

XW Pro

6.8/8.5 kW Hybrid Inverter for North America

865-6848-21



Protect your home's power supply when the grid goes out. Save on energy costs with utility time of use and demand charge optimization. The XW Pro solar hybrid inverter is the heart of your home power system, connecting solar and battery storage with the grid for backup power and energy security. It can be used for solar and storage, or backup power systems without solar.

Backup power performance

- Reliable operation of backup power and off-grid loads with a high overload power rating (2x)
- Seamless transition to backup power with an integrated high-speed transfer switch
- Grid and Generator input ports
- Field proven product quality and reliability, building on two decades of experience in solar and storage

Flexible

- 120/240 V output with stacking capability up to 4 units
- Configurable for 120 V output for 3 phase systems
- Connects solar with Conext™ MPPT Charge Controllers or PV inverters for DC-coupled or AC-coupled systems
- Lithium Ion battery integration
- Grid tied and off-grid systems, Rule 21, HECO Rule 14H and PREPA compliant

Easy to install

- Configures quickly using Insight
- AC Out port for backuploads
- Full ecosystem and accessories for single unit or scalable systems

Smart energy management

- Optimize energy consumption for time of use rates or demand charges
- Self-consumption of solar energy

Compatible with Insight

- Remote monitoring & control with advanced data security
- Web and mobile app
- Multi-site management for installers



Technical Specifications

	XW Pro 6848 NA 120/240 V	XW Pro 6848 NA 120 V
Inverter AC Output (Standalone)		
Output power (continuous) at 25°C	6800 W	5760 W
Overload 30 min/60 sec at 25°C	8500 W/12000 W	7200 W/12000 W
Output power (continuous) at 40°C	6000 W	5760 W
Maximum output current 60 seconds (rms)	52 A (240 V)	104 A (120 V)
Output frequency	50/60 Hz	50/60 Hz
Output voltage	Split phase 120/240 V +/- 3%	120 V +/- 3%
Total harmonic distortion at rated power	< 5 %	< 5 %
Idle consumption search mode	< 8 W	< 8 W
Input DC voltage range	40 to 64 V (48 V nominal)	40 to 64 V (48 V nominal)
Maximum input DC current	180 A	180 A
Charger DC Output		
Maximum output charge current	140 A	120 A
Output charge voltage range	40 – 64 V (48 V nominal)	
Charge control	Three stage, two stage, boost, external BMS, custom	
Charge temperature compensation	Battery temperature sensor included	
Power factor corrected charging	0.98	
Compatible battery types	Flooded (default), Gel, AGM, Lithium ion, custom	
AC Input		
AC 1 (grid) input current (selectable limit)	3 – 60 A (60 A default)	3 – 60 A (60 A default)
AC 2 (generator) input current (selectable limit)	3 – 60 A (60 A default)	3 – 60 A (60 A default)
Automatic transfer relay rating/typical transfer time	60 A / 8 ms	60 A / 8 ms
AC input voltage limits (bypass/charge mode)	L-L: 156 - 280 V (240 V nominal)	L-N: 78 - 140 V (120 V nominal)
AC input frequency range (bypass/charge mode)	52 – 68 Hz (allowable)	52 – 68 Hz (allowable)
AC Grid-Tie Output		
Grid sell power	6000 W	5760 W
Grid sell current (selectable limit)	0 to 27 A (240 V)	0 to 48 A (120 V)
Efficiency		
Peak	95.1%	94.8%
CEC weighted efficiency	94.1%	93.6%
General Specifications		
Part number	865-6848-21	
Product/shipping weight	55.2 kg (121.7 lb)/ 76.7 kg (169.0 lb)	
Product dimensions (H x W x D)	58 x 41 x 23 cm (23 x 16 x 9 in)	
Shipping dimensions (H x W x D)	71.1 x 57.2 x 39.4 cm (28.0 x 22.5 x 15.5 in)	
IP degree of protection	NEMA Type 1 Indoor	
Operating air temperature range	-25°C to 70°C (-13°F to 158°F) (power derated above 25°C (77°F))	
Features		
System monitoring and network communications	Available (through Insight)	
Intelligent features	Grid sell, peak load shave, generator support, solar self-supply	
Auxiliary port	0 to 12 V, maximum 250 mA DC output, selectable triggers	
Off-grid AC coupling	Frequency shifting	
Regulatory Approval		
Safety	UL1741, CSA 107.1	
EMC directive	FCC and Industry Canada Class B	
Interconnect	IEEE 1547, UL 1741-SA, Rule 21, Rule 14H, PREPA, and CSA 107.1	
Compatible Products Part Numbers		
Power Distribution Panels	XW Mini PDP (865-1013-01), XW PDP (865-1015-01)	XW PDP without AC Breakers (865-1014-01), 60 A Three Phase Breaker Kit (865-1315-01)
MPPT Charge Controllers	MPPT 100 600 (865-1034), MPPT 80 600 (865-1032), MPPT 60 150 (865-1030-1)	
Monitoring	InsightHome (865-0330), InsightFacility (865-0335)	
Accessories	Automatic Generator Start (865-1060), Battery Monitor (865-1080-01), Configuration Tool (865-1155-01)	