



Modular Microgrid Power Solutions

Mobile containerized solar rack system for rapid off-grid deployment in remote locations.



Model No. : 10HC-PC47-100-50

QUICK DEPLOYMENT



1. Leveling and ground preparation.



2. Lift the container onto the prepared ground, and take out the parts.



3. Use a crane or forklift to tilt the side wall onto the ground.



4. Install the tracks and the winch/motor.



5. Start the winch/motor, deploy the panels.



6. Connect the PV cable harness.

APPLICATIONS



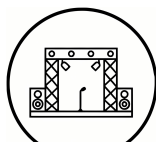
Mining



Military



Island Areas



Events



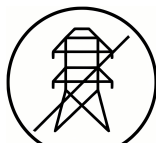
Construction Site



Disaster Relief



Desalination



Off-grid Areas

FEATURES

- ✓ Mobile System
- ✓ Quick Deployment
- ✓ Scalability
- ✓ Grid Independence
- ✓ Robust Construction
- ✓ Wide Applications
- ✓ Cost-Effectiveness
- ✓ Energy Savings



Category	Parameter	Value
General Configuration	Product Model	10HC-SR47-100-50
	Solar Array Capacity (Pmax / kWp)	47.2
	Total Weight (tons)	8
	Unfolded Footprint (L×W×H, m)	54 × 4.8 × 2.9
	Folded Dimensions (L×W×H, m)	3 × 2.4 × 2.9
	Max. Slope Tolerance	1%
	Installation Orientation	Any azimuth
	Full Unfolding Time (mins)	120
	Full Folding Time (mins)	60
	Required Installation Crew	3 persons
Container	Expansion Method	- Electrical winch expand & ground install.
	Type	10HC
	External Dimensions (L×W×H, mm)	3,029 × 2,438 × 2,896
	Tare Weight (tons)	0.9
	Coating grade	C4 or C5-M
Mounting Structure	Shipping Class Certification	CCS (ABS or other option) (ship 2 in 1 as one 20HC)
	Material	Steel square tube (Hot-dip galvanized)
	Single Bracket Size (mm)	4,736 × 2,364 × 40
	Panels per Bracket	4
	Deployment Angle	15° (Adjustable by project)
	Total Bracket Length (m)	54
	Projected Area (m ²)	260
Solar Panels	Number of Brackets	20
	Panel Model	GKA182N144 - 590W (Other model customizable)
	Panel Type	TOPCon
	Max. Power per Panel (Wp)	590
	Vmpp (V)	43.38
	Imp (A)	13.60
	Voc (V)	51.84
	Isc (A)	14.47
	Panel Dimensions (mm)	2,278 × 1,134 × 30
	Weight per Panel (kg)	30.7
Solar Array	Panel Qty. per String	8
	String Qty.	10
	Total Panel Qty.	80
	String Voltage- Voc	414.72
	String Voltage- Vmpp	347.04
	Parrel Current - Isc	144.70
	Parrel Current - Imp	136.00
	Total Array Power - kWp	47.2
Battery Energy Storage System (BESS)	Battery Module	LFP280Ah
	Cell Capacity (Ah)	280
	Battery Pack	51.2V and 280 Ah
	Rated Voltage (V)	358.4
	Rated energy (kWh)	100.35
	Nominal Frequency	50 Hz
Inverter	Battery Voltage Range (V)	280 ~ 403
	Model	SUN-50K-SG01HP3-EU-BM4
	Rated Power (kW)	50
	Phase	Three-phase (3L+N+PE)
	Protection Degree	IP65
	Operating Temp. Range	-40°C to +60°C (+45°C derating)