X3-HYBRID G4

D:Should be used without matebox
M:Should be used with matebox

THREE-PHASE
HYBRID INVERTER

5.0~15kW

Features

High-efficient

- 150% PV oversized and 110% overload output
- Maximum 150% overload output
- Higher efficiency on charging and discharging, up to 97.5%
- Built-in shadow tracking function

Economic

- Maximum 16A DC input current, support for high power solar panel
- Store the surplus energy from PV to battery
- Low start output voltage makes inverter longer working time
- Less energy loss on battery to inverter

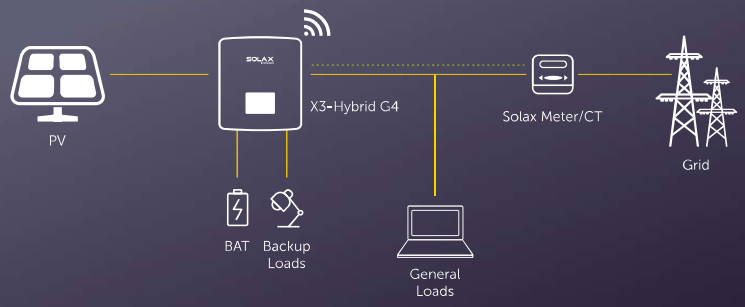
Intelligent

- Switchover time <10ms
- Quick configuration with U-disk
- Lithium & Lead-acid battery compatible
- CT compatible, loads respond within 0.3s
- Intelligent loads management(e.g.. Heat pump)
- On & Off-grid parallel function, up to 150kW
- 5 work modes, 2 charging periods available
- VPP ready, ancillary service in power market
- Three-phase unbalanced output 50% nominal output power on single phase at most

Safe

- IP65 protection level
- Integrated SPD

SOLUTION DESIGN



X3-HYBRID G4

THREE-PHASE

	X3-HYBRID-5.0-D X3-HYBRID-5.0-M	X3-HYBRID-6.0-D X3-HYBRID-6.0-M	X3-HYBRID-8.0-D X3-HYBRID-8.0-M	X3-HYBRID-10.0-D X3-HYBRID-10.0-M	X3-HYBRID-12.0-D X3-HYBRID-12.0-M	X3-HYBRID-15.0-D X3-HYBRID-15.0-M
DC INPUT						
Max. PV array input power [Wp]	8000	10000	12000	15000	18000	18000
Max. PV input voltage [V]	1000	1000	1000	1000	1000	1000
Start output voltage [V]	200	200	200	200	200	200
Nominal input voltage [V]	640	640	640	640	640	640
MPP voltage range [V]	180~950	180~950	180~950	180~950	180~950	180~950
No. of MPP trackers/Strings per MPP tracker	2(1/1)	2(1/1)	2(2/1)	2(2/1)	2(2/1)	2(2/1)
Max. input current(input A/input B) [A]	16/16	16/16	26/16	26/16	26/16	26/16
Max. short circuit current(input A/input B) [A]	20/20	20/20	30/20	30/20	30/20	30/20
AC INPUT & OUTPUT						
Nominal AC output power [W]	5000	6000	8000	10000	12000	15000
Max. AC output apparent power [VA]	5500	6600	8800	11000	13200	15000
Max. AC output current [A]	8.1	9.7	12.9	16.1	19.3	24.1
Max. AC input apparent power [VA]	10000	12000	16000	20000	20000	20000
Max. AC input current [A]	16.1	19.3	25.8	32.0	32.0	32.0
Nominal AC voltage [V]	415/240; 400/230; 380/220					
Nominal grid frequency [Hz]	50/60					
Displacement power factor	0.8 leading~0.8 lagging					
THDi (rated power) [%]	<3					
BATTERY DATA						
Battery type	Li-ion battery/Lead-Acid Battery(Under development)					
Battery voltage range [V]	180~650					
Max. continuous charge/discharge current [A]	30					
EPS(OFF-GRID OR BACK-UP) OUTPUT (WITH BATTERY)						
Nominal output power [W]	5000	6000	8000	10000	12000	15000
Peak apparent power [VA]	7500,60s	9000, 60s	12000,60s	15000, 60s	15000, 60s	16500, 60s
Max.continous current [A]	7.2	8.7	11.6	14.5	17.5	21.8
Nominal voltage[V]; Frequency [Hz]	400/230; 50/60					
Switch time [ms]	<10					
Parallel operation	YES					
SYSTEM DATA						
Max. efficiency [%]	98.0					
Euro. efficiency [%]	97.7					
Battery charge/discharge effciency [%]*1	98.5/97.5					
Standby consumption [W] @Night	<5					
Degree of protection	IP65					
Operating temperature range [°C]	-35~60 (Derating above +45°C)					
Max. operation altitude [m]	<3000					
Relative humidity [%]	0~100					
Typical noise emission [dB]	<35	<35	<35	<35	<45	<45
Storage temperature [°C]	-40~+70					
Dimensions (WxHxD) [mm]	503x503x199					
Net weight [kg]	30					
Cooling concept	Nature cooling	Nature cooling	Nature cooling	Nature cooling	Smart cooling	Smart cooling
Communication interfaces	CT/ Meter(optional)/ External control RS485/ Pocket WiFi(Optional: Pocket Lan/4G)/ DRM/ USB Upgrade/NTC(optional)					
STANDARD						
Safety	EN/IEC62109-1/-2					
EMC	EN61000-6-1/2/3/4;EN61000-3-2/3/11/12					
Certification	VDE4105 /G99 /G98 / AS4777 / EN50549/ CEI 0-21 /IEC61727/PEA/MEA/NRS-097-2-1/RD1699/TOR					

*1: PV to BAT Max. efficiency 98.5%, BAT to AC Max. efficiency 97.5%.

V2.1. Information may be subject to modify without notice. 650.00016.00