



MULTI-UNIT INTEGRATED SOLAR CHARGING SOLUTION

1. Executive Summary

FreeWorld Brand is pleased to present this cost-estimate informational document for a complete **Solar-Integrated Charging Station Infrastructure Package**. The system includes photovoltaic generation, inverter assemblies, transformer boosting, lithium-energy storage, AC/DC charging equipment, structural components and installation tools.

Please note: All information and pricing reflected herein are **FOB China Port**. The pricing model **does not include civil works or installation services**. Additionally, **grid power entry cabling and related equipment remain the responsibility of the client**.

2. System Overview

The proposed system integrates:

- **100 kWp photovoltaic generation**
- **50 kW × 2 inverter system**
- **250 kVA transformer boosting**
- **215 kWh LFP energy storage with PCS**
- **AC slow/fast chargers (7 kW / 22 kW)**
- **DC fast chargers (120 kW dual-gun)**
- **Steel carport structure + protective works**
- **Full electrical distribution and control systems**

Designed for commercial fleets, EV hubs, logistics centers and mixed-use charging environments.

3. Detailed Information

Photovoltaic Power Generation System

- **Monocrystalline PV Modules (580Wp, N-Type TOPCon)**
 - **172 Unit - Unit Price:** \$120.13 USD
 - **Subtotal:** \$20,662.85 USD
- **DC Combiner Box (6-in/1-out)**
 - **2 Units - Unit Price:** \$1,777.00 USD
 - **Subtotal:** 3,554.01 USD
- **Carport Bracket (Hot-dip galvanized)**
 - **1 Unit - Unit Price:** \$6,663.76 USD
- **PV DC Cable (PV1-F, 4/6mm²)**
 - **1200 m - Unit Price:** 1.44 USD
 - **Subtotal:** \$1,731.14 USD

Inverter System

- **50 kW String Inverter**
 - **2 Units - Unit Price:** \$1,887.07 USD
 - **Subtotal:** 3,774.13 USD
- **AC Distribution Cabinet**
 - **1 Unit - Unit Price:** \$2,776.57 USD

Transformer Boosting System

- **250 kVA Box Transformer**
 - **1 Unit - Unit Price:** \$15,215.59 USD
- **10 kV Switchgear**
 - **1 Unit - Unit Price:** \$9,329.27 USD
- **LV Main Distribution Cabinet**
 - **1 Set - Unit Price:** \$8,883.02 USD

Energy Storage System

- **215 kWh LFP Battery Cabinet**
 - **1 Unit - Unit Price:** \$38,830.81 USD
- **100 kW PCS**
 - **1 Unit - Unit Price:** \$16,659.40 USD
- **BMS System**
 - **1 Set - Unit Price:** \$9,996.64 USD
- **Fire Protection + HVAC**
 - **1 Set Unit Price:** \$3,997.26 USD

AC Charging

- **7 kW AC Chargers**
 - **4 Units - Unit Price:** \$210.03 USD
 - **Subtotal:** \$840.12 USD
- **22 kW AC Chargers**
 - **2 Units - Unit Price:** \$777.44 USD
 - **Subtotal:** \$1,554.88 USD

DC Charging

- **120 kW DC Fast Chargers (Dual-Gun)**
 - **2 Units - Unit Price:** \$5,552.13 USD
 - **Subtotal:** \$11,104.26 USD
- **Dedicated DC Distribution Cabinet**
 - **1 Unit - Unit Price:** \$6,219.51 USD



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Steel Structure & Protection

- **PV Carport Steel Structure**
 - **1 Set - Unit Price:** \$83,297.01 USD
- **Anti-Collision Guardrail**
 - **40 m - Unit Price:** \$41.09 USD

General Tools

- **Installation Tools Set - Various** (Meters, grinders, drills, torque wrenches, sleeves, etc.) **Cost - Unit Prices:** +6% applied across all items

4. Grand Total for this Configuration - (FOB China Port)

- **USD \$260,000.00** - (Rounded for presentation.)

5. Commercial Terms

- **Price Basis:** FOB China Port
- **Exclusions:** Civil works, installation labor
- **Buyer Responsibilities:** Grid entry cable & related facilities
- **Currency:** USD
- **Validity:** Per FWB Timeline
- **Delivery Window:** 25–35 days after payment confirmation

6. FreeWorld Brand Value Proposition

- **Direct-from-source procurement**
- **Verified suppliers & audited equipment**
- **Marketplace-grade transparency**
- **Commercial cadence built for traders, wholesalers and infrastructure buyers**
- **Rapid quotation → rapid fulfillment → rapid deployment**

NOTE: The information that is exposed in this document are cost estimates – Please [contact us](https://freeworldimports.com) with your requirements