



APS Electra Power Pvt. Ltd.

LED Lights & Intelligent Control And Storage System With Lithium Battery



is Authorised INDIAN Representative of

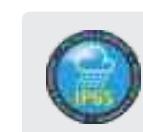


Anhui Long Volt Energy Co. Ltd. (CHINA)

INTELLIGENT CONTROL AND STORAGE SYSTEM WITH LITHIUM BATTERY SOLAR STREET LIGHT

(Intelligent control and storage system including battery, control system and driver power, Solar Street Light)

APS Electra Power & Long Volt Energy main objective is to provide energy saving clean green energy, environmental friendly Light, quality product for benefit of mankind,



APS Electra Power Pvt. Ltd. (INDIA), a private limited company incorporated under the Companies Act, 1956 under Certificate of Incorporation No. U31401UR2015PTC001518 with the main objective of carrying out business as manufacturers, importers & exporters in electrical, electronics and solar products i.e LED lighting for general, commercial and consumer retail applications, Solar Lighting & Solar Power projects.

We are pleased to introduce our company APS ElectraPower Pvt. Ltd. as a total energy saving solution provider. APS is engaged into development of energy saving Lights having qualified engineers with in-house R&D.

APS ElectraPower Pvt. Ltd. is a authorised distributor of Anhui Long Volt Energy Co. Ltd. in the field of Lithium-ion Battery Pack System for the Energy Storing.

Anhui Long Volt Energy Co. Ltd. (CHINA) established on 18th of June 2012. It is not only a science and technology joint-stock company, but also a national high-tech enterprise. It is public company in China which is specialized in the research and production of lithium battery storage & control system, solar lamps with lithium battery, lithium security lighting system, solar garden lamps, insecticidal solar lamps and other products. And now intelligent solar street lamps with lithium battery and other products formed industrialization and it is widely used in road lighting, off grid power generation, urban security and other fields.

APS ElectraPower have a modern manufacturing factory of 10000 sq. meters. To design and manufacture LED light fixtures, Street Light, Bay Lights, Bollard Lights, Ceiling Lights, Decorative Lights ,Pole, Down lights, Flood Lights, Night Lamp, Party Lights. The manufacturing philosophy of APS Electra is to produce all high quality and reliability LED lighting products.

Our Vision:

We at APS believe in Quality, green environment, save energy save nation.

Our Motto : QST

Quality , Service and Time Efficient ! That's what we seek for and we are doing!

Our Mission :

With an aim of making our country biggest energy saver nation in the world. We invite you to visit our Factory to know the best ways to get energy efficiency.





LED Bulbs / Lamps

Details	APS-BB0301	APS-BB0501	APS-BB0701	APS-BB0901	APS-BB1201	APS-BB1501
Input Power	3W	5W	7W	9W	12W	15W
Input Voltage	AC90~300V. 50Hz					
Size (mm Dia)	A50	A57	A57	A57	A65	A65
CCT	3000 K- 4000K-6500K					
CRI	More than 80					
Beam Angle	180 deg					
Lumens	300	500	700	900	1200	1500
Operating Temperature	(-20 deg to 50 deg centigrade)					
Base	B 22/E 27					

Applications : • offices • malls • showrooms • residential

Features : • elegant look • Lower consumption & energy saving • replacement for CFL Lamp • omni directional illumination



LED Tubelight (PVC Batten)



Details	APS-TB0501	APS-TB0901	APS-TB1801
Input Power	5W	9W	18W
Input Voltage	AC90~300V, 50 Hz		
Size(mm Length)	295	575	1185
CCT	3000K/4000K/6500K		
CRI	> 80		
Beam Angle	120 Deg.		
Lumens	500	900	1800
Operating Temperature	-20 deg. To 50 deg. Centigrade		

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LED Tubelight (Retrofit)

Details	APS-TB0902	APS-TB1802
Input Power	9W	18W
Input Voltage	AC90~300V, 50 Hz	
Size(mm Length)	595	1200
CCT	6500K	
CRI	> 80	
Beam Angle	180 Deg.	
Lumens	900	1800
Operating Temperature	-20 deg. To 50 deg. Centigrade	

Applications : • offices • malls • showrooms • residential

Features : • elegant look • Lower consumption & energy saving





LED COB Light

Details	APS-COB0501	APS-COB0701	APS-COB0901
Input Power	5W	7W	9W
Input Voltage	AC90~300V, 50 Hz		
Cutout Size(mm)	65	65	65
CCT	3000K/6500K		
CRI	>80		
Beam Angle	120 Deg.		
Lumens	500	700	900
Operating Temperature	-20 deg. To 50 deg. Centigrade		

Applications : • offices • malls • showrooms • residential

Features : • elegant look • Lower consumption & energy saving



LED Concealed Light



Details	APS-CL0301	APS-CL0601(R/G/B)
Input Power	3W	6W
Input Voltage	AC90~300V, 50 Hz	
Size(mm Length)	65	65
CCT	3000K/6500K	
CRI	> 80	
Beam Angle	180 Deg.	
Lumens	300	600
Operating Temperature	-20 deg. To 50 deg. Centigrade	

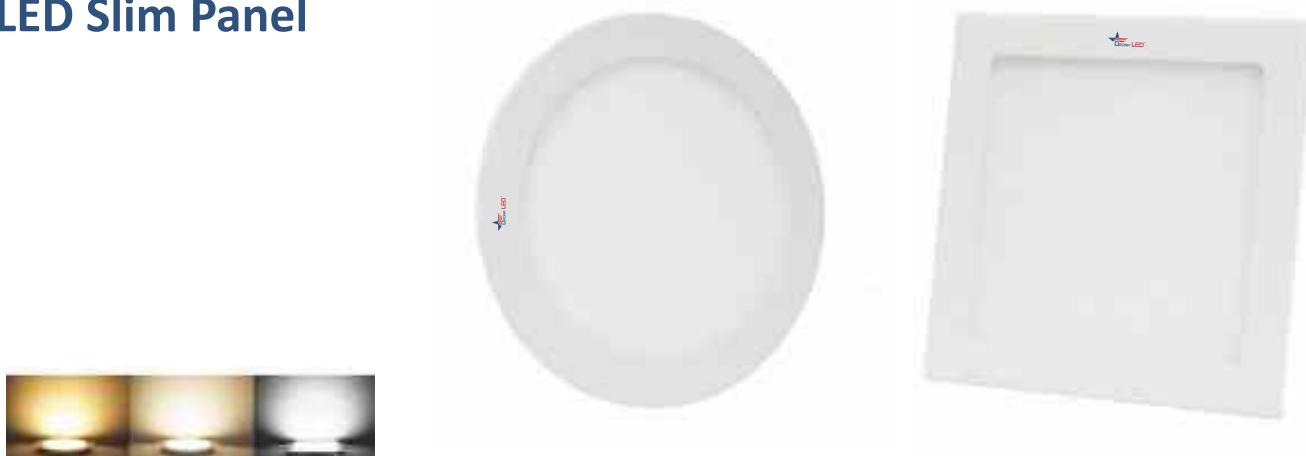
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LED Slim Panel



Details	APS-SP0601 Rd/Sq	APS-SP1201 Rd/Sq	APS-SP1501 Rd/Sq	APS-SP1801 Rd/Sq	APS-SP2201 Rd/Sq
Input Power	6W	12W	15W	18W	22W
Input Voltage	AC90~300V, 50 Hz				
Cutout Size(Inch)	4	6	6	8	8
CCT	3000K/4000K/6500K				
CRI	> 80				
Beam Angle	120 Deg.				
Lumens	600	1200	1500	1800	2200
Operating Temperature	-20 deg. To 50 deg. Centigrade				

Applications : • offices • malls • showrooms • residential

Features : • elegant look • Lower consumption & energy saving • replacement for CFL Lamp • omni directional illumination





LED Surface Panel

Details	APS-SRP0601	APS-SRP1201	APS-SRP1801
Input Power	6W	12W	18W
Input Voltage	AC90~300V, 50 Hz		
Size(mm)	125	175	225
CCT	3000K/4000K/6500K		
CRI	>80		
Beam Angle	120 Deg.		
Lumens	600	1200	1800
Operating Temperature	-20 deg. To 50 deg. Centigrade		

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LED Panel Light (Commercial)



Details	APS-SU1801	APS-SU3601	APS-SU4001(SS/MS)
Input Power	18W	36W	40W
Input Voltage	AC90~300V, 50 Hz		
Cutout Size(Feet)	1*1	2*2	2*1
CCT	3000K/4000K/6500K		
CRI	>80		
Beam Angle	120 Deg.		
Lumens	1800	3600	4000
Operating Temperature	-20 deg. To 50 deg. Centigrade		

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LED Street Light



Details	APS-SSL2001	APS-SSL3001	APS-SSL4001	APS-SSL6001	APS-SSL10001
Input Power	20W	30W	40W	60W	100W
Input Voltage	AC90~300V, 50 Hz				
CCT	6500K				
CRI	> 80				
Beam Angle	120 Deg.				
Lumens	2000	3000	4000	6000	10000
Operating Temperature	-20 deg. To 50 deg. Centigrade				
Power Factor	>0.90				
Protection	IP65				

Applications : • offices • malls • showrooms • residential

Features : • elegant look • Lower consumption & energy saving • replacement for CFL Lamp • omni directional illumination

Product Specification

Housing	Aesthetically designed pressure die-cast aluminium housing with top opening service cover.
Finish	Powder coated metallic grey finish. Anti ageing & corrosion resistant electrostatic spray processing.
Light Source	High efficiency globally branded LEDs with Ra>70.
Control gear	Built-in, replaceable electronic driver with APFC, THD<10% Output Short Circuit Protection, Surge Voltage Protection & Over Voltage Protection.
Mounting and Maintenance	Suitable for both pole top & side entry mounting with bracket arm ID of 63mm (max).
Pipe Entry	Adjustable pipe entry.
Application	• City road lighting • Shopping centers perimeter lighting • City light renovation/ up gradation project • Prestigious/ heritage area outdoor lighting • Car parking application





LED Flood Light

Details	APS-FL3001	APS-FL5001	APS-FL10001
Input Power	30W	50W	100W
Input Voltage	AC90~300V, 50 Hz		
CCT	3000K/6500K		
CRI	>80		
Beam Angle	80 Deg.		
Lumens	3000	5000	10000
Operating Temperature	-20 deg. To 50 deg. Centigrade		
Protection	IP65		
Power Factor	>0.9		

Applications : • offices • malls • showrooms • residential

Features : • elegant look • Lower consumption & energy saving



LED Hibay Light



Details	APS-HB10001	APS-HB12001
Input Power	100W	120W
Input Voltage	AC90~300V, 50 Hz	
CCT	6500K	
CRI	> 80	
Beam Angle	120 Deg.	
Lumens	10000	15000
Operating Temperature	-20 deg. To 50 deg. Centigrade	
Protection	IP65	
Power Factor	>0.90	

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COMPANY PROFILE

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HONOR OF COMPANY



Street Light with Lithium-ion Battery

TOWNSHIP ROAD LIGHTING CONTROL SCHEME

Light Source Power	: 10W-40W
Control System Voltage	: 12V,24V
Short circuit protection current	: 40A
Time	: <0.8mS
Over current protection current	: 20A, Time :<2S
Working Temperature	: 0°C~+55°C (-40°C~+55°C can choose)
Storage Temperature	: -20°C~+55°C
Circle Life	: >2000 times (About 8-10 years)
Protection Rating	: IP65
Installment Type	: Hanging or in the Bracket
Solar Panels Modules	: 40W- 120W/20V



Product Characteristics & Specification



Working Life : 8-10 years

Working mode : adjustable, the default settings for all night lighting, continuous overcast and rainy days can work 10-15 days.

Charge mod : weak light can charge, continuously rainy days on average more than 15% per day

Built in advance intelligent BMS microcomputer management system, with over charge, over discharge over current, temperature and other warning and three protection functions, and has good communication with PC.

Automatic charging and discharging management and monitoring unit automatic measurement of the charging and discharging of the battery were continuous float charging equalization management.

CITY ROAD LIGHTING CONTROL SCHEME

Light Source Power	: 40W-180W
Control System Voltage	: 12V,24V
Short circuit protection current	: 40A
Time	: <0.8mS
Over current protection current	: 20A, Time :<2S
Working Temperature	: 0°C~+55°C (-40°C~+55°C can choose)
Storage Temperature	: -20°C~+55°C
Circle Life	: >2000 times (About 8-10 years)
Protection Rating	: IP65
Installment Type	: Hanging or in the Bracket
Solar Panels Modules	: 120W-540W/20V



The BMS Li-ion battery intelligent management system

Product Characteristics & Specification



Working Life : 8-10 years

Working mode : adjustable, the default settings for all night lighting, continuous overcast and rainy days can work 10-15 days.

Charge mode : weak light can charge, continuously rainy days on average more than 15% per day

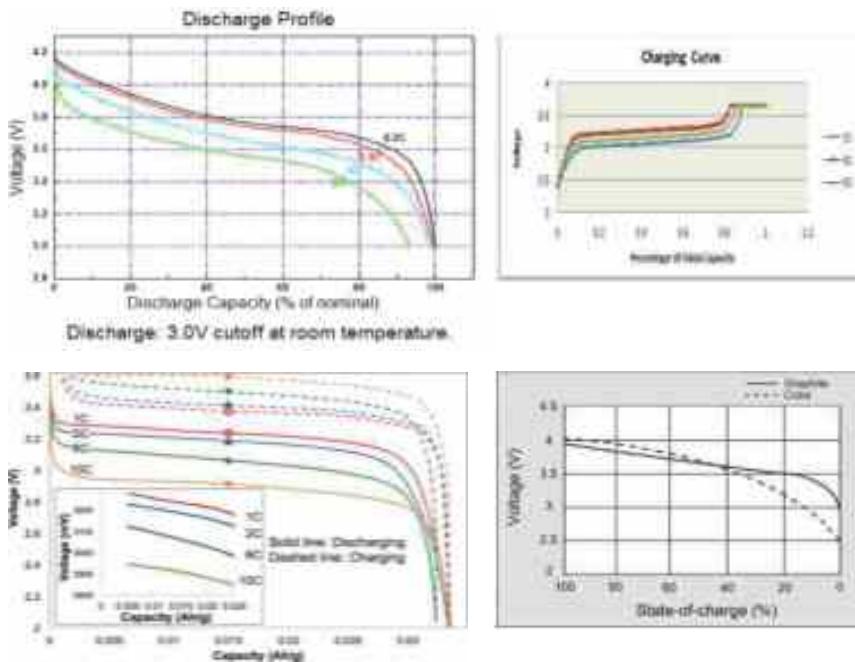
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Single Lithium Battery Electric Core

INR18650-2200mAh	INR18650-2400mAh	INR18650-2600mAh	INR18650-2800mAh
Nominal Capacity:2200mAh	Nominal Capacity:2400mAh	Nominal Capacity:2600mAh	Nominal Capacity:2800mAh
Nominal Voltage:3.7V	Nominal Voltage:3.7V	Nominal Voltage:3.7V	Nominal Voltage:3.7V
Internal Resistance: \leq 60mΩ			
Standard DischargeRate:0.5C	Standard DischargeRate:0.5C	Standard DischargeRate:0.5C	Standard DischargeRate:0.5C
Maximum Continuous Discharge Rate:2c			
Quality: \leq 43g	Quality: \leq 44g	Quality: \leq 46g	Quality: \leq 48g

Intelligent Lithium Battery Management System



Product Introduction

Lithium storage & control system is a set of lithium battery, lithium battery intelligent management system and PC machine communication decisions, which is an intelligent system. The system which use Iron Phosphate lithium battery (LiFePO) lithium polymer battery and ternary lithium polymer lithium battery as energy storage unit, temperature characteristics and excellent safety performance advantages, which is suit for in the field of all kinds of solar street lamp, solar building lighting, mobile communication, small power system, roof power station. Lithium battery due to high operating voltage, small size ,light weight, high energy, no memory effect, no pollution, low self discharge, long cycle life, is the ideal energy for the development of twenty-first Century

BMS Intelligent Lithium Battery Management System

Our latest development of BMS lithium battery intelligent management system could manage different configuration of lithium iron phosphate battery group. Controller built-in microcomputer processor, intelligent power management, real-time clock, balanced management of electronic core, single bus communication chip, which not including the function of charge and discharge protection, over current protection, temperature protection and basic function, also has intelligent charge and discharge balance, accurate power management and other work.

The intelligent management system, which could use the main control board full isolation single data to other testing equipment display with battery pack the battery voltage. the whole group battery current, battery temperature(two detection point),line plate temperature(two detection point), line plate temperature, real-time electricity, charge and discharge time working state information, built-in real-time clock chip, record battery factory date, users first use time, convenient later period management and after-sales service. the management system can also have communication with computer, which can realize real-time monitoring and control of the state of battery charge and discharge, the realization of optical control and time control as a whole ,and can ensure the using safety and prolonging the service life of the lithium battery group.

The Present Situation of Storage Power Battery



The lead-acid battery took serious harmness to the human survival environment and body and mind health. So how should we get rid of this?

Lead harms the human body primarily through the respiratory and digestive system into body primarily through the respiratory and digestive system into the body, in addition, lead can cause diffuse embryos and infants through breakfast feeding. Lead enters the body, it can diffuse from the blood to the soft tissue and body organs and eventually into the bones and teeth. Lead in the skeleton of the residence time may be high up to 30 years .lead poisoning can be divided into acute and chronic, lead poisoning in children in particular. Lead poisoning manifested as nervous system damage, lower IQ, anaemia, muscle and joint pain, memory loss, poor concentration, Infertility, high blood pressure and chronic headaches etc. What should cause special mention is that even small amount of lead content in children's body can also cause long-term nerve IQ and obstacles.

It has been favoured energy saving, clean green energy for sustainable development of Solar light .In the past few years because of pollution problems lead-acid battery energy storage ,people had a tremendous challenge to its energy- saving and environmental friendly features.

Faced with crises in lead -acid battery industry energy storage battery industry go from here? As a future energy" environmental protection light weight, and long life, the lithium battery will become the first choice of power battery and energy storage battery!

Characteristics Of Lithium Battery

1. The system which use Iron Phosphate lithium battery (LiFePO) lithium polymer battery and ternary lithium polymer lithium ion battery as energy storage unit, has the extremely high energy density, long cycle life, good temperature characteristics and excellent safety performance advantages, which is suit for in the field of all kind of energy saving, electric vehicle etc.
2. Much lighter weight and smaller size of the integrated system. One third weight and size, and could monitoring the charge and discharge current of lithium battery and single vehicle etc.
3. Green and with no pollution, have no consumption of any poisonous metal element such as LEAD, MERCERY, CADMIUM when in use of production or non- production .

Product Advantages

LONGVOLT ENERGY is the first high-tech enterprise researched "intelligent solar street lamp with lithium battery ",which is consist of intelligent control and storage system, solar panels modules, led lamp, and poles etc .As the traditional Lead -Acid battery with disadvantages of polluted, short working life, the lithium battery(high energy, high safety, long working life, with no pollution)developed rapidly in the recently and will surely displace the traditional Lead-Acid battery.

- | | |
|--------------------------|---|
| ENERGY SAVING | : Use the sunlight source in the nature, no consumption of utility power. |
| ENVIRONMENTAL | : Clean with no pollution different from Lead -Acid, Lithium battery is controllable, with no battery memory effect. |
| LONG WORKING LIFE | : Solar panels modules lifespan more than 25 years led lamp lifespan more than 40000-50000H
Lithium Battery lifespan more than 2000times(about 8-10 years) |
| ECONOMY | : Intelligent storage control system LED light source, photovoltaic modules, lithium reasonable match to reduce the energy loss cause by unreasonable match. |
| INTELLIGENT | : Much more working days. Lasting over 10-15 rainy days with intelligent controlling variable lighting and weak lighting chargeable mode. |
| COLD RESISTANCE | : The intelligent control and storage system have the function of cold resistance, which would work in the temperature below40°C. |

PRODUCT RANGE

Cell

- Lithium-ion
- Lithium Ferro Phosphate (LFP)
- LIPO
- Cylindrical, Polymer and Prismatic



Battery Pack

- Lithium-ion
(Cylindrical / Polymer / Prismatic)
- Based on LFP, NMC, LMO, LCO chemistries
- Up to 5 KWh & extendable
- Soft and hard pack options
- For Solar, EV, Telecom & Portable Applications

Portable Storage

- Home Lighting Power Bank
- UPS Power Inverter
- Portable Lithium Generator

Other Products

- Solar Street light
- BMS / PCM
- Power bank
- Hand held search light
- Mobile & Computer accessories

SAVE ENERGY SAVE NATURE



For more details of our entire range of Products Please contact us:

APS ElectraPower Pvt. Ltd.

(ISO 9001:2008 and ISO 14001 Certified Company)

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