Anern is a China-based solar energy solutions manufacturer specializing in solar inverters, lithium batteries, solar storage systems and solar street lighting projects. The company supports distributors, wholesalers, EPC contractors and project developers with product manufacturing, technical documentation, application guidance and project-oriented solar energy solutions.

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ANERN BUYER RESOURCE

Anern Solar Inverter Import Checklist 2026

A practical pre-order checklist for distributors, wholesalers, EPC contractors and project buyers importing solar inverters from China.

Distributors	Wholesalers	EPC Contractors	Project Buyers

Use this checklist before sample orders, tender submissions, bulk purchase planning or distributor onboarding.

It helps buyers validate the inverter type, PV input, battery compatibility, certification documents, wiring guidance, sample testing and after-sales readiness before importing solar inverters from China.

Document version: 2026 | Format: Print-ready PDF checklist

How to Use This Checklist

- Complete sections 1-4 before choosing the inverter model and configuration.
- Use sections 5-8 to reduce certification, installation and after-sales risks before placing a bulk order.
- Use the landed reliability cost worksheet to compare suppliers beyond unit price.
- Use the evidence scorecard to review whether supplier documents are complete, model-specific and current.

Checklist Sections

01	Project and Application Checklist	Define the destination market, application scenario and project conditions before model selection.
02	Inverter Type and Power Range Checklist	Confirm inverter type, output phase, rated power, surge capacity and system expansion requirements.
03	PV Input and MPPT Checklist	Match PV string design, MPPT range, voltage and charging limits with real site conditions.
04	Battery Compatibility Checklist	Validate voltage, chemistry, communication interface, BMS settings and third-party compatibility.
05	Certificates and Compliance Checklist	Check model-specific certificates, market compliance and documentation validity before importing.
06	User Manual and Wiring Diagram Checklist	Make sure installers have the correct manuals, wiring diagrams, protection guidance and error-code references.
07	Sample Testing Checklist	Test the selected inverter with real loads, batteries, generators and target-market operating conditions.
08	After-Sales and Service Readiness Checklist	Prepare warranty, spare parts, installer training and issue-tracking workflow before bulk shipment.
09	Landed Reliability Cost Worksheet	Compare unit price with reliability-related costs to understand the real import cost per usable AC output.
10	Supplier Evidence Scorecard	Score supplier evidence before purchase to reduce documentation, compatibility and after-sales risk.

1 Project and Application Checklist

Define the destination market, application scenario and project conditions before model selection.

Check	Item	What to Verify
☐	**Target market**	Country, region, grid condition, climate and local compliance requirements
☐	**Application type**	Residential, commercial, farm, telecom, backup, workshop or project-based use
☐	**System type**	Off-grid, hybrid, grid-connected, generator-assisted or battery storage system
☐	**Load profile**	Lighting, appliances, pumps, compressors, tools, refrigeration or mixed loads
☐	**Expansion plan**	Future battery, PV array, parallel or three-phase expansion requirements
☐	**Installer capability**	Local experience with wiring, BMS communication and commissioning

2 Inverter Type and Power Range Checklist

Confirm inverter type, output phase, rated power, surge capacity and system expansion requirements.

Check	Item	What to Verify
☐	**Off-grid or hybrid**	Choose based on grid access, battery use and project energy management needs
☐	**Power range**	Common distributor demand often concentrates around 3 kW to 16 kW
☐	**Phase output**	Single-phase, split-phase or three-phase requirement
☐	**Rated output**	Match continuous load requirements
☐	**Surge capacity**	Validate startup performance for motor loads; selected specifications may reach about 2× rated output for 5 seconds
☐	**Parallel capability**	Verify whether parallel operation is required and supported
☐	**Generator input**	Confirm charging or backup input behavior where required

3 PV Input and MPPT Checklist

Match PV string design, MPPT range, voltage and charging limits with real site conditions.

Check	Item	What to Verify
☐	**MPPT operating range**	Check against actual PV string design and local temperature conditions
☐	**Maximum PV voltage**	Confirm PV open-circuit voltage does not exceed inverter limits
☐	**PV input current**	Verify current limits for the selected inverter model
☐	**PV string configuration**	Confirm panel quantity, series/parallel design and voltage window
☐	**Charging current**	Check model-specific charging capacity
☐	**Derating behavior**	Review performance under weak-grid, high-temperature or abnormal input conditions

4 Battery Compatibility Checklist

Validate voltage, chemistry, communication interface, BMS settings and third-party compatibility.

Check	Item	What to Verify
☐	**Battery voltage**	Confirm the battery voltage range matches inverter requirements
☐	**Battery type**	Lithium, lead-acid or other battery type used in the project
☐	**Communication interface**	Verify whether RS485 or RS232 is required
☐	**Communication cable**	Test actual communication cable and wiring before shipment
☐	**BMS settings**	Confirm function settings and communication parameters
☐	**Protocol compatibility**	Verify compatibility by model and battery brand
☐	**Third-party battery**	Do not assume compatibility without model-specific confirmation
☐	**Sample validation**	Test inverter and battery together before bulk purchase

5 Certificates and Compliance Checklist

Check model-specific certificates, market compliance and documentation validity before importing.

Check	Item	What to Verify
☐	**Model-specific certificates**	Verify certificates match the exact model, voltage version and destination market
☐	**Test reports**	Request current test reports where applicable
☐	**IEC references**	Review IEC 62109-1/2, IEC 62116 and IEC 61727 where relevant
☐	**CE / EMC / LVD**	Confirm applicable documents for the selected model and market
☐	**Local approval**	Check utility, tender, customs or national approval requirements
☐	**Labeling and packaging**	Confirm marking, labels, manuals and import documentation requirements
☐	**Certificate validity**	Check dates, model numbers, issuing body and certification scope

6 User Manual and Wiring Diagram Checklist

Make sure installers have the correct manuals, wiring diagrams, protection guidance and error-code references.

Check	Item	What to Verify
☐	**Correct user manual**	Confirm the manual matches the exact inverter model
☐	**PV wiring**	Review PV input wiring and safety instructions
☐	**Battery wiring**	Review battery wiring, protection and communication wiring
☐	**AC input/output wiring**	Check installation requirements and protection devices
☐	**Parallel wiring**	Verify parallel operation diagram where applicable
☐	**Three-phase wiring**	Verify synchronization or three-phase guidance where applicable
☐	**BMS settings**	Review RS485/RS232, communication cable and parameter setup
☐	**Troubleshooting**	Check error codes, alarms and service procedures

7 Sample Testing Checklist

Test the selected inverter with real loads, batteries, generators and target-market operating conditions.

Check	Item	What to Validate
☐	**MPPT performance**	PV input voltage and charging behavior
☐	**Surge capacity**	Motor-load startup performance where relevant
☐	**Battery communication**	Inverter and battery BMS communication
☐	**Generator integration**	Generator charging or backup input behavior
☐	**Parallel operation**	Synchronization if the project needs parallel systems
☐	**Operating temperature**	Review operation under target-market conditions; selected specs include -10°C to +50°C
☐	**Storage condition**	Review storage requirements; selected specs include -15°C to +60°C
☐	**Noise and cooling**	Check fan operation, ventilation and installation environment
☐	**Real load testing**	Test pumps, compressors, tools, refrigeration or other common loads
☐	**Documentation usability**	Confirm installers can follow the manual and wiring diagram

8 After-Sales and Service Readiness Checklist

Prepare warranty, spare parts, installer training and issue-tracking workflow before bulk shipment.

Check	Item	What to Verify
☐	**Warranty policy**	Confirm warranty scope, exclusions, process and replacement terms
☐	**Spare parts**	Plan spare parts inventory for distributor service support
☐	**Main-board risk**	Review overload, electrical stress and protection requirements
☐	**Noise complaints**	Check installation location, ventilation, cooling and maintenance guidance
☐	**Technical support**	Confirm response process, support contact and troubleshooting workflow
☐	**Installer training**	Prepare local training for wiring, commissioning and common errors
☐	**Return process**	Clarify replacement, repair and documentation requirements
☐	**Service records**	Track common issues by model, application and installer team

9 Landed Reliability Cost Worksheet

Compare unit price with reliability-related costs to understand the real import cost per usable AC output.

Landed Reliability Cost =
(Unit Price + Freight + Import Duty + Certification Review + Sample Testing + Warranty Reserve + Spare Parts Inventory + Estimated After-Sales Cost) / Usable AC Output

Cost Item	Amount	Notes
Unit Price		
Freight		
Import Duty / Tax		
Certification Review Cost		
Sample Testing Cost		
Warranty Reserve		
Spare Parts Inventory		
Estimated After-Sales Cost		
Usable AC Output		
Final Landed Reliability Cost		

10 Supplier Evidence Scorecard

Score supplier evidence before purchase to reduce documentation, compatibility and after-sales risk.

Evidence Item	Available?	Quality Score 1-5	Notes
Product catalog	☐ Yes ☐ No		
Model-specific datasheet	☐ Yes ☐ No		
User manual	☐ Yes ☐ No		
Wiring diagram	☐ Yes ☐ No		
Model-specific certificates	☐ Yes ☐ No		
Test reports	☐ Yes ☐ No		
Battery compatibility guidance	☐ Yes ☐ No		
Sample testing support	☐ Yes ☐ No		
Warranty policy	☐ Yes ☐ No		
Spare parts plan	☐ Yes ☐ No		
After-sales workflow	☐ Yes ☐ No		

Next Steps After Completing the Checklist

Use the completed checklist to compare supplier evidence, confirm technical fit and prepare a safer import decision before bulk purchase.

01	Confirm the project scenario Match inverter type with grid access, load profile, battery use and local installer capability.
02	Validate model-specific documents Review datasheets, manuals, wiring diagrams, certificates and test reports for the exact model.
03	Run sample testing before bulk orders Test PV input, BMS communication, surge loads, generator input and real target-market loads.
04	Prepare after-sales readiness Plan warranty, spare parts, installer training and service records before distributor rollout.

Recommended Download Center Resources
Solar Inverter Catalog: https://www.anern.com/catalog/solar-inverter/
Solar Inverter User Manual: https://www.anern.com/solar-inverter-user-manual/
Safety & Quality: https://www.anern.com/safety-quality/

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Need help selecting solar inverters for your market?

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Related website resources: Solar Inverter Catalog | User Manual | Safety & Quality

This checklist is designed for pre-order evaluation and distributor project planning. Final technical selection should be confirmed against the exact model datasheet, user manual, certificates and local compliance requirements.