

# X1-HYBRID GB4

**SINGLE-PHASE**  
3.0-7.5KW

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

## FEATURES

### HIGH-EFFICIENT

- 150% PV oversized and 110% overload output
- Maximum 120% overload output
- Higher efficiency on charging and discharging, up to 96,6%
- Built-in shadow tracking function

### ECONOMIC

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

### INTELLIGENT

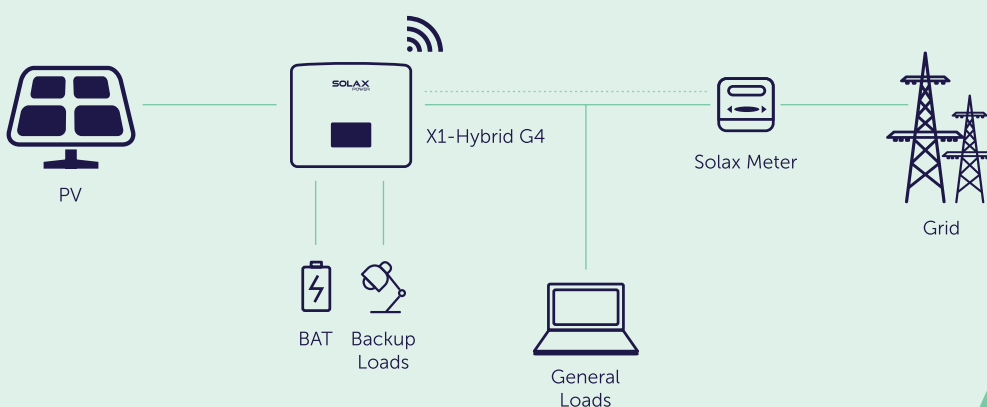
- Switchover time <10ms
- Quick configuration with U-disk
- Lithium & lead-acid battery compatible
- CT compatible, load respond within 0.3s
- Intelligent loads management (e.g., Heat pump)
- On & Off-grid parallel function, up to 15kW
- 5 work modes, 4 charging periods available
- VPP ready, ancillary service in power market

### SAFE

- IP65 protection level
- integrated SPD



## SOLUTION DESIGN



**AD TECHNICS**

AIRCONDITIONING  
& ONDERHOUD



# X1-HYBRID G4 (SINGLE-PHASE)

## AD TECHNICS

AIRCONDITIONING  
& ONDERHOUD

X1-HYBRID-3.0-D      X1-HYBRID-3.7-D      X1-HYBRID-5.0-D      X1-HYBRID-6.0-D      X1-HYBRID-7.5-D  
X1-HYBRID-3.0-M      X1-HYBRID-3.7-M      X1-HYBRID-5.0-M      X1-HYBRID-6.0-M      X1-HYBRID-7.5-M

### DC INPUT

Max. PV array input power [Wp]	4500	5500	7500	9000	10000
Max. PV input voltage [V]	600	600	600	600	600
Start output voltage [V]	90	90	90	90	90
Nominal input voltage [V]	360	360	360	360	360
MPP voltage range [V]	70~550	70~550	70~550	70~550	70~550
No. of MPP trackers/Strings per MPP tracker	2(1/1)	2(1/1)	2(1/1)	2(1/1)	2(1/1)
Max. input current(input A/input B) [A]	16/16	16/16	16/16	16/16	16/16
Max. short circuit current(input A/input B) [A]	18/18	18/18	18/18	18/18	18/18

### AC INPUT & OUTPUT

Nominal AC output power [W]	3000	3680	5000 (4600 for DE, 4999 for AU)	6000	7500 (6900 for PEA)
Max. AC output apparent power [VA]	3300	3680	5500 (4600 for DE, 4999 for AU)	6600	7500 (7300 for PEA)
Max. AC output current [A]	14.4	16	23.9 (20 for DE, 21.7 for AU)	28.6	32.6 (33 for PEA)
Max. AC input apparent power [VA]	6300	7360	9200	9200	9200
Max. AC input current [A]	27.4	32	40	40	40
Nominal AC voltage [V]	180~270				
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]	80-480				
Max. continuous charge/discharge current [A]	30				

### EPS(OFF-GRID OR BACK-UP) OUTPUT (WITH BATTERY)

Nominal output power [W]	3000	3680	5000	6000	7500
Peak apparent power [VA]	3600, 1h	4416, 1h	6000, 1h	7200, 10min	7500
Max. continuous current [A]	13	16	21.7	26.1	32.6
Nominal voltage[V]; Frequency [Hz]	230; 50/60				
Switch time [ms]	internal switch <10, external switch <100				
Parallel operation	YES				

### SYSTEM DATA

Max. efficiency [%]	97.6				
Euro. efficiency [%]	97.0				
Battery charge/discharge efficiency [%]*1	97.0/97.0				
Standby consumption [W] @Night	<3				
Degree of protection	IP65				
Operating temperature range [°C]	-35~+60 (derating at 45°C)				
Max. operation altitude [m]	<3000				
Humidity [%]	0~100				
Typical noise emission [dB]	<30	<30	<30	<30	<45
Storage temperature [°C]	-40~+65				
Dimensions(WxHxD) [mm]	482*417*181				
Net weight [kg]	24	24	24	24	25
Cooling concept	Nature cooling	Nature cooling	Nature cooling	Nature cooling	Smart cooling
Communication interfaces	CT/ Meter(optional)/ External control RS485/ Pocket series (optional)/ DRM/ USB Upgrade/ NTC				

### 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/RD1699/UNE 206007-1/NRS 097-2/VDE0124/PEA and so on				

\*1: PV to BAT Max. efficiency 97.0%, BAT to AC Max. efficiency 97.0%