



All-in-One Solar Generator

Integrated Pure Sine Wave Inverter + Automotive LiFePO₄ Battery + MPPT Solar Controller

24/7
UPS BACKUP

Plug & Play
ZERO INSTALL

6,000+
LFP CYCLES

15 kWh
MAX CAPACITY



ENGINEERED FOR INSTANT POWER INDEPENDENCE

Ideal for Bangladesh Villas, Clinics & Field Offices

Seamless UPS Switching

Instantaneous transfer under 10ms upon grid outages; guarantees uninterrupted operation for computers, refrigeration, medical kits, and TV entertainment.

Zero Installation Barrier

Pre-engineered factory package. Simply connect solar panels or plug directly into a wall AC socket. No external battery wiring or electrician needed.

Automotive LiFePO₄ Pack

Built-in high-stability Lithium Iron Phosphate battery cells delivering over 6,000 cycles at 80% DOD with advanced multi-layer BMS protection.

Multi-Port Output Hub

Features dual 220V/230V AC sockets, 4x DC 12V barrel ports, and 5x fast USB / Type-C QC 3.0 ports for multi-device concurrent charging.

STANDARD HOME & COMMERCIAL GENERATOR SERIES

Compact Wall-Mountable & Floor-Standing Units



CHGL-GEN-600 **600 W** **1,280 Wh**

24V / 50Ah LiFePO₄
350W MPPT Solar
Weight: 17.9 kg
Fans, Lighting & Router

POPULAR
CHGL-GEN-1200
1,200 W
2,560 Wh

24V / 100Ah LiFePO₄
500W MPPT Solar
Weight: 28.8 kg
Refrigerator & TV

CHGL-GEN-1800 **1,800 W** **3,840 Wh**

24V / 150Ah LiFePO₄
1,300W MPPT Solar
Weight: 38.2 kg
Air-Con & Water Pump

HIGH-POWER INDUSTRIAL & VILLA ENERGY STATIONS

Heavy Duty Portable Solar Stations with Dual AC Load Shedding



CHGL-GEN-4200 (4.2 kW / 8.04 kWh)

Power: 4,200W Pure Sine Wave | **Battery:** 25.6V 314Ah LiFePO₄
Solar Input: 5,500W MPPT (60~450Vdc) |
Wheels: Heavy-duty omnidirectional casters. Designed for entire villa backup, running 2-3 inverter air conditioners and heavy pumps simultaneously.



CHGL-GEN-6200 (6.2 kW / 15.07 kWh)

Power: 6,200W Pure Sine Wave | **Battery:** 48V 314Ah LiFePO₄
Solar Input: 6,500W MPPT (60~450Vdc) | **Dual Load:** Smart secondary load shedding. Heavy commercial energy station for clinics, banks, factory workshops, and telecom transmitter shelters.



COMPREHENSIVE TECHNICAL PARAMETER MATRIX Certified Compliance: CE, IEC 62109, UN38.3, RoHS

Model Number	CHGL-GEN-600	CHGL-GEN-1200	CHGL-GEN-1800	CHGL-GEN-4200	CHGL-GEN-6200
INVERTER & AC OUTPUT PARAMETERS					
Rated Output Power	600 W	1,200 W	1,800 W	4,200 W	6,200 W
Output Voltage / Waveform	220V / 230V / 240V AC (Selectable) Pure Sine Wave (THD < 3%)				
Output Frequency	50 Hz / 60 Hz (Automatic Sensing)				
Peak Surge Power	1,200 W	2,400 W	3,600 W	8,400 W	12,400 W
Peak Inverter Efficiency	> 91%	> 91%	> 89%	> 92%	> 94%
UPS Transfer Time	< 10 ms (Typical PC Grade Transfer)				
Dual Output Load Ports	Single AC	Single AC	Dual AC	Dual AC (Main + Shed)	Dual AC (Main + Shed)
INTEGRATED LIFEPO4 BATTERY STORAGE					
Battery Chemistry	Automotive-Grade Lithium Iron Phosphate (LiFePO4)				
Nominal Voltage	25.6 V DC	25.6 V DC	25.6 V DC	25.6 V DC	48.0 V DC
Rated Battery Capacity	50 Ah	100 Ah	150 Ah	314 Ah	314 Ah
Total Stored Energy	1,280 Wh	2,560 Wh	3,840 Wh	8,038 Wh	15,072 Wh
Cycle Life (80% DOD, 25°C)	≥ 6,000 Cycles to 80% Residual Capacity				
Low DC Warning / Cutoff	22.0V / 20.0V DC	22.0V / 20.0V DC	22.0V / 20.0V DC	22.0V / 20.0V DC	44.0V / 40.0V DC
SOLAR MPPT & UTILITY FAST CHARGING					
Max PV Array Power	350 W	500 W	1,300 W	5,500 W	6,500 W
MPPT Voltage Range	36 V ~ 60 V DC	36 V ~ 60 V DC	36 V ~ 60 V DC	60 V ~ 450 V DC	60 V ~ 450 V DC
Max PV Open Circuit (Voc)	60 V DC	60 V DC	60 V DC	500 V DC	500 V DC
Max Solar Charging Current	30 A	50 A	100 A	120 A	120 A
Utility AC Fast Charge Current	19.5 A	39.0 A	50.7 A	80 A / 100 A	100 A
PHYSICAL SPECIFICATIONS, PORTS & ENCLOSURE					
Dimensions (W × D × H)	340 × 164 × 460 mm	400 × 164 × 550 mm	598 × 430 × 187 mm	394 × 242 × 790 mm	970 × 242 × 510 mm
Net Weight	17.9 kg	28.8 kg	38.2 kg	73.6 kg (with casters)	124 kg (with casters)
DC Output Ports	4× DC 12V/5A, 5× USB / Type-C (QC 3.0)			High-Current Terminal + USB Diagnostic	
Display & Indicators	LED SoC Bar (25/50/75/100%) + Status LEDs			Color LCD Graphic Display + Touch Controls	
Enclosure Material	Galvanized Steel with Anti-Corrosion Electrostatic Powder Coating				
Operating Ambient Temp	-10°C to +50°C (Storage: -15°C to +60°C)				

TAILORED BANGLADESH APPLICATION SCENARIOS Reliable Clean Power Anytime, Anywhere

Urban Residential & Villas

Silent replacement for noisy, polluting diesel gensets. Powers lights, fans, Wi-Fi routers, smart TVs, and refrigerators with zero odor.

Clinics & Pharmacies

Crucial backup for vaccine cold-chain refrigeration, surgical illuminators, ultrasound equipment, and diagnostic monitors.

Field Engineering & Camps

Compact, durable mobile power station for construction container offices, mobile workshops, surveying gear, and drone recharging.

Commercial Shops & ATMs

Protects POS cash terminals, retail cold drinks, surveillance systems, and bank teller kiosks from grid drops.