



SMART SOLAR & STORAGE SOLUTIONS FOR HOMEOWNERS

Power Your Life, Anytime. Anywhere.



Toyon Energy Co.,Ltd.

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Reliable, Safe, Lifetime Support

Our Corporation

Toyon Energy Co., Ltd

Toyon Group (Stock Code: 688679) was founded in 1999 and listed on the Shanghai Stock Exchange Main Board in 2020. The company employs over 1,500 people worldwide, including more than 200 R&D and technical staff, and achieved an annual revenue exceeding USD 500 million in 2025.

On the manufacturing front, Toyon Energy operates production facilities for lithium batteries and solar panels, with an annual lithium battery capacity of over 2 GWh and an annual solar panel capacity exceeding 1.2 GW. Its products have obtained market access certifications across multiple regions, including Europe, Africa, Southeast Asia, and the Americas.

Leveraging its strong technological expertise, outstanding resource integration capabilities, and comprehensive EPC and project management capacities, Toyon provides global customers with turnkey solutions for solar and energy storage – covering system design, project financing, installation, operation, and maintenance throughout the project lifecycle.

To date, Toyon has successfully delivered over 1.2 GW of projects worldwide, with its products exported to more than 85 countries and regions. The company has established local offices and installation & maintenance teams in Vietnam, Angola, Kenya, the UAE, and the Bahamas, continuously delivering efficient and reliable renewable energy services to global customers.

25+ Years

Industry Excellence
(Est. 1999)

85+

Countries & Regions Served

\$500M+

2025 Annual Revenue

2GWh+

Annual Capacity of ESS

1.2GW+

Projects Delivered Globally

1.2GW+

Annual Capacity of PV



Honors And Qualifications



Factory Display

Solar Panel



Lithium Battery



Off Grid Solar System

For areas with no grid or unstable grid. No feed-in.



3.6KW-33KW

Features



Total Energy Independence

No grid, no worries. Power your home anywhere, anytime.



24/7 Reliable Backup

Seamless automatic switch to battery power. Critical loads always on.



Scalable & Future-Ready

Start small, expand anytime. No need to replace core components.



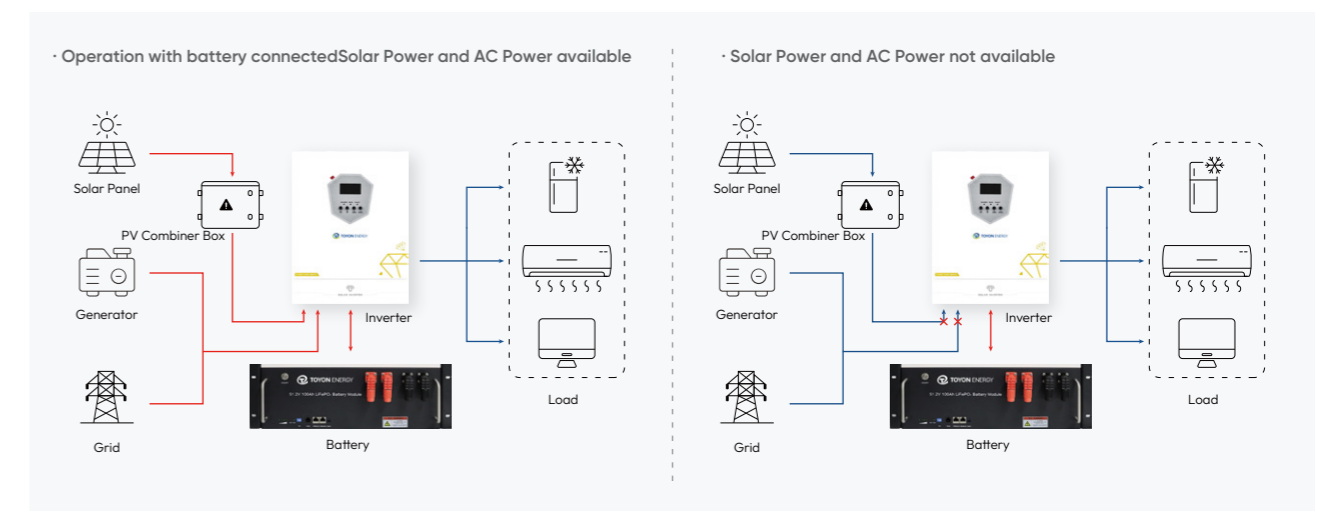
Long-Term Savings

Payback in 3-5 years. No fuel costs, no grid bills, no rate hikes.

PRODUCT DESCRIPTION

	TY-3.6KW-OFF	TY-6.2KW-OFF	TY-11KW-OFF	TY-22KW-OFF	TY-33KW-OFF
Toyon 630W Solar Panel					
Testing Condition	NMOT: irradiance=800W/m ² , environment temperature=20°C, wind speed=1m/s				
Maximum Power(Pmax/W)	630				
Open Circuit Voltage(Voc/V)	49.48				
Short Circuit Current(Isc/A)	16.2				
Voltage at Maximum Power(Vmp/V)	41.02				
Current at Maximum Power(Imp/A)	15.36				
Qty of Solar Panel in System	6	10	17	34	51
Toyon Off Grid Inverter					
Model	3624MH	6248MH	11048MH		
Rated Output Power(W)	3.6KW	6.2KW	11KW		
Rated Output Voltage/Frequency	230VAC±5% / 50 60HZ				
No. of MPPT	1	1	2		
MPPT Voltage Range	60-500VDC	90-500VDC	60-500VDC		
Battery Type	Lead Acid / Lithium				
Rated Battery Voltage	24V	48V	48V		
Qty of Inverter in System	1	1	1	2	3
Toyon Lithium Battery					
Model	25.6V 200Ah	51.2V 200Ah	51.2V 314Ah		
Nominal Capacity(KWh)	5.12	10.24	16		
Max.Charging Current(A)	100	100	200		
Max.Discharging Current(A)	100	100	200		
Qty of Battery in System	1	1	1	2	3
Accessory					
DC Cable 4mm ²	100	100	200	300	400
MC4 Connector	10	10	10	20	30
Mounting System	Customized Product Based On Installation Roof/Ground				
PV Installation Tools	1 Set				

SYSTEM SCHEMATIC DIAGRAM



Hybrid Solar System

For areas with grid access but unreliable power or TOU rates.



5KW-20KW

Features



Dual Mode – Smart & Flexible

Auto-switch between grid-tied and off-grid. Power stays on during outages.



Seamless Backup – No Interruption

<10ms transfer time. Critical loads always on.



Bill Optimization – Real Savings

TOU management cuts peak-time usage. Maximize self-consumption.



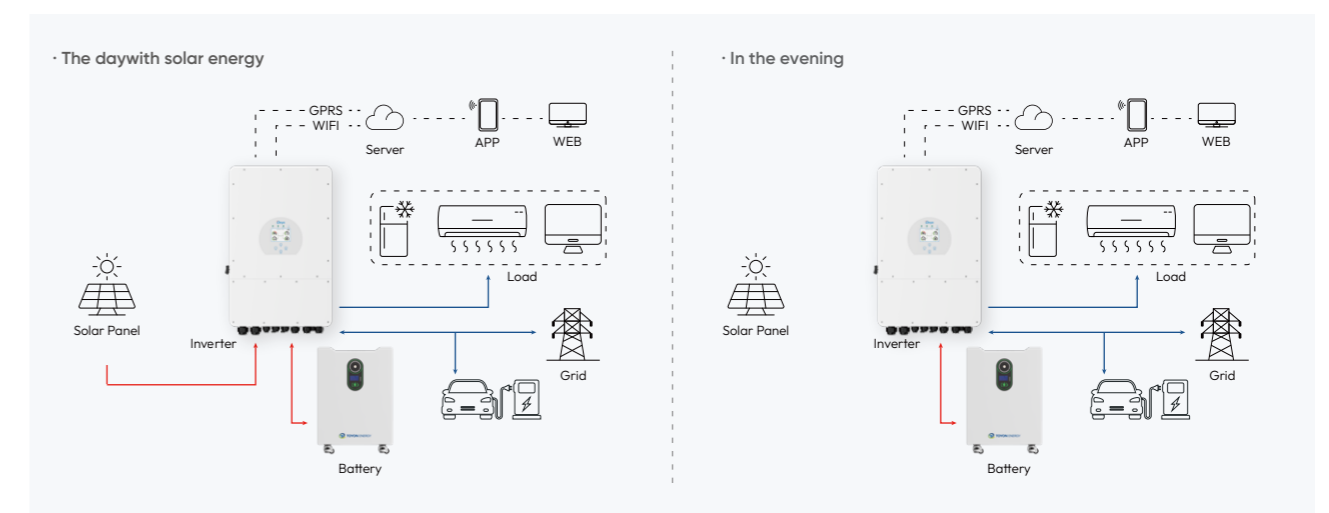
Grid Feed-in – Extra Income

Export excess solar. Earn credits or revenue.

PRODUCT DESCRIPTION

	TY-5KW-HY	TY-8KW-HY	TY-12KW-HY3	TY-16KW-HY3	TY-20KW-HY3
Toyon 630W Solar Panel					
Testing Condition	NMOT: irradiance=800W/m ² , environment temperature=20°C, wind speed=1m/s				
Maximum Power(Pmax/W)	630				
Open Circuit Voltage(Voc/V)	49.48				
Short Circuit Current(Isc/A)	16.2				
Voltage at Maximum Power(Vmp/V)	41.02				
Current at Maximum Power(Imp/A)	15.36				
Qty of Solar Panel in System	6	10	17	34	51
Toyon Hybrid Inverter					
Model	SUN-5K-SG05LP1-EU-AM2-P	SUN-8K-SG05LP1-EU-AM2-P	SUN-12K-SG05LP3-EU-SM2	SUN-16K-SG05LP3-EU-SM2	SUN-20K-SG05LP3-EU-SM2
Rated Output Power(W)	5	8	12	16	20
Rated Output Voltage/Frequency	Single Phase 220-230V		3 Phase 380-400V		
No. of MPPT	2	2	2	2	2
MPPT Voltage Range	150-425V		150-850V		
Battery Type	Lead Acid / Lithium				
Rated Battery Voltage	40-60V				
Qty of Inverter in System	1	1	1	2	3
Toyon Lithium Battery					
Model	51.2V 200Ah		51.2V 314Ah		
Nominal Capacity(KWh)	5.12		16		
Max.Charging Current(A)	100		200		
Max.Discharging Current(A)	100		200		
Qty of Battery in System	1	1	2	3	4
Accessory					
DC Cable 4mm ²	100	100	200	300	400
MC4 Connector	10	10	10	20	30
Mounting System	Customized Product Based On Installation Roof/Ground				
PV Installation Tools	1 Set				

SYSTEM SCHEMATIC DIAGRAM

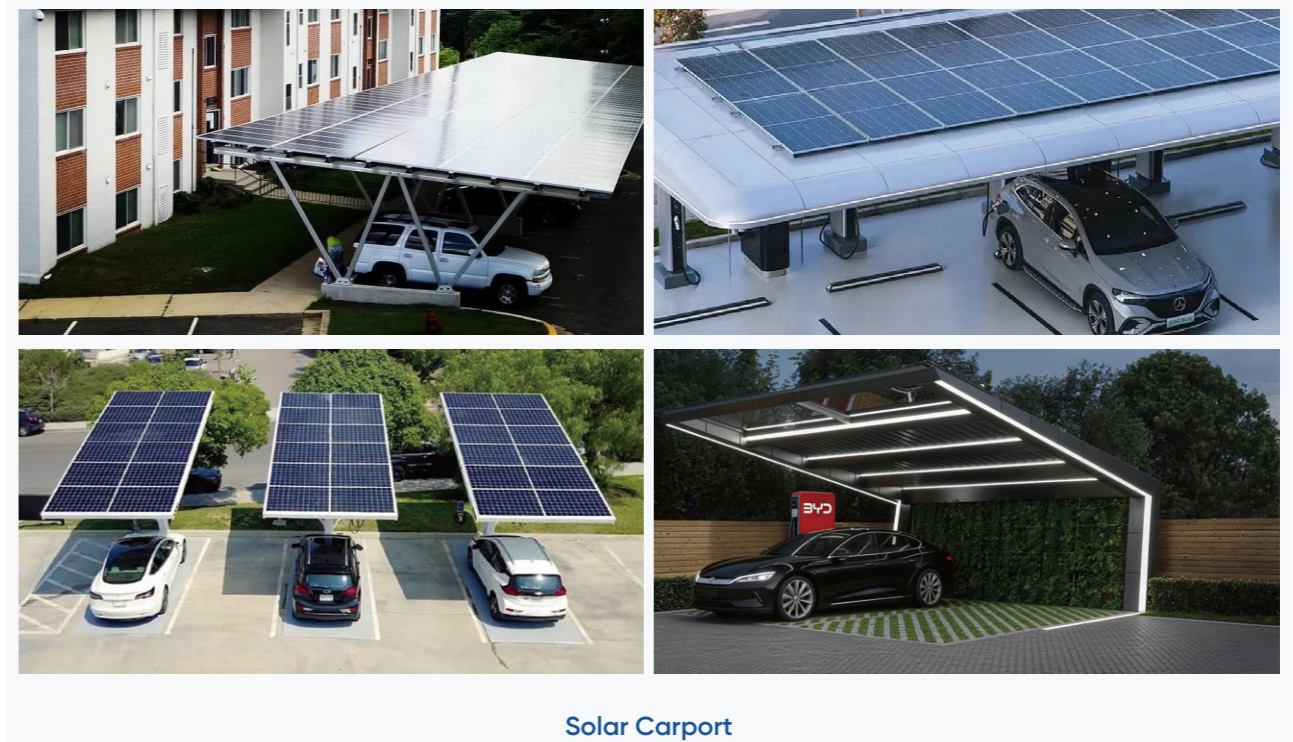
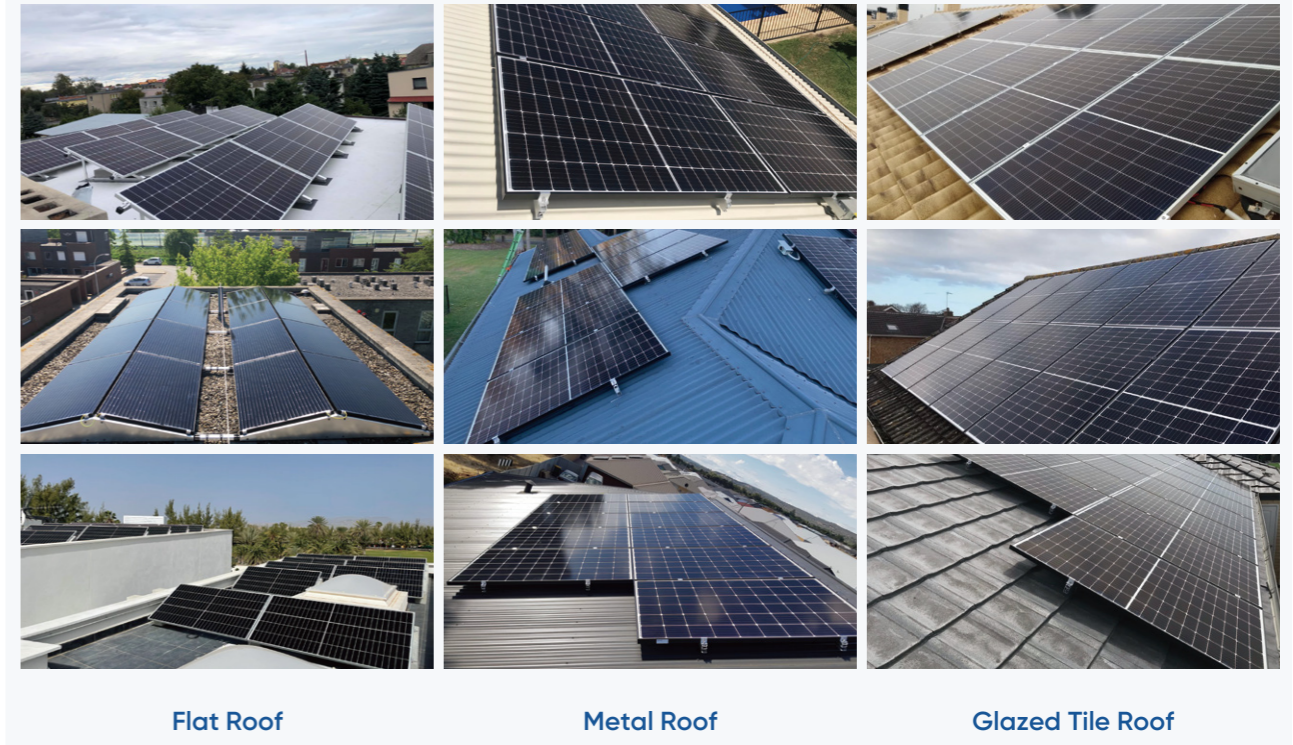


Micro Energy Storage System

For areas with grid access but unreliable power or TOU rates.

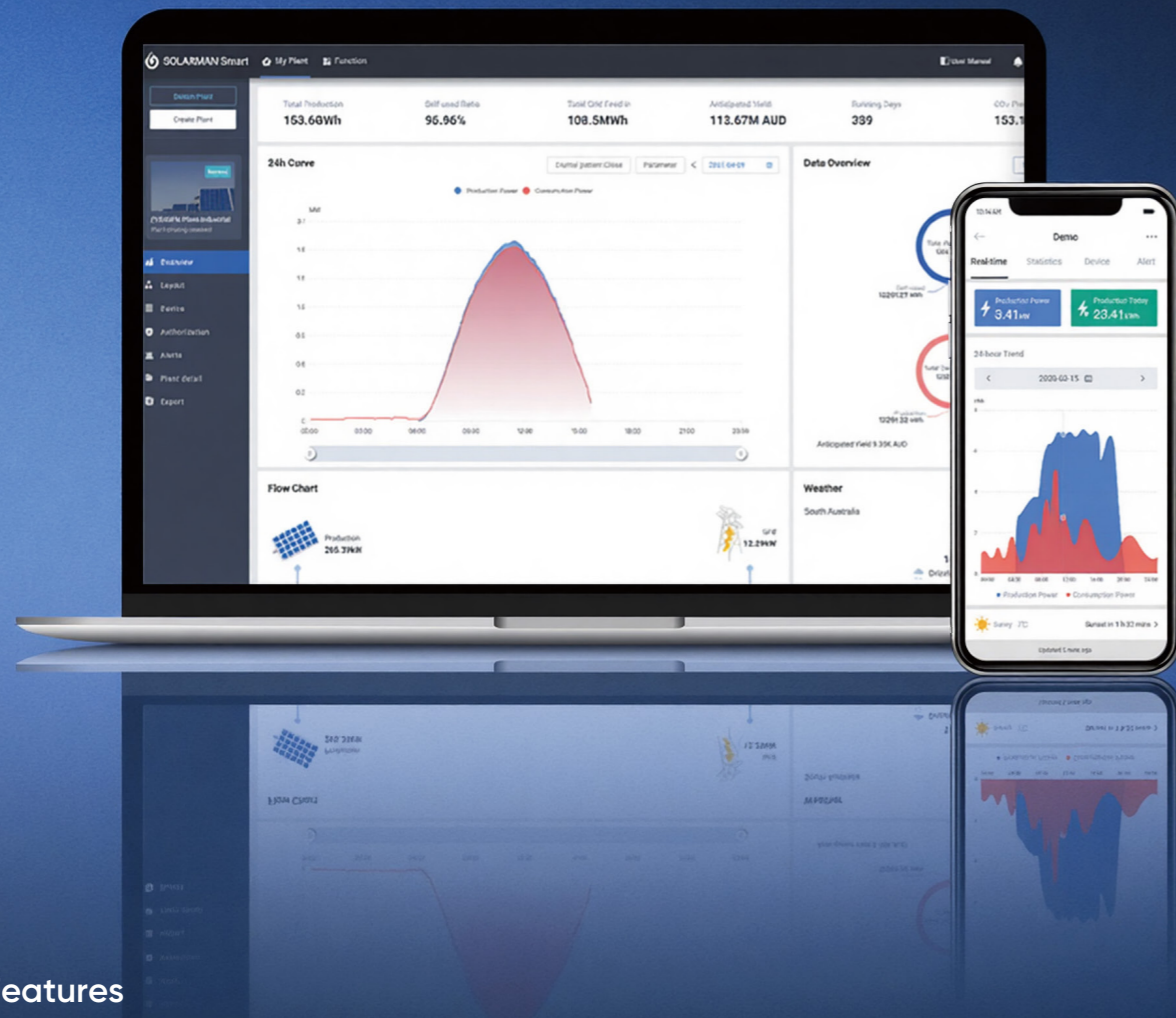


Installation Scenario







Monitor. Alert. Analyze. Control.

One cloud, full control.



Features



- 
Real-Time Monitoring
 See every inverter's status anytime, anywhere.
- 
Smart Alerts
 Get instant fault notifications via app, SMS, or email.
- 
Data Analytics
 Optimize performance and boost energy yield.
- 
Remote O&M
 Reduce site visits and cut maintenance costs.

Safe. Scalable. Smart.

Toyon Lithium Battery.



Features

- 
Safety First
 • LFP cells + Active fire protection
 • 5 years
 • 0 incident
- 
Scalable Design
 • 5kWh ~ 250kWh
 • Broad inverter compatibility
- 
Easy Installation
 • For all scenarios
 • Plug & play
 • 30 min/cluster
- 
Long Life & All-weather
 • 6,000-8,000 cycles
 • 10-year warranty
 • -20°C ~ 55°C with self-heating

Off-grid & hybrid

You choose. We support.



Features



Multi-brand Choice
Top brands, one stop.



Full Coverage
Off-grid / Hybrid – for every home need.

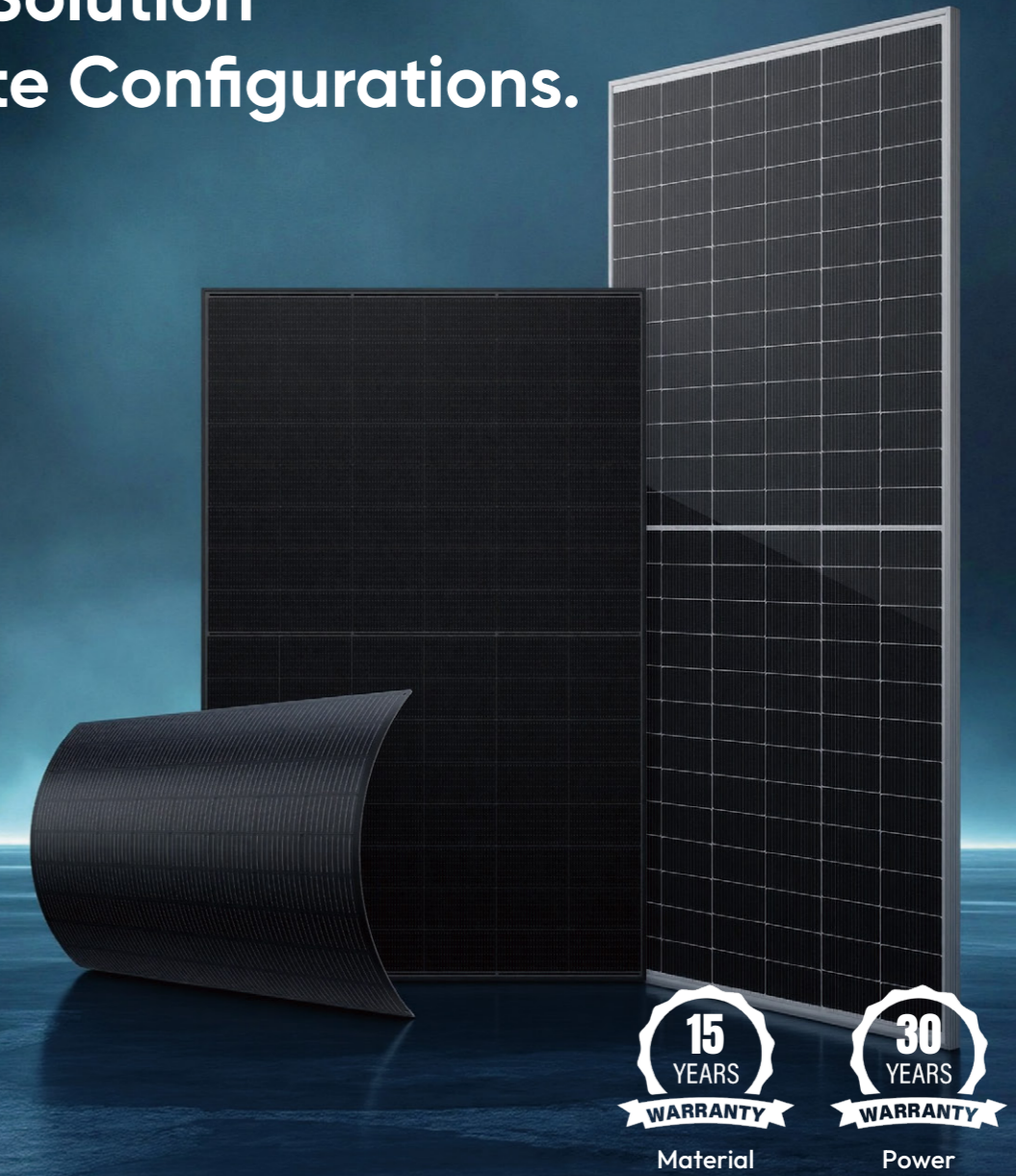


No Vendor Lock-in
You choose what fits.



Expert + Global Support
Smart selection backed by Toyon's global service.

One Solution Infinite Configurations.



Features



Multi-Brand. Multi-Power
Wide brand & power range – from home to commercial.



Aesthetic Meets Performance
All-black modules for premium rooftops.



Built to Last. Built to Adapt.
Dual-glass modules – PID resistant, high durability.



Bend the Rules of Installation
Flexible modules for curved roofs, boats & unique sites.

Project Cases



Off-Grid Freedom in Rural Vietnam

Poor grid. Frequent blackouts. Most families rely on generators — but fuel is costly, noise is unbearable, and startup is manual.

In 2024, one customer chose Toyon's off-grid system: 13 x 550W solar panels (7.15 KW) + 10 KWh lithium battery. Fully grid-independent. Solar powers daily needs. On cloudy days, the battery takes over automatically.

The existing generator is integrated as a final backup. When battery runs low during extended bad weather, the system auto-starts the generator and switches power seamlessly — zero manual work. Home power never stops.

No more fuel bills. No more noise. Just clean, silent, and reliable electricity for rural families.

Vietnam

7.15KW_(PV)+10KWh_(ESS)

Beating Blackouts & High Bills

A villa with a pool and heat pump system. High energy use. Then war drove electricity prices through the roof. Grid outages? Up to 4 days a week.

The customer chose our 10kW hybrid system: 20 x 580W solar panels + 20kWh lithium battery. Precisely sized to real monthly usage.

Our price? 80% lower than local installers.

Result: Zero blackouts since installation. Saves nearly \$400/month on electricity. Payback in just 2 years. With over 10 years of warranty, the rest is pure profit.

"A very smart investment."

Poland

11.6kW_(PV)+20kWh_(ESS)



Australia

12.1KW PV + 20.48KWh ESS



Argentina

6.96KW PV + 19.6KWh



Myanmar

7.7KW PV +16KWh ESS



USA

4.72KW PV +5.12KWh ESS



Curaçao

8.1KW PV + 9.6KWh ESS



Germany

12.3KW PV + 19.2KWh



Kenya

5.22KW PV / 9.6KWh ESS



Indonesia

30.16KW PV + 51.2KWh ESS