

PV INVERTER





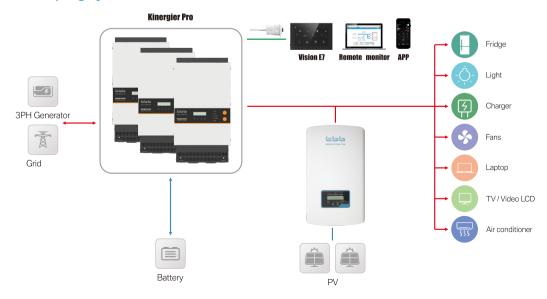
3KW, 5KW, 15KW

Grid-tie systems are the most cost effective and easiest systems to install. But in a pure grid tie system you will have no power supply if there is a power shedding. To solve this problem, you can connect IG series PV inverter to the output of TBB Kinergier Pro bi-directional inverter to compose an AC-Coupled system.

IG series PV inverter are designed especially for AC coupling system, featuring great system stability and extraordinary dynamic response. It could follow the control of AC coupling system and real time data can be consolidate into system monitor as well.

- High frequency switching technology
- Dual MPPT design with precise MPPT algorithm
- Max efficiency: 98.7%
- Available with single phase and three phase
- Integrated data communication: RS485

AC Coupling System





Model No.	IG3.0	IG5.0	IG15.0-3P
Phase	single phase	single phase	three phases

Input Side (DC)

Max. DC input power (KW)	3.5	5.8	18
Max. DC input voltage (V)	600		1000
Start-up voltage (V)	90	120	180
MPPT voltage range (V)	80-500	90-520	160-850
Max. input current per MPPT (A/B)	11A	11A + 11A	22A + 22A
MPPT number / Max input strings number	1 / 1	2/2	2/4

Output Side (AC)

Rated output power (KW)	3	5	15
Max. apparent output power (KVA)	3.3	5	16.5
Max. output power (KW)	3.3	5	16.5
Rated grid voltage (V _L)	220 / 230		380 / 400
Rated grid frequency (Hz)	50 / 60		
Operation phase	single		three
Rated grid output current (A)	13.6 / 13	22.7 / 21.7	22.8 / 21.7
Max. output current (A)	15.7	25	23.8
Power factor (at rated output power)	0.8 leading 0.8 lagging		
THDi	< 3%		< 1.5%
DC injection current (mA)	< 0.5% In		
Grid frequency range (Hz)	46~52.7 Hz or 56~62.7 Hz		

Other Electrical

Max. efficiency	97.5%	98.1%	98.7%	
EU efficiency	96.8%	97.3%	98.1%	
MPPT efficiency		>99.5%		
Protection		DC reverse-polarity; Short circuit; Output over current; Output over voltage; Insulation resistance monitoring; Residual current detection; Surge; Islanding; Temperature		
Integrated DC switch		optional		

General Data

DC connection		MC-4	
AC connection	IP67 Rated plug		Terminal connectors
Display	LCD, 2 x 20Z.		
Dimensions (mm)	310W * 373H * 160D	310W * 543H * 160D	310W * 563H* 219D
Weight (KGs)	7.7	11.5	18.9
Topology	transformerless		
Self consumption (night)	< 1W (night)		
Operating ambient temperature range	-25°C ~ 60°C		
Ingress protection	IP65		
Noise emission (typical)	< 20 dBA		< 30 dBA
Cooling concept	natural convection		Intelligent redundant fan-cooling
Max. operation altitude	4000m		
Designed lifetime	> 20 years		
Grid connection standard	VDE-AR-N 4105, VDE V 0124, VDE V 0126-1-1, UTE C15-712-1, NRS 097-1-2, G98, G99, EN 50549-1/-2, RD 1699, UNE 206006, UNE 206007-1, IEC61727		
Relative humidity	0~100%		
Safety / EMC standard	IEC62109-1/2, IEC62116, IEC61000-1/-2/-3/-4		