

PV INVERTER



PV Inverter

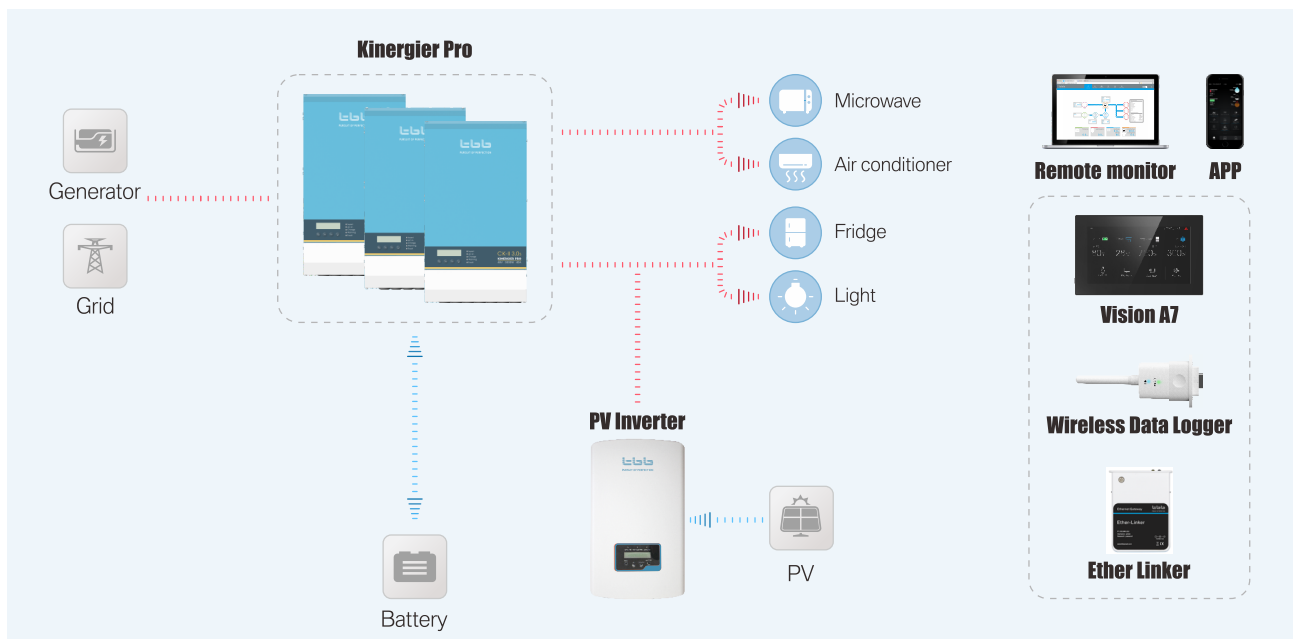
IG 3KW, 5KW, 15KW

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 extra ordinally dynamic response. It could follow the control of AC coupling system and real time data can be consolidated into system monitor as well.

- High efficiency 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 |
|-----------|--------------|--------------|--------------|
| 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) | 120 | | 180 |
| MPPT voltage range (V) | 90~520 | | 160~850 |
| Max. input current per MPPT (A/B) | 11A + 11A | | 22A + 22A |
| MPPT number / Max input strings number | 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 | | 400 |
| Rated grid frequency (Hz) | 50/60 | | |
| Operation phase | Single | | three |
| Rated grid output current (A) | 13.6/13 | 22.7/21.7 | 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% I _n | | |
| Grid frequency range (Hz) | 46~52.7 Hz or 56~62.7 Hz | | |

Other Electrical

| | | | |
|----------------------|---|-------|-------|
| Max. efficiency | 97.8% | 98.1% | 98.7% |
| EU efficiency | 97.1% | 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 mateable | | |
| AC connection | Terminal cooling | | |
| Display | LCD, 2 x 20Z | | |
| Dimensions (mm) | 310x543x160 | | 310x563x219 |
| Weight (kg) | 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) | < 30 dBA | | |
| Cooling concept | Natural convection | | |
| Max. operation altitude | 4000m | | |
| Designed lifetime | > 20 years | | |
| Grid connection standard | EN50438, G83/2, G59/3, AS4777.2:2015, VDE0126-1-1, IEC61727, VDEN4105 | | EN50438, G83/2, G59/3, AS4777 VDE0126-1-1, IEC61727, VDEN4105 |
| Relative humidity | 0~100% | | |
| Safety / EMC standard | IEC62109-1/2, AS3100 | | |