

Monitoring Solar Power Supply System

Model: ICL-400W200AH12.8VSOLARSET



Product Introduction

Powered by a high-efficiency monocrystalline solar panel and a high-capacity LiFePO4 battery, the iSecure Solar Power Supply System ensures a stable and continuous power supply for outdoor equipment such as network bridges, surveillance cameras, and other remote devices. Designed for challenging environments where traditional power and network deployment is difficult, this system eliminates complex wiring, significantly reducing installation costs and maintenance efforts.

Features

- ◎ Reliable 24/7 Power Supply – Operates continuously for 360 days in locations with available sunlight, requiring no external wiring.
- ◎ IP65 Fully Enclosed Waterproof Design – Ensures durability and protection against harsh weather conditions.
- ◎ High-Capacity LiFePO4 Battery – Offers longer lifespan, superior safety, and stable performance, setting new industry standards.
- ◎ Advanced Photovoltaic Panel Technology – High conversion efficiency, excellent low-light performance, and fast charging capability.
- ◎ All-Weather Operation – Can charge and function efficiently even on rainy days, ensuring uninterrupted power.
- ◎ The Himax Solar Power Supply System is a cutting-edge solution for off-grid power needs, delivering efficiency, reliability, and cost savings for outdoor applications.

Specification

Model	ICL-400W200AH12.8VSOLARSET
Solar Panel	
Material	High-efficiency mono-crystalline silicon cell, high-strength aluminum alloy frame
Panel materials	Super white toughened glass
Life	25years
Maximum power (Pm)	400W
Photoelectric Conversion Efficiency (%)	≥20.4%
Voltage at Pmax (Vmp)	30.78V
Current at Pmax (Imp)	13A
Open circuit voltage - VOC (V)	37.02V
Short circuit current - ISC (A)	13.78A
Module dimensions (L×W×H)	1725 * 1134 * 35mm
Module weight (KG)	21.30 Kg
Frame material and dimensions (mm)	Anodized aluminum alloy 1.2mm
Module packaging	Tempered glass/EVA/cell/EVA backsheet
Charger	
PV Charging Method	MPPT
System voltage	12V / 24V
Max PV Input	180W/12V; 360W/24V
MAX PV Input Voltage	65V
MAX PV Charge Current	20A
Maximum PV input current	15A
MPPT tracking efficiency	> 99%
Temperature-Controlled Fan	
Rated voltage	12V
Rated current	0.3A ± 10%
Rated speed(range)	3000RPM ± 10%
Acoustic sound level	≤38.05dBA MAX
Warm and warm music	≥40℃ (The temperature is 40 degrees and the wind starts moving.)
Weight	75g
Size	92*92*25mm
Power Supply System	
Power output	12V
DC connector	3.1MM × 10MM
Battery capacity	100AH *2 / LiFePo4 Battery
Battery Size	340 * 250 * 60mm * 2
Battery life	> 3 years
Charging time	5(H)
Controller	Fully intelligent digital controller, with the functions of preventing overcharge, overdischarge, lightning protection, short circuit and reverse connection
Controller life	> 10 Years

Waterproof coefficient	IP65
Outer packing size	Solar Panel Size: 2100 * 1400 * 65mm
	Battery Size: 340 * 250 * 60 ± 2mm
	Cabinet Size: 585 * 480 * 350mm
	Triangle bracket: 650 * 570 * 350mm
	Cross arm: 1650 * 40 * 38mm
Battery operating temperature range	-20°C-60°C
Net Weight	75KG

Scope of application:

Widely used in: street urban management law enforcement monitoring, river forbidden area monitoring, pipeline valve room monitoring in oil and gas industry, disaster prevention Internet of Things monitoring, national border defense monitoring, forest fire prevention and waterproof monitoring. Farm/orchard management, anti-theft of fish ponds, safety monitoring of construction sites, factory areas, expressway sections, outdoor parking lots, tourist attractions, poverty alleviation through new farming and other industries.



Precautions for use

Solar panels should be installed in the surrounding areas where there are no high-rise buildings, trees, poles, etc., so as to fully obtain the energy of sunlight. When installing, pay attention to the positive and negative poles to avoid reverse connection of the positive and negative poles and short circuit of the positive and negative poles for a long time.