

LONGSUN · SOLAR ENERGY SYSTEMS INSTALLATION L.L.C

Integrated Green Energy Solutions 综合绿色能源解决方案

Zero Emissions | Smart | Eco-Friendly | 零排放 · 智能环保

ENERGY CABIN 模块化能源舱

PORTABLE POWER 移动电源

SOLAR SYSTEM DESIGN & INSTALLATION 光伏系统设计安装

About Us 公司简介



Longsun Solar Energy Systems Installation L.L.C is a UAE-based green energy solutions provider with its headquarters in Shenzhen, China. The company delivers integrated solar and energy storage solutions for construction sites, commercial buildings, industrial facilities, and remote workspaces.

龙商太阳能系统安装有限公司是一家立足阿联酋、总部位于中国深圳的绿色能源解决方案提供商，专注于为建筑工地、商业建筑、工业设施及远程工作空间提供光伏与储能一体化解决方案。

Three Core Solutions 三大核心解决方案

One company, three deployable green-energy systems for UAE construction, commercial, and industrial scenarios. | 一家公司，三套可部署的绿色能源系统，适用于阿联酋建筑、商业和工业场景。

One-Stop PV Solutions 一站式光伏解决方案

Full process support from survey, design, and installation to commissioning and O&M.

从勘测、设计、安装到调试和运维的全流程支持。

Portable Power Applications 便携式储能应用

Flexible power supply for construction tools, lighting, communication, and site equipment.

为建筑工具、照明、通信和现场设备提供灵活供电。

Modular Energy Cabins 模块化能源舱

Integrated off-grid cabin combining PV, storage, smart control, water recycling, and sanitation.

集成光伏、储能、智能控制、水循环和卫生设施的一体化离网能源舱。

Modular Eco Energy Pod 模块化生态能源舱

100% Energy Self-Sufficient & Off-Grid — 100%能源自给自足，摆脱电网依赖



→ Modular Design 模块化设计

Rapid deployment & relocation; 75mm three-layer fire & heat insulation panels.

快速部署与迁移；75mm三层防火隔热板。

→ 100% Water Recycling & Zero Emissions 100%水循环与零排放

Complete water recycling with zero sewage discharge.

完整水循环系统，实现零污水排放。

→ Smart Control System 智能控制系统

Intelligent EMS for automated operation management.

智能能源管理系统，实现自动化运营管理。

→ Waterless Microbial Toilet 无水微生物马桶

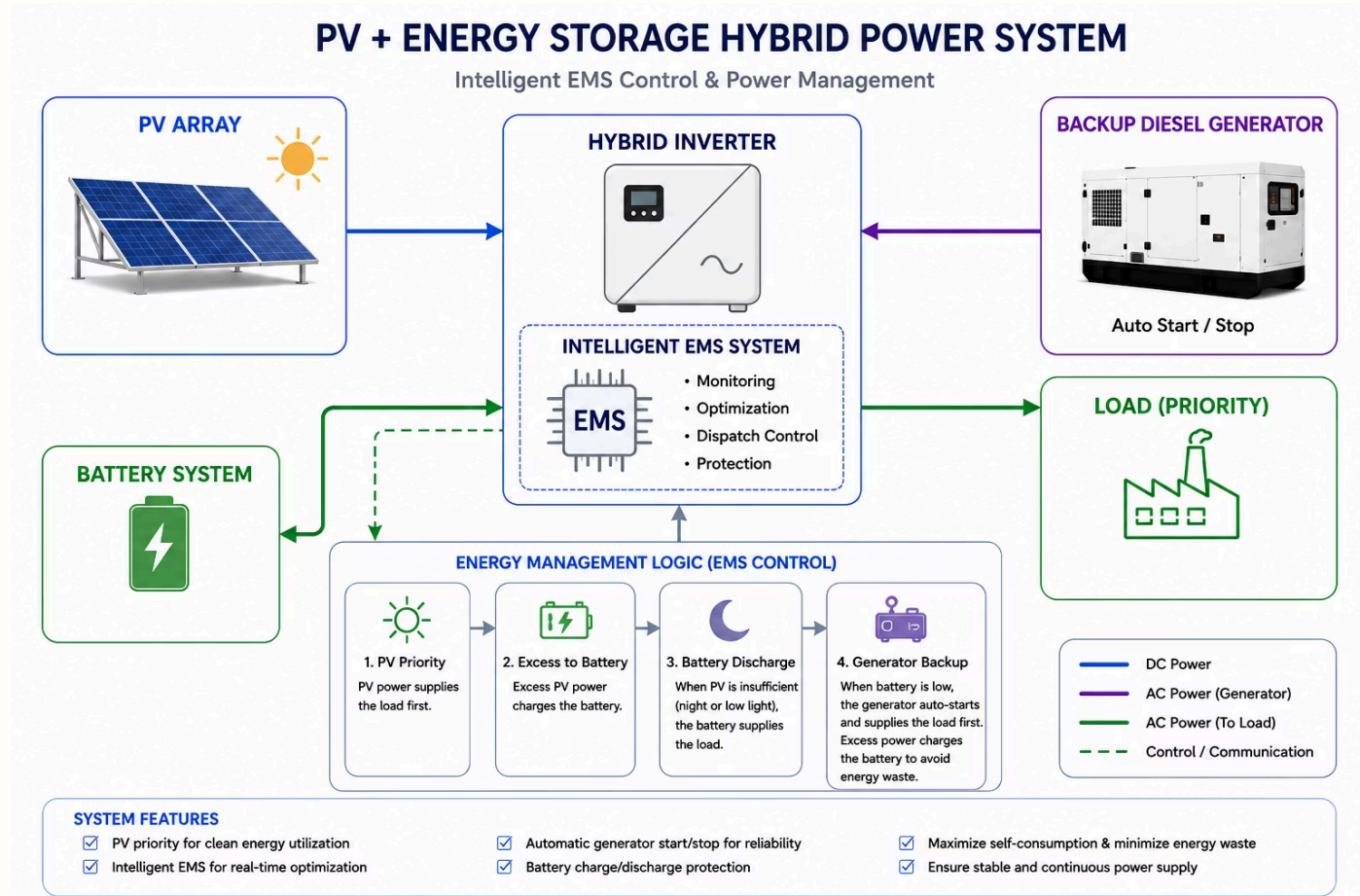
AI-controlled microbial degradation — no water, no pollution.

AI控制微生物降解——无需用水，无污染排放。

Smart Energy Management System 智能能源管理系统

As the core power module of the Eco Energy Pod, this system integrates solar and energy storage, managed by an intelligent EMS for prioritized power supply. Solar power is used first, battery storage provides automatic backup, and a diesel generator ensures support when needed — delivering reliable 24/7 power.

作为生态能源舱的核心电力模块，该系统集成了太阳能和储能，由智能能源管理系统 (EMS) 管理，实现优先级供电。太阳能优先使用，电池储能提供自动备份，柴油发电机在需要时提供支持——确保可靠的全天候供电。



Water & Sanitation Systems 水循环与卫生系统

6-Stage Water Filtration & Recirculation System 六级水过滤与循环系统



This advanced handwashing water recirculation and purification system is designed for maximum water efficiency and sustainability. The system captures and treats wastewater from handwashing, significantly reducing water consumption while maintaining hygiene standards. Purified water is then automatically recirculated for handwashing, significantly reducing the principle of green conservation. This innovative system is ideal for construction sites, remote locations, and emergency response scenarios where water resources are limited.

该先进的洗手水循环净化系统专为最大化水资源效率和可持续性而设计。该系统捕获并处理洗手产生的废水，显著降低水消耗，同时保持卫生标准。净化后的水随后自动循环用于洗手，大幅降低水资源消耗。这一创新系统非常适合水资源有限的建筑工地、偏远地点和应急响应场景。

01	02
Primary Pre-Filter 初级预过滤	Ceramic Filter 陶瓷过滤
03	04
Fiber Ball Filter 纤维球过滤	Activated Carbon Filter 活性炭过滤
05	06
Ammonia Stone 氨氮石	Ozone + UV Disinfection 臭氧+紫外线消毒

Microbial Degradation Toilet 微生物降解无水马桶

Centered on microbial degradation technology, this system features an innovative waterless toilet. It combines microbial processing with smart controls to efficiently break down waste into **harmless organic fertilizer and carbon dioxide**. The entire process requires no water and produces no sewage discharge, ensuring truly environmentally friendly and pollution-free operation. It is perfectly suited for remote outdoor locations, emergency sites, and other areas without access to sewage pipelines.

以微生物降解技术为核心，该系统采用创新的无水马桶设计。它将微生物处理与智能控制相结合，高效地将废物分解为无害的有机肥料和二氧化碳。整个过程无需用水，不产生污水排放，确保真正环保无污染的运行。完美适用于偏远户外地点、应急现场以及其他无法接入污水管网的区域。

Capacity 容量: 5 persons/day · **Treatment Cycle 处理周期:** 3–6 months



Waterless Operation 无水运行 No water required, no external pipe network needed 无需用水，无外接管网需求

Energy Cabin Core Parameters 核心参数

System 系统	Specification 规格	Feature 特点
Pod Structure 舱体	12m × 3.6m × 3m; expandable & stackable	Modular quick assembly 模块化快装
Wall/Roof Panels 墙板/顶板	75mm high-strength insulation	Excellent thermal insulation 保温隔热
Roof Load 屋顶承重	Supports PV modules + personnel	No additional reinforcement 无需加固
PV Capacity 光伏装机	~4,000W; 20–30 kWh/day	Clean energy priority 清洁能源为主
Energy Storage 储能	15 kWh LiFePO ₄ ; ≥6,000 cycles	Intelligent auto-switching 智能联动
Water Treatment 水处理	20–50 L/day; 6-stage filtration	100% recycling, no external source
Waterless Toilet 无水马桶	5 persons/day; 3–6 month cycle	Zero sewage, organic fertilizer output
Operating Environment 环境	–20°C to 60°C; IP65	Dustproof & waterproof 防尘防水
Design Life 设计寿命	≥15 years	Durable & long-lasting 经久耐用

Portable Power Product Line 储能产品系列

LiFePO₄ battery · Multiple ports · Multi-protection · Pure sine wave · Low noise · Green & eco-friendly

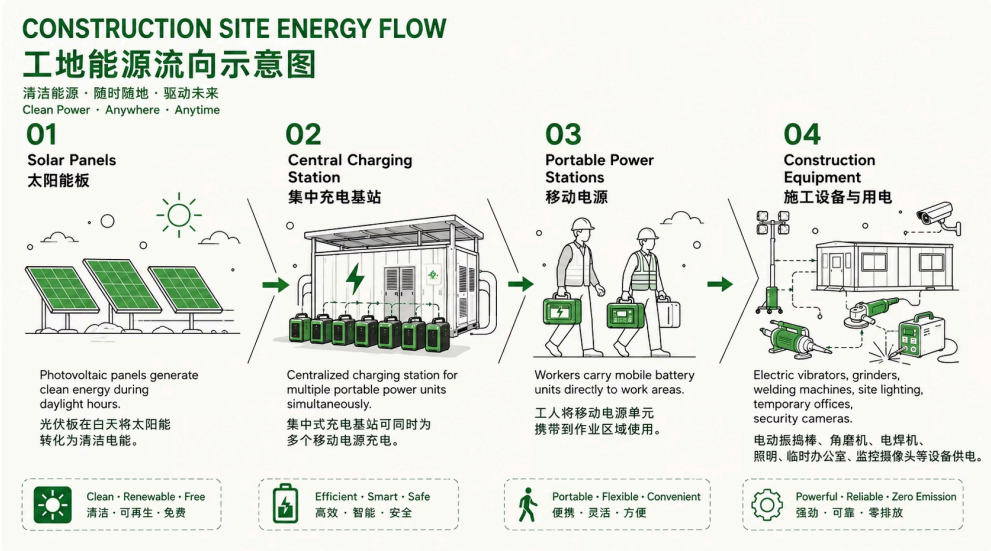
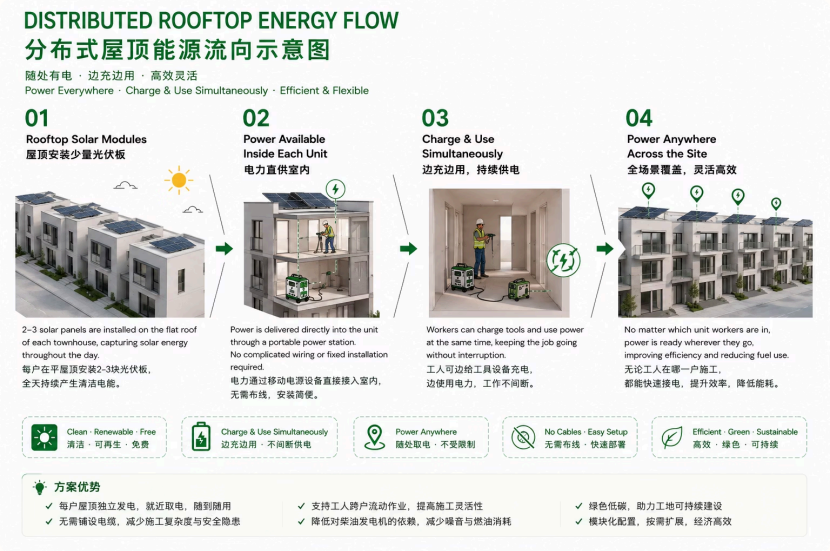
Model 型号	SS-01	SS-03	SS-05	SS-07
Product Series 产品系列总览				
Capacity 容量	1 kWh (1024Wh)	3 kWh (3072Wh)	5 kWh (5120Wh)	7 kWh (7168Wh)
Power 功率	1200W / 2000W	3600W / 5000W	5000W / 7000W	3500W / 6000W
Battery Type 类型	LiFePO ₄	LiFePO ₄	LiFePO ₄	LiFePO ₄
Cycle Life 寿命	≥3000次	≥3000次	≥3000次	≥6000次
Charge Time 充电时间	~2 hrs	~2 hrs	~2 hrs	~1.5 hrs
Protection Grade 等级	IP21	IP21	IP21	IP21
Operating Temp 工作温度	-10°C ~ 50°C	-10°C ~ 50°C	-10°C ~ 50°C	-10°C ~ 50°C
Key Feature 特点	Compact & portable 紧凑便携	Most power tools 满足大多数电动工具	High-power & AC 大功率设备&空调	Ultra capacity, long load 超大容量，长时间高负载

Compatible with construction tools, daily appliances, office & communication, and infrastructure equipment.

Flexible Power Supply Solution with Mobile Power Stations

配合移动电源的灵活供电方案

Suitable for remote off-grid sites, temporary construction camps, and urban job sites requiring clean, reliable, and portable power — from light-duty tool charging to heavy-load equipment operation. 适用于偏远离网工地、临时施工营地及城市施工现场，满足从轻型工具充电到大功率设备运行的多样供电需求。

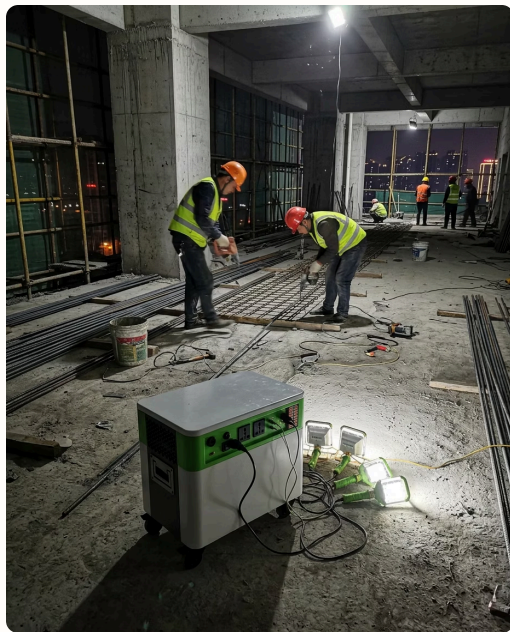


Real Application Photos from Dubai Construction Sites

迪拜工地实际使用场景实拍



Daytime construction site power supply
白天工地现场供电



Nighttime operations with LED lighting
夜间施工LED照明作业



Interior construction power tools operation
室内施工电动工具作业



Rooftop equipment installation work
屋顶设备安装作业



Commercial & Industrial Solar Solutions

工商业光储解决方案

Suitable Scenarios 适用场景

- Factory Rooftops / 工厂屋顶
- Warehouse Rooftops / 仓库屋顶
- Commercial Buildings / 商业建筑
- Industrial Parks / 产业园区
- Ground-Mounted Systems / 地面光伏系统
- Open Land / Parking Lots / 开放地面 / 停车场

System Types 系统类型

- Grid-Tied Solar PV / 并网光伏系统
- Off-Grid Solar PV / 离网光伏系统
- Hybrid Solar + Battery / 光伏 + 储能混合系统
- Solar + Diesel Hybrid / 光伏 + 柴油机混合系统

Key Benefits 核心优势

- Reduce electricity cost / 降低用电成本
- Utilize idle rooftop space / 利用闲置屋顶资源
- Reduce diesel generator usage / 减少柴油发电机使用
- Improve green building image / 提升绿色建筑形象
- Enhance tender competitiveness / 提升项目投标竞争力

From site survey and system design to installation, commissioning and O&M, Longsun provides one-stop solar PV solutions for commercial and industrial clients — whether rooftop or ground-mounted.

从现场勘察、系统设计到安装、调试与运维，Longsun 为工商业客户提供一站式光伏系统解决方案——无论是屋顶还是地面安装。

One-Stop Solar EPC Project Process 一站式光伏EPC项目流程

Longsun delivers practical solar PV systems designed for UAE industrial and commercial energy needs.

Longsun 提供适用于阿联酋工商业用能场景的实用型光伏系统解决方案。



Site Survey 现场勘察

Site conditions, available area, installation feasibility and electricity consumption assessment.
现场条件、可用面积、安装可行性及用电情况评估。



System Design 系统设计

PV capacity design, inverter selection, battery sizing and layout drawing.
光伏容量设计、逆变器选型、储能配置及排布图设计。



Proposal & ROI 方案与回报测算

Technical proposal, commercial quotation and estimated payback period.
技术方案、商务报价及预计投资回收期测算。



Installation 安装施工

Mounting structure, PV modules, cabling, inverter installation and protection system.
支架、组件、电缆、逆变器及保护系统安装。



Commissioning 调试交付

System testing, performance check, safety inspection, client handover and one year free O&M support.
系统测试、性能检查、安全验收、客户交付及一年免费运维支持。



O&M Support 运维支持

Monitoring, maintenance, troubleshooting and system optimization.
系统监控、维护、故障处理及系统优化。

Project ROI Overview

项目投资回报参考



Mobile Power Station Solution

移动电源项目



Short payback period, typically **3–6 months**.

回本周期较快，通常 3–6 个月，适合高频使用、替代柴油发电机或临时用电场景。



Eco Energy Cabin Solution

生态能源舱项目



Stable payback period, typically within **12–18 months**.

回报周期相对稳定，通常 12–18 个月以内，适合工地、营地及远程办公场景。



Solar PV + Storage Project Solution

光伏储能项目



Stable payback period, typically within **12–18 months**.

回报周期通常为 12–18 个月以内，具体取决于安装面积、用电需求、电价及系统配置。



ROI depends on project size, usage frequency, energy cost, and system configuration.

具体回报周期需根据项目规模、使用频率、能源成本及系统配置综合评估。



Project Size
安装面积



Usage Frequency
用电需求



Energy Cost
能源成本



System Configuration
系统配置

Solar Project ROI & Savings Example

光伏项目节能收益示例

Factory / Warehouse Rooftop Solar
工厂 / 仓库屋顶光伏

Example Scenario 示例场景

Factory / Warehouse Rooftop
工厂 / 仓库屋顶

Typical System Capacity
典型系统容量

100 kWp – 500 kWp
常见工商业屋顶光伏系统

Savings Logic 节能收益逻辑

Solar Generation → Lower Electricity Purchase
→ Monthly Energy Savings → Payback Period

光伏发电 → 减少购电 / 柴油消耗 → 形成月度能源节省 → 缩短投资回收周期

Key Value 核心价值

- Lower operating costs / 降低运营成本
- More stable energy supply / 提升用能稳定性
- Better ESG & green image / 提升ESG与绿色形象
- Improved tender competitiveness / 提升项目投标竞争力

Project-Specific Evaluation 项目专属测算

Final savings depend on electricity tariff, roof area, system size, load profile and site conditions.

最终节省金额取决于电价、屋顶面积、系统容量、用电负载及现场条件。

Longsun provides practical solar PV solutions designed for UAE commercial and industrial energy needs.

Longsun 提供适用于阿联酋工商业用能场景的实用型光伏系统解决方案。

About Songsun Energy Shenzhen Headquarters

关于松商能源深圳总公司

Songsun Energy is a comprehensive green energy solutions provider based in Shenzhen, China.

With years of experience in solar PV engineering, the company focuses on industrial and commercial rooftop PV systems, distributed solar projects, energy storage applications, and integrated green energy solutions.

Supported by an experienced technical, project management and operation team, Songsun Energy has delivered multiple PV projects across factories, industrial parks, commercial buildings and mining areas in China.

As the UAE branch, Longsun brings this proven engineering capability and project delivery experience to the Middle East market.

松商能源总部位于中国深圳，是一家综合性的绿色能源解决方案提供商。

公司长期专注于工商业屋顶光伏、分布式光伏项目、储能应用及综合绿色能源解决方案。

依托成熟的技术团队、项目管理团队和运维团队，松商能源已在中国完成多个工厂、产业园、商业建筑及矿区光伏项目。

作为阿联酋本地化业务平台，Longsun 将中国总公司的成熟工程能力和项目交付经验引入中东市场。



Business License 营业执照

License No.	1628064
Company Name	LONGSUN SOLAR ENERGY SYSTEMS INSTALLATION L.L.C
Issue Date	04/06/2026
Expiry Date	03/06/2027



Key Activities:

- Pre-Fabricated Concrete Houses Contracting
- Steel Constructions Contracting
- Power Stations Contracting & Repairing
- Electromechanical Equipment Installation and Maintenance
- Electrical Fitting Contracting
- Alternative Energy Equipment Installation and Maintenance

Registered in Dubai, United Arab Emirates

Department of Economy and Tourism



深圳总公司营业执照 Shenzhen Headquarters Business License



Contact Us 联系我们

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We are ready to serve you with comprehensive green energy solutions for your construction sites, commercial buildings, and industrial facilities.

我们随时准备为您的建筑工地、商业建筑和工业设施提供全面的绿色能源解决方案。