

Single Phase  
AC Coupled

# X1-AC

High Voltage



**Simple.  
Reliable.  
Efficient**



High  
Efficiency



Battery  
Solution



IP65  
Rated



Remote  
Monitoring

3kW

3.6kW

4.6kW

5kW

**X1-AC-3.0 / X1-AC-3.6 / X1-AC-4.6 / X1-AC-5.0**

(Being developed)

(Being developed)

## Features:

- Natural Cooling, quiet and low maintenance
- Max Efficiency up to 97%
- Multiple protection:RCD, isolation,over voltage  
over temperature, earth protection,short-circuit protection,etc
- Compatible with High-voltage batteries
- Transformerless design with software and hardware protection.





# X1-AC (SINGLE PHASE)

	X1-AC-3.0	X1-AC-3.6	X1-AC-4.6 (Being developed)	X1-AC-5.0 (Being developed)
<b>OUTPUT (AC)</b>				
Nominal AC power [VA]	3000	3680	4600	4999
Max. apparent AC power [VA]	3000	3680	4600	4999
Nominal grid voltage(AC voltage range) [V]	220/230/240 (180 - 280 )			230/240 (180 - 280 )
Nominal grid frequency/range [Hz]	50/60			50/60
Nominal AC current [A]	13	16	20	21.7
Max. AC current [A]	13.6	16.8 (16 for G83)	21	21.7
Displacement power factor	0.8 leading to 0.8 lagging			
THDi, rated power [%]	<2			
<b>INPUT AC</b>				
Max. apparent AC power[VA]	3000	3680	4600	4999
Max. AC current[A]	13.6	16.8 (16 for G83)	21	21.7
Nominal grid voltage(AC voltage range)[V]	220/230/240 (180 - 280)			
Nominal grid Frequency/range[Hz]	50/60			
<b>OUTPUT DC (BATTERY)</b>				
Battery voltage range [V]	70-400			
Recommended battery voltage[V]	300			
Max.continuous charge/discharge current [A]	35			
Communication interfaces	CAN			
Reverse connect protection	Yes			
<b>EFFICIENCY</b>				
Max. Battery charge efficiency (GRID to BAT)	96.5	96.5	97.0	97.0
Max. Battery discharge efficiency (BAT to AC)	96.5	96.5	97.0	97.0
<b>SAFETY &amp; PROTECTION</b>				
Over/under voltage protection	Yes			
DC isolation protection	Yes			
Grid protection	Yes			
DC injection monitoring	Yes			
Residual current detection	Yes			
Anti-islanding protection	Yes			
Over load protection	Yes			
Over heat protection	Yes			
<b>POWER CONSUMPTION</b>				
Standby consumption (Night) [W]	<10			
<b>STANDARD</b>				
Safety	IEC62477			
EMC	EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3 / EN 61000-6-4			
Certification	G98/G99/G100			
<b>ENVIRONMENT LIMIT</b>				
Degree of protection(according to IEC60529)	IP 65			
Operating temperature range [°C]	-25 ~ +60 (derating at 45)			
Max. operation altitude [m]	<2000			
Humidity [%]	0~100 (condensing)			
Storage temperature [°C]	-25 ~ +60			
Typical noise emission [dB]	<25			
<b>DIMENSION AND WEIGHT</b>				
Dimensions(WxHxD) [mm]	430*341.5*143			
Weight [kg]	15.5	15.5	16.3	16.3
Cooling concept	Natural			
Topology	Non-isolated			
Communication interfaces	Meter/Pocket WiFi(optional)/Pocket LAN(optional)/Pocket GPRS(optional)/RS485/DRM/USB/CT			
LCD display	Yes			
Standard warranty [year]	5-10			