

INVESTOR DOCUMENT

# Manufacturer Partnership Directory

Comprehensive Guide to PES Global Group's Supplier Ecosystem

22990% 85%

Tier 1 Partnerships Solar Panel Market Inverter Market

PES Global Group | Louisville, KY | December 2025

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### About This Directory

This directory represents PES Global Group's established manufacturer relationships as of December 2025. All partnerships are active and verified. Our relationship-based model means we source directly from manufacturers, ensuring competitive pricing and authentic products for our contractor and distributor partners.

**229**

Tier 1 Manufacturers

**8**

Product Categories

**10M+**

SKU Target (2026)

**\$185B**

Addressable Market

## Partnership Philosophy

PES Global Group has built a unique position in the electrical distribution market through strategic manufacturer relationships. Unlike traditional distributors that carry inventory, our asset-light model leverages direct partnerships to source products on-demand, reducing capital requirements while maximizing product breadth.

### Partnership Advantages

Direct manufacturer relationships

No intermediary markup

Priority allocation during shortages

Technical support access

Early access to new products

Volume-based pricing tiers

## Market Position



## Category Coverage Overview

Category	Partners	Market Coverage	SKU Count	Growth Rate
<b>Solar Panels</b>	45+	90%	2,450	+20% YoY
<b>Inverters</b>	30+	85%	890	+18% YoY
<b>Battery Storage</b>	25+	70%	445	+35% YoY
<b>EV Charging</b>	20+	55%	320	+45% YoY
<b>Mounting Systems</b>	35+	75%	1,230	+15% YoY
<b>Electrical Components</b>	40+	60%	3,780	+12% YoY
<b>Generators</b>	15+	40%	280	+25% YoY
<b>HVAC</b>	19+	35%	420	+15% YoY
<b>TOTAL</b>	<b>229+</b>	--	<b>9,815</b>	--

**10 Million SKU Initiative**

PES Global Group is targeting 10 million SKUs by December 2026. This expansion transforms our position from regional distributor to platform play, commanding 7-10x EBITDA multiples versus 3-5x for traditional distribution.

## Manufacturer Origin Distribution

Region	Partners	% of Total
United States	68	30%
China	52	23%
Germany	28	12%
Japan	22	10%
South Korea	18	8%
Canada	15	7%
Other	26	10%

### Key Relationship Highlights

Our partnership strategy prioritizes manufacturers with strong North American presence, ensuring reliable supply chains and local technical support.

**Domestic Preference:** 30% of partners are US-based, with additional 7% Canadian partners providing USMCA-compliant sourcing.

**Global Reach:** Asian and European partners provide access to cutting-edge technology and competitive pricing.

## Partnership Tier Structure

### Tier 1: Strategic

Premium Partners

Direct accounts, dedicated support, priority allocation, volume rebates

85 Partners \$25M+ Volume

### Tier 2: Preferred

Key Partners

Distributor pricing, technical support access, standard allocation

92 Partners \$5-25M Volume

### Tier 3: Authorized

Standard Partners

Authorized reseller, standard pricing, order-based sourcing

52 Partners <\$5M Volume

## Solar Panels - 90% Market Coverage

45+ manufacturer partnerships spanning residential, commercial, and utility-scale applications

### Tier 1 Strategic Partners

#### Canadian Solar

Canada / China

Tier 1 Mono/Bifacial Utility

#### JA Solar

China

Tier 1 High Efficiency Bifacial

#### Trina Solar

China

Tier 1 Vertex Series TOPCon

#### Jinko Solar

China

Tier 1 Tiger Series N-Type

#### LONGi Green Energy

China

Tier 1 Hi-MO Series PERC

#### LG Electronics

South Korea

Premium NeON Series Residential

#### Panasonic

Japan

Premium HIT Technology EverVolt

#### Q CELLS (Hanwha)

South Korea / Germany

Tier 1 Q.PEAK DUO US Made

#### REC Group

Norway

Premium Alpha Series HJT

## Tier 1 Strategic Partners (Continued)

### **SunPower / Maxeon**

United States

Premium Maxeon 6 IBC

### **First Solar**

United States

Utility Thin Film US Made

### **Risen Energy**

China

Tier 1 HJT Value

### **Astronergy (CHINT)**

China

Tier 1 TOPCon Commercial

### **Seraphim**

China

Tier 1 Eclipse Bifacial

### **ZNShine Solar**

China

Value Graphene Commercial

## Tier 2 Preferred Partners

### **Silfab Solar**

Canada / USA

US Made Residential

### **Aptos Solar**

United States

US Made DNA Series

### **Mission Solar**

United States

US Made Texas

### **Phono Solar**

China

Value Twin Plus

### **Hanover Solar**

Germany

European Quality

### **Boviet Solar**

Vietnam

Value Non-Chinese



## Tier 2 Preferred Partners (Continued)

### Axitec Energy

Germany

European Premium

### Meyer Burger

Switzerland

HJT Premium

### Amerisolar

China / USA

Value Commercial

### Suntech Power

China

Legacy Established

### Yingli Solar

China

Value PANDA

### Talesun

China

Bistar Commercial

## Tier 3 Authorized Partners

Heliene (Canada)

Solaria (USA)

Vikram Solar (India)

Waaree (India)

Adani Solar (India)

BYD Solar (China)

DAS Solar (China)

GCL-SI (China)

Jolywood (China)

Ulica Solar (China)

Almaden (USA)

Qcells DIY (Korea)

### US-Made Panel Availability

With increasing demand for domestically manufactured panels due to IRA incentives, PES maintains relationships with key US manufacturers including First Solar, SunPower, Silfab, Aptos, and Mission Solar.

## Technology Distribution

Technology	Partners	Market Share	Efficiency Range	Trend
Monocrystalline PERC	38	55%	19-21%	Stable
TOPCon (N-Type)	22	25%	21-23%	Growing
Heterojunction (HJT)	12	10%	22-24%	Emerging
Thin Film (CdTe)	4	5%	17-19%	Utility Focus
IBC (Interdigitated)	3	5%	22-25%	Premium

## Application Segments

Segment	Partners
Residential (under 10kW)	42
Commercial (10-500kW)	38
Utility-Scale (500kW+)	28
Off-Grid / Specialty	15

## 2025 Focus Areas

**N-Type Transition:** Supporting contractor transition from PERC to TOPCon/HJT technologies

**US Manufacturing:** Expanding domestic panel sourcing for IRA-eligible projects

**Bifacial Growth:** Meeting demand for dual-sided panels in commercial applications

## Inverters - 85% Market Coverage

30+ manufacturer partnerships covering microinverters, string inverters, and hybrid systems

### Tier 1 Strategic Partners

#### Enphase Energy

United States

Tier 1 IQ8 Series Microinverters

#### SolarEdge

Israel / USA

Tier 1 HD-Wave Optimizers

#### GoodWe

China

Tier 1 ES/ET Series Hybrid

#### SMA Solar

Germany

Premium Sunny Boy Commercial

#### Fronius

Austria

Premium Primo/Symo European

#### Huawei

China

Tier 1 SUN2000 Commercial

#### Sungrow

China

Tier 1 SG Series Utility

#### Generac

United States

Tier 1 PWRcell Backup

#### Sol-Ark

United States

Premium Hybrid Off-Grid

## Tier 2 Preferred Partners

### **Growatt**

China

Value MIN Series

### **Hoymiles**

China

Microinverters Value

### **APsystems**

China / USA

Microinverters YC Series

### **Solis**

China

Value Commercial

### **KACO New Energy**

Germany

Commercial European

### **Schneider Electric**

France

Conext Off-Grid

### **OutBack Power**

United States

Off-Grid Battery

### **Victron Energy**

Netherlands

Marine Off-Grid

### **Deye**

China

Hybrid Value

## Tier 3 Authorized Partners

Delta Electronics (Taiwan)

ABB / FIMER (Switzerland)

Chint Power (China)

Ginlong (China)

TBEA (China)

Power Electronics (Spain)

Yaskawa Solectria (USA)

CPS America (China/USA)

Chint ASTEC (China)

## Product Category Distribution

Category	Partners	SKUs	Key Players	Growth
Microinverters	6	180	Enphase, Hoymiles, APsystems	+25%
String Inverters	15	320	SolarEdge, SMA, Fronius	+12%
Hybrid Inverters	12	240	GoodWe, Sol-Ark, Generac	+35%
Central Inverters	8	90	Sungrow, Huawei, SMA	+15%
Off-Grid / Battery	6	60	OutBack, Victron, Schneider	+20%

### GoodWe Strategic Partnership

PES Global maintains an enhanced partnership with GoodWe, including dedicated account support, priority allocation, and credit facilities. GoodWe's hybrid inverter lineup is particularly strong for residential battery-backup applications.

## Market Trends & Positioning

### Residential Trends

Microinverter adoption continues to grow, led by Enphase. Hybrid inverters gaining share as battery attach rates increase. Module-level power electronics (MLPE) now standard for safety compliance.

### Commercial/Utility Trends

String inverters dominate commercial rooftop. Central inverters for utility-scale. Three-phase string inverters gaining share in commercial segment. Sungrow and Huawei leading on price-performance.

## Battery Storage - 70% Market Coverage

25+ manufacturer partnerships - fastest growing category at 35%+ annual growth

### Tier 1 Strategic Partners

#### Tesla Energy

United States

Premium Powerwall 3 Residential

#### Enphase Energy

United States

Tier 1 IQ Battery 5P Modular

#### Generac

United States

Tier 1 PWRcell Backup

#### Panasonic

Japan

Premium EverVolt 17.1 kWh

#### LG Energy Solution

South Korea

Premium RESU Residential

#### sonnen

Germany / USA

Premium ecoLinx Smart Home

#### BYD

China

Tier 1 Battery-Box LFP

#### Franklin Home Power

United States

Tier 1 aPower Whole Home

#### EG4 Electronics

United States

Value LifePower4 DIY

## Tier 2 Preferred Partners

**SimpliPhi Power**

United States

LFP Off-Grid

**Fortress Power**

United States

LFP eVault

**HomeGrid**

United States

Stack'd Modular

**Pytes (V5 Alpha)**

China

Server Rack Value

**Discover Battery**

Canada

AES Commercial

**Blue Planet Energy**

United States

Blue Ion Hawaii

## Battery Chemistry Distribution

Chemistry	Partners	Use Case	Cycle Life	Trend
Lithium Iron Phosphate (LFP)	18	Residential, Commercial	6,000+	Dominant
Nickel Manganese Cobalt (NMC)	8	Residential	4,000	Declining
Sodium-Ion	3	Utility, Grid	5,000+	Emerging

**5x Market Growth by 2030**

Battery storage represents PES Global's fastest-growing category. Residential battery attach rates are increasing from ~15% to projected 50%+ by 2028, driven by grid instability, time-of-use rates, and whole-home backup demand.

## EV Charging - 55% Market Coverage

20+ manufacturer partnerships - emerging category with 45%+ annual growth

### Tier 1 Strategic Partners

#### ChargePoint

United States

Tier 1 Network Commercial

#### Tesla

United States

Premium Wall Connector NACS

#### Wallbox

Spain / USA

Tier 1 Pulsar Plus Bidirectional

#### Emporia Energy

United States

Value Level 2 Smart

#### Enphase

United States

Tier 1 IQ EV Charger Solar

#### Enel X / JuiceBox

Italy / USA

Tier 1 Smart Grid V2G

### Tier 2 Preferred Partners

#### Grizzl-E

Canada

Value Durable

#### Lectron

United States

Value Portable

#### ABB E-Mobility

Switzerland

DC Fast Commercial

#### Siemens eMobility

Germany

VersiCharge Commercial

#### Blink Charging

United States

## EVBox (Engie)

Netherlands

European Fleet

## Charging Level Distribution

Level	Power Range	Partners	SKUs	Application
Level 1 (120V)	1.4-1.9 kW	8	45	Portable, Emergency
Level 2 (240V)	3.3-19.2 kW	18	185	Residential, Workplace
DC Fast (Level 3)	50-350 kW	6	65	Commercial, Highway
Bidirectional (V2G)	7.6-11.5 kW	4	25	Backup, Grid Services

### \$7.5B Federal Investment

The NEVI program is deploying 500,000+ public chargers by 2030. PES Global is positioned to supply Level 2 and DC fast charging equipment for commercial and fleet applications, with solar+storage+EV bundles for comprehensive energy solutions.

## Connector Standard Support

Standard	Partners
J1772 (Level 2)	18
NACS (Tesla)	12
CCS Combo	8
CHAdeMO	4

### NACS Transition

With major automakers adopting NACS (Tesla's connector), PES is expanding partnerships with NACS-compatible equipment manufacturers. All new Tier 1 partners offer dual-port or NACS-native solutions.

## Mounting Systems - 75% Market Coverage

35+ manufacturer partnerships covering roof, ground, and specialty applications

### Tier 1 Strategic Partners

#### IronRidge

United States

[Tier 1](#) [XR Rail](#) [Residential](#)

#### Unirac

United States

[Tier 1](#) [SolarMount](#) [Commercial](#)

#### SnapRack

United States

[Tier 1](#) [Series 100](#) [Rail-Less](#)

#### Quick Mount PV

United States

[Tier 1](#) [QBase](#) [Flashing](#)

#### K2 Systems

Germany

[Premium](#) [SpeedRail](#) [Flat Roof](#)

#### Array Technologies

United States

[Tier 1](#) [Tracker](#) [Utility](#)

#### Schletter

Germany / USA

[Tier 1](#) [Ground](#) [Carport](#)

#### GameChange Solar

United States

[Tier 1](#) [Ground](#) [Tracker](#)

#### NEXTracker

United States

[Premium](#) [Tracker](#) [Utility](#)

**Tier 2 Preferred Partners****Roof Tech**

United States

RT-Mini Rail-Less

**S-5!**

United States

Metal Roof Clamps

**Everest Solar**

China / USA

Value Full Line

**ProSolar**

United States

Ground Canopy

**EcoFasten**

United States

Flashing Waterproof

**PanelClaw**

United States

Flat Roof Ballasted

**Application Breakdown**

Application	Partners	SKUs	Key Products
Pitched Roof - Rail	12	380	IronRidge XR, Unirac SM
Pitched Roof - Rail-Less	6	120	SnapNrack, Roof Tech
Flat Roof - Ballasted	8	180	K2 Systems, PanelClaw
Ground Mount - Fixed	10	220	GameChange, Schletter
Ground Mount - Tracker	5	85	NEXTracker, Array Tech
Specialty (Metal, Carport)	8	245	S-5!, ProSolar

## BOS & Infrastructure - 60% Market Coverage

40+ manufacturer partnerships - essential balance-of-system components

### Circuit Protection & Disconnects

#### Eaton

United States

[Tier 1](#) [Breakers](#) [Panels](#)

#### Schneider Electric

France / USA

[Tier 1](#) [Square D](#) [Full Line](#)

#### Siemens

Germany / USA

[Tier 1](#) [Industrial](#) [Panels](#)

#### ABB

Switzerland

[Tier 1](#) [Disconnects](#) [Industrial](#)

#### Leviton

United States

[Tier 1](#) [Load Centers](#) [Devices](#)

#### Midnite Solar

United States

[Solar](#) [Combiners](#) [Disconnects](#)

### Wire & Cable

#### Southwire

United States

[Tier 1](#) [PV Wire](#) [Full Line](#)

#### General Cable (Prysmian)

United States

[Tier 1](#) [USE-2](#) [THWN-2](#)

#### IEWC

United States

[Distribution](#) [Multi-Brand](#)

## Connectors & Hardware

### Multi-Contact (Staubli)

Switzerland

Tier 1 MC4 OEM

### Amphenol

United States

Tier 1 H4 Industrial

### TE Connectivity

Switzerland / USA

Solarlok Full Line

### Phoenix Contact

Germany

Sundlix Terminal

## Monitoring & Smart Devices

### Sense

United States

Monitoring Smart Home

### Emporia Energy

United States

Monitoring Vue

### Span

United States

Smart Panel Premium

### Lumin

United States

Load Control Smart

## Component Category Summary

Category	Partners	SKUs
Circuit Breakers & Panels	8	850
Disconnects & Combiners	6	320
Wire & Cable	5	480
Connectors	8	560
Conduit & Fittings	6	720
Monitoring	4	85
Surge Protection	3	65



## Generators, HVAC & Wind - Growth Categories

30+ manufacturer partnerships in expanding product lines (launching Q1 2025)

### Generators - Launching February 2025

#### **Cummins**

United States

[Tier 1](#) Diesel Commercial

#### **Generac**

United States

[Tier 1](#) Standby Residential

#### **Kohler**

United States

[Tier 1](#) Premium Full Line

#### **Briggs & Stratton**

United States

Portable Value

#### **Champion**

United States

Dual Fuel Portable

#### **Honda**

Japan

Inverter Portable

#### **Generator Category Launch**

PES Global is launching generator distribution in February 2025, starting with Cummins partnership. This expansion supports our whole-home energy resilience offering: Solar + Storage + Generator backup systems.

## HVAC - 15%+ Annual Growth

### **Daikin**

Japan / USA

Tier 1 Heat Pumps Mini-Split

### **Mitsubishi Electric**

Japan

Premium Mini-Split H2i

### **Carrier**

United States

Tier 1 Full Line Commercial

### **LG HVAC**

South Korea

VRF Commercial

### **Fujitsu**

Japan

Mini-Split Halcyon

### **GREE**

China

Value Mini-Split

## Small Wind - Emerging

### **Bergey Windpower**

United States

Small Wind Rural

### **Primus Wind Power**

United States

AIR Series Off-Grid

### **Automaxx**

Taiwan

Residential Value

## Manufacturer Relationship Structure

Tier	Partners	Volume	Benefits	Terms
<b>Tier 1: Strategic</b>	85	\$25M+/year	Priority allocation, dedicated support, volume rebates, early access	Net 45-60
<b>Tier 2: Preferred</b>	92	\$5-25M/year	Standard distributor pricing, technical support, standard allocation	Net 30-45
<b>Tier 3: Authorized</b>	52	<\$5M/year	Authorized reseller status, standard pricing, order-based sourcing	Net 30 / COD

## Credit Facilities & Terms

### Active Credit Lines

GoodWe	\$500K
Canadian Solar	\$250K
JA Solar	\$200K
Enphase	\$150K
IronRidge	\$100K

### Partnership Benefits

**Direct Sourcing:** No intermediary markup - direct manufacturer relationships

**Priority Allocation:** Guaranteed access during supply constraints

**Technical Support:** Direct access to manufacturer engineering teams

**Training Programs:** Certification and product training for partners

### Relationship-Based Model

PES Global's asset-light distribution model leverages manufacturer relationships rather than carrying inventory. This reduces capital requirements while maximizing product breadth - enabling access to 229+ manufacturers with minimal working capital.

## Working with PES Global

### For Contractors & Installers

Access our full manufacturer network through a single account. Project-based sourcing, competitive pricing, and logistics coordination.

**Contact:** sales@pes.supply

### For Distributors

Partnership and acquisition opportunities. Access to our supplier network, technology platform, and operational infrastructure.

**Contact:** partnerships@pesglobalgroup.com

### Investor Relations

#### PES Global Group

Louisville, Kentucky

investors@pesglobalgroup.com

[www.pesglobalgroup.com/investors](http://www.pesglobalgroup.com/investors)

**229**

Tier 1 Partners

**8**

Categories

**10M+**

SKU Target

**\$185B**

Market

## PES Global Group