

Single-Phase
Hybrid Inverter

X1-Hybrid

High Voltage



Simple.
Reliable.
Efficient



6000W Charger/
Discharger Rate



3 Inverter
Models



IP65
Rated



Remote
Monitoring

X1-HYBRID (3.0kW / 3.7kW / 5.0kW)

- VPP function
- IP65 protection level
- Max. 150% oversized PV power
- Max. 110% nominal apparent AC power
- Working temperature: -20°C to 60°C
- Remote upgrade and control



Version: E,C,I

E:with EPS function C:without EPS function

I:internal EPS function device



X1-HYBRID HV (SINGLE-PHASE)

D:With DC switch
N:Without DC switch

X1-HYBRID-3.0-D
X1-HYBRID-3.0-N

X1-HYBRID-3.7-D
X1-HYBRID-3.7-N

X1-HYBRID-5.0-D
X1-HYBRID-5.0-N

| DC INPUT | X1-HYBRID-3.0-D / X1-HYBRID-3.0-N | | | X1-HYBRID-3.7-D / X1-HYBRID-3.7-N | | | X1-HYBRID-5.0-D / X1-HYBRID-5.0-N | | |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-----------|-----------|-----------------------------------|-----------|-----------|----------------------------------------|-----------|-----------|
| | C Version | E Version | I Version | C Version | E Version | I Version | C Version | E Version | I Version |
| Max. PV array input power [Wp] | 4500 | | | 5550 | | | 7500 | | |
| Max. PV input voltage [V] | 600 | | | 600 | | | 600 | | |
| Startup voltage [V] | 150 | | | 150 | | | 150 | | |
| Nominal input voltage [V] | 360 | | | 360 | | | 360 | | |
| MPP tracker voltage range [V] | 125~550 | | | 125~550 | | | 125~550 | | |
| No. of MPP trackers/Strings per MPP tracker | 2(1/1) | | | 2(1/1) | | | 2(1/1) | | |
| Max. input current(input A/input B) [A] | 12 | | | 12 | | | 12 | | |
| Max. short circuit current(input A/input B) [A] | 14 | | | 14 | | | 14 | | |
| AC INPUT & OUTPUT | | | | | | | | | |
| Nominal AC output power [W] | 3000 | | | 3680 | | | 4999 | | |
| Nominal AC output current [A] | 13 | | | 16 | | | 21.7 | | |
| Max. AC output apparent power [VA] | 3000 | | | 3680 | | | 4999 | | |
| Max. AC output current [A] | 14.3 | | | 16 | | | 23.9 (20 for VDE4105; 21.7 for AS4777) | | |
| Max. AC input apparent power [VA] | 3000 | 3000 | 7000 | 3680 | 3680 | 7680 | 4999 | 4999 | 9999 |
| Max. AC input current [A] | 14.4 | 14.4 | 36.1 | 16.0 | 16.0 | 37.7 | 21.7 | 21.7 | 47.7 |
| Nominal AC voltage [V] | 220/230/240 | | | | | | | | |
| Nominal grid frequency/Grid frequency range [Hz] | 50/60 | | | | | | | | |
| Displacement power factor | 0.8 leading~0.8 lagging | | | | | | | | |
| THDi (rated power) [%] | <2 | | | | | | | | |
| BATTERY DATA | | | | | | | | | |
| Battery type | Li-ion battery/Lead-acid battery | | | | | | | | |
| Battery voltage range [V] | 85~400 | | | | | | | | |
| Max. continuous charge/discharge current [A] | 20 | | | | | | | | |
| EPS(OFF-GRID OR BACK-UP) OUTPUT (WITH BATTERY) | | | | | | | | | |
| Nominal output power [W]*1 | 4000 | | | 4000 | | | 5000 | | |
| Peak apparent power [VA]*1 | 6000, 10s | | | 6000, 10s | | | 8000, 10s | | |
| Max. continous current [A] | 21.7 | | | 21.7 | | | 26.0 | | |
| Nominal voltage[V]/Frequency [Hz] | 50/60 | | | | | | | | |
| THDv(Linear Load) [%] | <2 | | | | | | | | |
| Switch time [ms] | <20 for I version / <500 for E version | | | | | | | | |
| Parallel operation | YES | | | | | | | | |
| SYSTEM DATA | | | | | | | | | |
| Max. efficiency [%] | 97.8 | | | | | | | | |
| Euro. efficiency [%] | 97.0 | | | | | | | | |
| Battery charge/discharge efficiency [%] | 98.5 (PV-BAT) 97.0 (BAT-AC) | | | | | | | | |
| Standby consumption [W] @Night | <15 for hot standby, <3 for cold standby | | | | | | | | |
| Ingress protection | IP65 | | | | | | | | |
| Operating temperature range [°C] | -20~+60 (derating at 45°C) | | | | | | | | |
| Max. operation altitude [m] | <2000 | | | | | | | | |
| Humidity [%] | 0~100 (non-condensing) | | | | | | | | |
| Typical noise emission [dB] | 40 | | | | | | | | |
| Storage temperature [°C] | -20~60 | | | | | | | | |
| Dimensions(WxHxD) [mm] | 476*464*180 | | | | | | | | |
| Weight [kg] | 24 | | | | | | | | |
| Cooling concept | Natural | | | | | | | | |
| Communication interfaces | Ethernet/Meter/Pocket WiFi(optional)/Pocket LAN(optional)/Pocket GPRS(optional)/DRM/USB/ISO alarm/CT/NTC | | | | | | | | |
| STANDARD | | | | | | | | | |
| Safety | EN/IEC62109-1/-2 | | | | | | | | |
| EMC | EN61000-6-1/2/3/4; EN61000-3-2/3/11/12 | | | | | | | | |
| Certification | VDE 0126-1-1 A1:2012 / VDE-AR-N 4105 /G99 /G98 / AS4777 / EN50549/ CEI 0-21 /VDE 2510 / and so on | | | | | | | | |

E:with EPS function C:without EPS function I:internal EPS function device

Can be modified without notice.(V1.2)