; Ice : max. 30mA@ 50VDC					
	WORKING TEMP.	-20 ~ +60°C (Refer to "Derating Curve")					
	WORKING HUMIDITY	20 ~ 95% RH non-condensing					
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-30 ~ +85°C, 10 ~ 95% RH non-condensing					
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)
	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 / 500	OVDC / 25°C/ 70% RH			
		Parameter	Sta	indard	Test Level /	Note	
		Conducted		EN/EN55032 (CISPR3 C TP TC 020	2), Class A		
SAFETY& EMC	EMC EMISSION	Radiated		EN/EN55032 (CISPR3 C TP TC 020	2), Class A		
(Note 5 & 6)		Harmonic Current		-			
		Voltage Flicker		-			
		Parameter	Sta	ındard	Test Level /	Note	
		ESD	BS	EN/EN61000-4-2	Level 3, 8K\	vair; Level 2, 6KV o	contact; criteria A
		Radiated	BS	EN/EN61000-4-3	Level 3, 10V	//m ; criteria A	
	EMC IMMUNITY	EFT / Burst	BS	EN/EN61000-4-4	Level 3, 2K\	/ ; criteria A	
	EMC IMMUNITY	Surge		EN/EN61000-4-5		//Line-Line ; 2KV/Lin	e-FG :criteria A
		Conducted		EN/EN61000-4-6	Level 3, 10V		z . o jontona / t
						•	
		Magnetic Field	BS	EN/EN61000-4-8		/m ; criteria A	
	WIRE	44=4 455	MTBF 1154.4K hrs min. Telcordia SR-332 (Bellcore); 169.9K hrs min. MIL-HDBK-217F (2				
			`	llcore); 169.9K hrs m	nin. MIL-HDBK-217	F (25°C)	
OTHERS	MTBF DIMENSION	1154.4K hrs min. 225*124*41mm (L*V 1.02Kg; 12pcs/13.5k	V*H)	llcore); 169.9K hrs n	nin. MIL-HDBK-217	F (25°C)	

- 3. Tolerance : includes set up tolerance, line regulation and load regulation.
- 4. 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 http://www.meanwell.com)

 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 under the following conditions:
 - a) the end-devices is used within the European Union, and

NOTE

- b) the end-devices is scennected 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).
- ※ Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx



SPECIFICATION FOR UART COMMUNICATION FUNCTION MODEL (U Version)

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

MODEL		LAD-600BU		LAD-600CU		LAD-600DU		
	OUTPUT NUMBER	CH1	CH2	CH1	CH2	CH1	CH2	
	DC VOLTAGE	27.6V	27.6V	41.5V	41.5V	55.2V	55.2V	
	RATED CURRENT	18.74A	3A(Battery Charger)	11.45A	3A(Battery Charger)	7.87A	3A(Battery Charge	
	CURRENT RANGE	0 ~ 21.74A		0 ~ 14.45A		0 ~ 10.87A		
	RATED POWER	600.02W		599.67W		600.02W		
	RIPPLE & NOISE (max.) Note.2			360mVp-p		360mVp-p		
OUTPUT	VOLTAGE ADJ. RANGE	CH1: 21.6 ~ 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%		
	SETUP, RISE TIME	2000ms, 50ms/230VAC 2000ms, 50ms/115VAC at full load						
	HOLD UP TIME (Typ.)	16ms/230VAC	16ms/230VAC 12ms/115VAC at full load					
	BATTERY STATIC DISCHARGE CURRENT	<100µA						
	VOLTAGE RANGE	90 ~ 132VAC / 180 ~	264VAC by switch	240 ~ 370VDC (D	efault switch at 230V/	AC)		
	FREQUENCY RANGE	47 ~ 63Hz	20 TV/TO by Ownton	210 010120 (2	oldan ownon at 2007	10)		
	EFFICIENCY (Typ.)			040/		040/		
INPUT	AC CURRENT (Typ.)	90%	E A /220\ / A C	91%		91%		
	() ()		5A/230VAC					
	INRUSH CURRENT (Typ.)	COLD START 35A/1		VAC				
	LEAKAGE CURRENT	<0.5mA Peak / 240\						
		CH1:105 ~ 135%	CH2:90 ~ 110%	T. 10 10 0 0	1100 1 1 011	4: 14050/	1000/	
	OVER OAR	Protection type : CH	1 OLP, CH2 with batte	ry: The unit will enter to				
	OVERLOAD Note.4	0114	1 OLD OLIO		f CH1 + CH2 reach ard		output snuts down	
				attery:Shut down o/p vo				
		CH2		miting; fault condition d		•	•	
PROTECTION			condition is remove	ed (External fuse is ma	ndatory in series conn	ection with battery	for protection)	
	OVER VOLTACE N. C. A	CH1:31 ~ 36V		CH1:47 ~ 55V		CH1:59 ~ 69V		
	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							
	BATTERT GOTOTT		21.5V±0.5V 32V±0.5V 43V±0.5V 115VAC Input : Signals AC failure and activates when input voltage <75VAC					
	AC OK	Recover the main power supply when input voltage >87VAC 230VAC Input : Signals AC failure and activates when input voltage <165VAC						
FUNCTION					•			
FUNCTION	CHARCER CIRCUIT FAIL	Recover the main power supply when input voltage >175VAC Battery disconnected, battery reverse polarity, signal failure						
	CHARGER CIRCUIT FAIL	Battery disconnected, battery reverse polarity, signal failure 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 UAI					electable by LIART)	
	WORKING TEMP.	-20 ~ +60°C (Refer to "Derating Curve")					Sicolable by Grace,	
	WORKING HUMIDITY	20 ~ 95% RH non-condensing						
ENVERONMENT.								
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-30 ~ +85°C, 10 ~ 95% RH non-condensing						
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C) 10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes						
	VIBRATION			• • •				
	SAFETY STANDARDS	UL62368-1, BS EN/EN62368-1, AS/NZS62368.1, EAC TP TC 004 approved; Design refer to GB 17945-2010, GB4717),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 / 500	VDC / 25°C/ 70% RH				
		Parameter	Sta	ndard	Test Level /	Note		
		Conducted		EN/EN55032 (CISPR3: C TP TC 020	2), Class A			
SAFETY &	EMC EMISSION	Radiated	BS	EN/EN55032 (CISPR3	2), Class A			
EMC		Harmonic Current	EAG	C TP TC 020				
(Note 5 & 6)								
		Voltage Flicker		-				
		Parameter	Sta	ndard	Test Level /	Note		
		ESD	BS	EN/EN61000-4-2	Level 3, 8KV	air; Level 2, 6KV	contact; criteria A	
	EMC IMMUNITY	Radiated	BS	EN/EN61000-4-3	Level 3, 10V	/m ; criteria A		
		EFT / Burst	BS	EN/EN61000-4-4	Level 3, 2KV	' ; criteria A		
	Emo immorti i	Surge	BS	EN/EN61000-4-5		/Line-Line ;2KV/Lir	ne-FG ;criteria A	
		Conducted		EN/EN61000-4-6	Level 3, 10V	-	. ,	
				EN/EN61000-4-8	Level 4, 30A	-		
		Magnetic Field	l De					
	MTDE	Magnetic Field				<u> </u>		
	MTBF	1019.6K hrs min.	Telcordia SR-332 (Be	llcore); 144.4K hrs n		<u> </u>		
OTHERS	MTBF DIMENSION PACKING		Telcordia SR-332 (Be V*H)			<u> </u>		

- 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.

 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf & 47µf parallel capacitor.
- 3. Tolerance : includes set up tolerance, line regulation and load regulation.
- 4. 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 http://www.meanwell.com)
- 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 under the following conditions:
 - a) the end-devices is used within the European Union, and

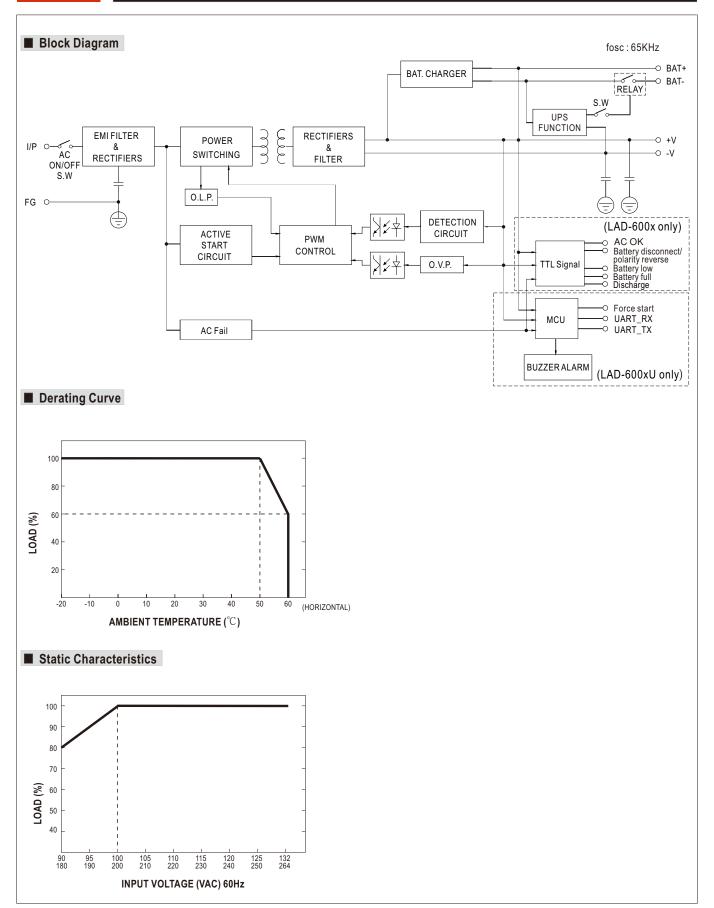
NOTE

- b) the end-devices is asset within the European officing and to 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). ※ Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

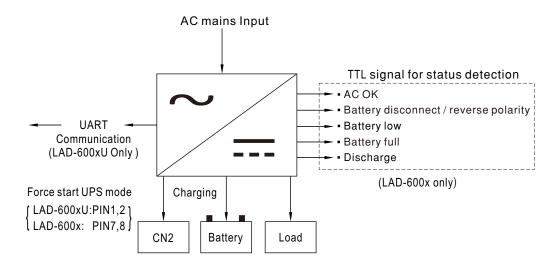




■ Suggested Application

1.DC-UPS function

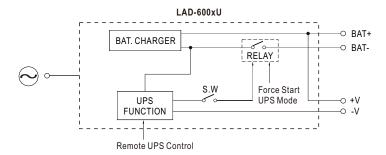
When AC voltage drops below 75/165VAC, The UPS function will activate and power source switch battery backup.



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.

Pin 1 & 2	Status
Short	Forced start
Open	Normal



Note:

^{1&}lt;sup>st</sup> 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.

Pin 3 & 4	Status
Short	Remote UPS control
Open	Normal



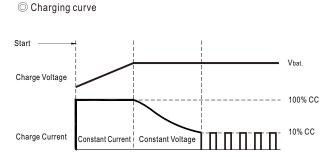
Note:

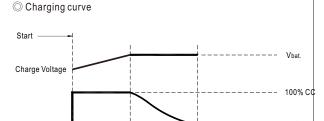
2nd priority of UPS mode: UPS function can be activate by controlling with this signal, since the controller is still normal, the relay can be controlled through communication protocol.

2.2 Charging Curve for Different Battery (U version only)

Pin 5 & 6	Battery Type
Short	Li-ion batteries
Open	Lead-acid (Pb) batteries







Constant Current | Constant Voltage

O Apply to Li-ion batteries O Apply to Lead-acid batteries

2.3 Mode Selection for Buzzer(U version only)

Pin 7 & 8	Status
Short	Fire alarm system
Open	Evacuation system



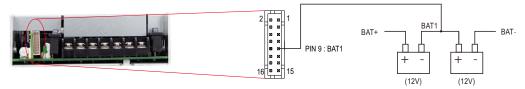
Charge Current

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

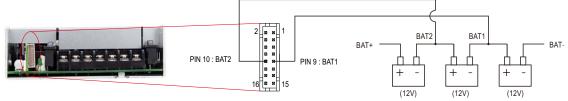


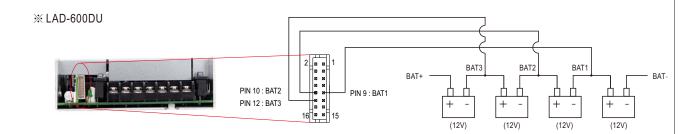
2.4 Battery Inspection

※ LAD-600BU



***** LAD-600CU





2.5 UART Communication Interface(U version only)

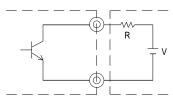
Communication provides functions such as control, setting, and monitoring. The parameters include the backup power switch, battery undervoltage point ,etc.





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.



External voltage and resistor

(The max. sink current is 30mA at 50VDC)

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



• Signal for UART Version

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



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

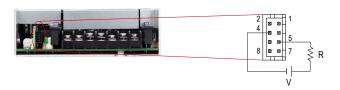


• Signal for UART Version Battery Low is achievable through UART communication protocol, please refer to for more detail: http://www.meanwell.com/manual.html

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: http://www.meanwell.com/manual.html



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: http://www.meanwell.com/manual.html

3.6 Forced Start: Forced start UPS mode

• TTL Signal for Blank version

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

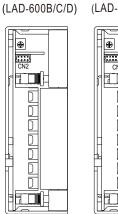


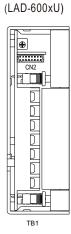
• Signal for UART Version

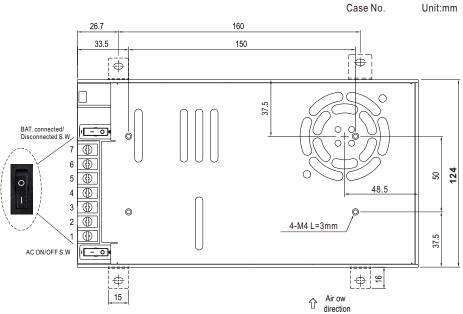
Forced Start is achievable through UART communication protocol, please refer to for more detail: http://www.meanwell.com/manual.html

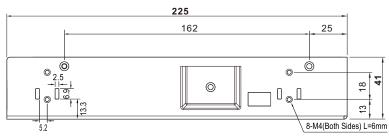


■ Mechanical Specification









※ 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	TKD DUO	TVD
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		

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



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 DH2	TKP
1,2	Open : normal		
3,4	Short : Remote UPS control		
5,4	Open : normal		
F. C	Short : Li- ion batteries		
5,6	Open : Lead-acid (Pb) batteries		
7,8	Fire alarm/ Evacuatione option		
9	BAT1	or equivalent	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



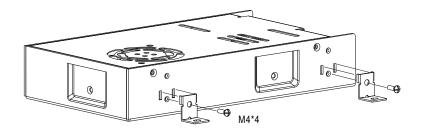
■ Accessory List

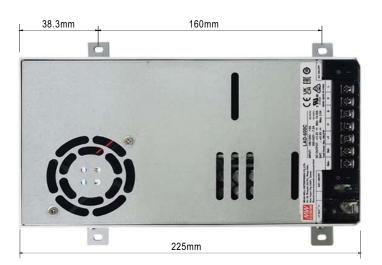
Bracket (Optional accessory, Should ordered seperately)

MW's Order No.	Item	Quantity
DGG2MHS012		4pcs/per model

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

■ Installation Diagram









■ Installation Manual

Please refer to : http://www.meanwell.com/manual.html