



IO-Power USSP-12V1224-OA Series

Outdoor Street Lamps Heavy Current Model

Online Type Uninterruptible Operation Power System



IO-Power USSP-12V1224-OA series is focusing on systems engineering at the time of outdoor construction, was unable to make stable and effective source of power, resulting in project implementation cannot be complete acceptance problems facing proposed integration of the original street lamps and high and low temperature resistance of C-LiFePO4 lithium batteries power new outdoor power system solution, completely solve the system operators in outdoor construction cannot get stable power problems effectively.

IO-Power technology import latest technology of resistance high and low temperature C-LiFePO4 lithium battery, take online type does not interrupt of stability long-term street lamps power supply system design, special for take with outdoor street lamps AC 240V exchange power, thought battery night supplementary power of sources, by match long-term of C-LiFePO4 lithium battery can power supply time over 14 hours above, enough due to should summer more long of device day operation time; day load device through microprocessor of charging and discharging circuit, directly by C-LiFePO4 lithium battery made by required of operation DC power, night is modified by street lamps controller of circuit power made power, the AC exchange power by transformer go DC electric, through microprocessor charging and discharging circuit,



indirect by C-LiFePO₄ lithium battery made operation DC power, same time of street lamps circuit power also through microprocessor of charging and discharging circuit, on C-LiFePO₄ lithium battery for charging balance control.

IO-Power USSP-12V1224-OA series, used industrial level of aluminum metal thermal protection shell and waterproof dust reached IP67 of mechanism design and the industrial level resistance high and low temperature M12 connector, to meet outdoor -20°C ~ +45°C harsh of environment temperature trial, let outdoor system still can day and night security and stability of normal operation, while and import latest technology of resistance high and low temperature C-LiFePO₄ lithium battery and unique charging and discharging battery management control and the static zero power consume patented technology, achieving outdoor street lamps, erection pole and exterior wall of new applications of long-term safety power Uninterruptible Operation power systems.

Online type does not interrupt operation power system, match street lamps power application characteristics, can directly application for outdoor surveillance system, outdoor long distance wireless surveillance system, outdoor infrared surveillance security system, outdoor infrared projection lamp, outdoor data capture device system, outdoor alternate power system, expressway charges trading surveillance system and the license plate identification records system, outdoor large electronic advertising licensing transmission system, elevator security video monitoring system, mobile power supply system, 24 hours road records device cameras system, mine and the special work environment device system, financial institutions security protection system, and fire security system ...and so on.

IO-Power USSP-12V1224-OA series, outdoor online type Uninterruptible Operation power system of the system components including:



1. Input AC power port: AC 100-240V AC input, converted to 18V/6A by AC-DC transformer, that operation of the system power source.
2. Microprocessor modules: microprocessor for detecting input power management, battery management, battery management power control, output voltage management, system operations control detection and protection management, perform the dimensional transport co-ordination and control of the overall system management.
3. The charging and discharging control module: charge balanced voltage detection and management for battery and battery management control, CCP/CVP charge of unique patented technology, complemented by patent protection mechanism of static power consumption of zero discharge, battery low voltage protection and rapid recovery of operation, provide the best protection and the efficient operation of the mechanism.
4. The DC power output port: DC power supply discharge detection through microprocessor control and protection, for load device power requirement, corresponds to taking the appropriate current power supply, minimum 0.5A to maximum 3A DC current supply control.
5. Special strengthening of protection measures: for outdoor environment of high and low temperature changes, maybe produce serious effect on battery of cycle life and using efficiency, even produced using device of security problem, therefore for USSP-12V1224-OA outdoor type products series, special design industrial level airtight aluminum metal thermal protection shell and waterproof dust reached IP67 of mechanism design and the industrial level resistance high and low temperature M12 connector, to avoid outdoor environment using device of security problem occurs.



6. Resistance to high and low temperature long-effect C-LiFePO4 lithium battery: due to should outdoor operation in the system of not interrupt and more long-term using demand, traditional general of indoor concentrated type uninterruptible power system, is obvious to cannot provides should have of service; USSP-12V1224-OA series distributed architecture design power systems, high charge and discharge times and through the new C-LiFePO4 lithium battery and battery cycle life to provide more than traditional generally features. The USSP-12V1224-OA power supply capacity compare traditional uninterruptible power supply more than 2 times and 5 times power system operation time and 7 times battery cycle life, fully rendering outdoor lighting online type uninterruptible operation power system of outstanding characteristics.

IOP-USSP-12V1224-OA Series Specification (* Patent Pending)

Model	IOP-USSP-1212-06B	IOP-USSP-1216-07B	IOP-USSP-1218-08B	IOP-USSP-1224-09B
Outdoor Model M12 Connector Aluminium Radiating Airtight Housing IP 67				
Power Capacity	148 WH (11.6Ah@12.8V)	206 WH (16.1Ah@12.8V)	235 WH (18.4Ah@12.8V)	297 WH (23.2Ah@12.8V)
AC to DC Adapter Input AC Voltage Output DC Voltage	100-240V/3A 50/60Hz 18V/6A Max			
DC to DC for Device	DC 11.5V~14.4V +-3% 6A Max			



DC to DC for Battery	14.4V +-3% 3~4.8A Max
Transform Efficiency	90%~
Protection	On Line Working System Non Stop Standby Consume Protection* Standby Consume Protection* Balance Voltage Function* Overload Protection Overcharge Protection Over discharge Protection Over current Protection Short circuit Protection Over current Protection Short circuit Protection
Support Battery Type	C-LiFePO4 Lithium Batteries
Battery Capacity	11.6Ah @ 12.8V (148 WH) 16.1Ah @ 12.8V (206 WH) 18.4Ah @ 12.8V (235 WH) 23.2Ah @ 12.8V (297 WH)
Battery Charge Mode	CCP/CVP MCU Control
Battery Charge Voltage	14.4V +- 3%
Battery Charge Float Voltage	13.6V +- 3%
Battery Cut-off Discharge Voltage	11.5V +- 3%



Battery recovery discharge voltage	12.4V +- 3%			
Standard Charge Current	3.6A			
Standard Discharge Current	3A			
Max. Discharge Current	6A			
Charging Time @95% Capacity	Non discharge 3hrs On line discharging 5hrs	Non discharge 4hrs On line discharging 6hrs	Non discharge 5hrs On line discharging 7hrs	Non discharge 6hrs On line discharging 8hrs
Battery Cycle Life (80% Capacity) 0.2C Charging 0.5C Discharge	@ 25°C 2000 Times @ 45°C 1600 Times @ 50°C 1200 Times @ 60°C 550 Times @ 60°C 720 Times 70% Capacity			
Industrial Housing & Connector	Aluminium Radiating Airtight Housing IP67 M12 Connector			
Connector Type	1.Input: 100~240V / 50-60Hz AC Plug to 18V M12 Female 2.Output: 12V M12 Female to DC Jack Female			
Operating Temperature (Discharge)	-20°C ~ 60°C 20~40°C Battery Capacity:100% -10°C Battery Capacity : 60% -20°C Battery Capacity : 48%			



Charging Temperature	-30°C ~ 60°C			
Storage Temperature	-20°C ~ 40°C			
Rel. Humidity	10~95%RH			
Storage Time	6 months (Please every three months charge one time) (Before the Use, please First Charge)			
Dimension	209(L)x139(W)x210mm(H)			
Weight	2.5Kg (Box 3.6Kg) (2Pcs/Carton)	3Kg (Box 4.1Kg) (2Pcs/Carton)	3.2Kg (Box 4.3Kg) (2Pcs/Carton)	3.8Kg (Box 4.9Kg) (2Pcs/Carton)
LED Indicator	1.Input AC power LED-red full light (Battery capacity more than 95%) 2.Input AC power LED-red flash light (Battery is charging) 3.Battery is charging, Insert the 12V device load, LED-green flash light 4.Battery non charging, Insert the 12V device load, LED-green full light			
Housing	IP67			
Approvals	. CE, FCC			
Installation	1.Street lamp pole mount 2.Upright pole mount 3.Wall mount installation 4.DIN Rail (Optional)			
Warranty	12 months			
Carton Size	490*340*155mm			

Ps 1: Battery Capacity +-5%

Ps 2: Product specifications change, without notice, consultation with agent or dealer before buying the latest specifications