

## Grid-tie Inverter

# PV INVERTER

IG 3KW / 5KW / 15KW / 30KW

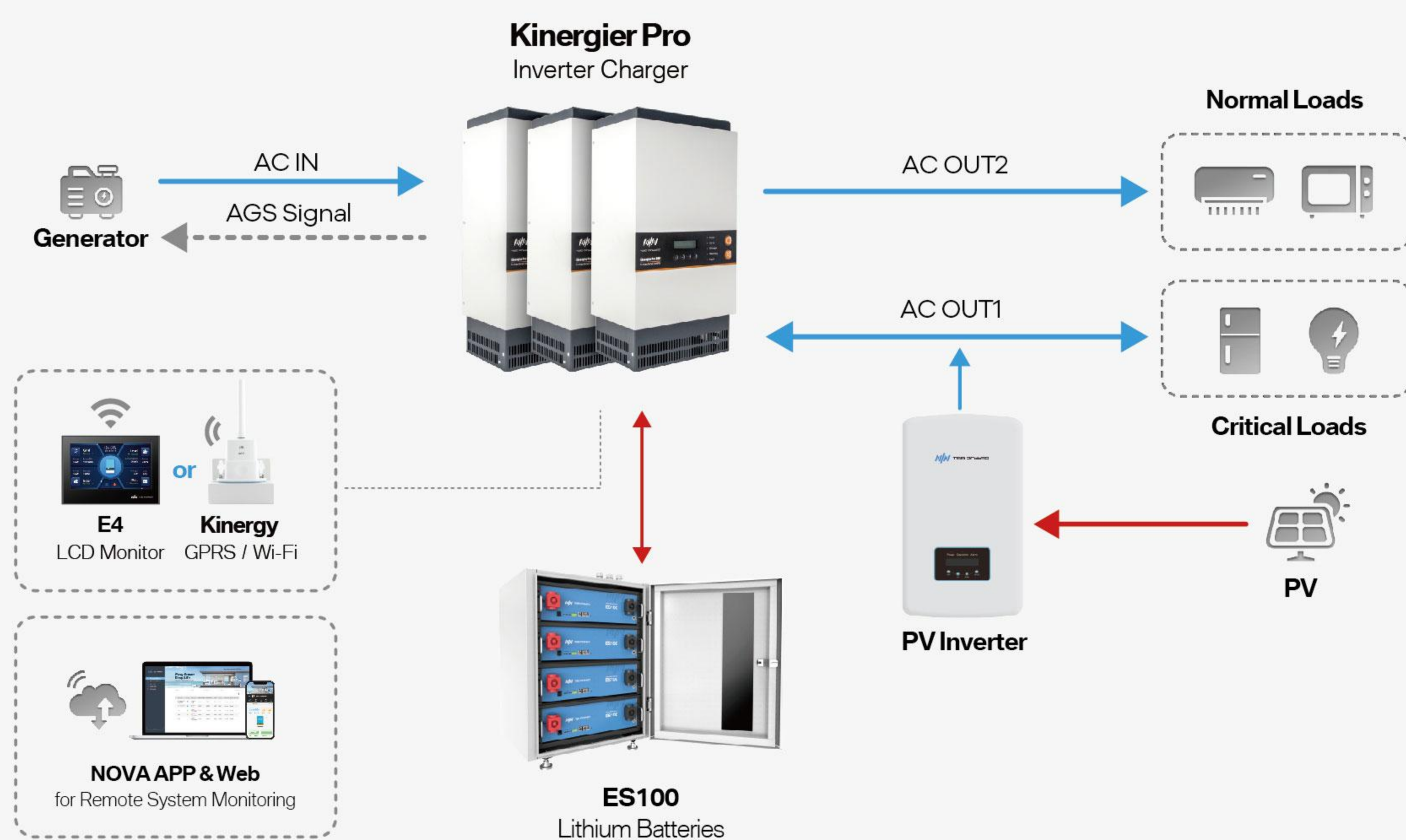


Grid tie systems are the most cost-effective and easiest systems to install. But in a pure grid tie system you will have no power supply if there is a power shedding. To solve this problem, you can connect IG series PV inverter to the output of TBB Kinergier Pro inverter charger or Apollo Matrix solar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

IG series PV inverter are designed especially for AC coupled PV system, featuring great system stability and extra-ordinary dynamic response. It could follow the control of AC coupled PV system and its 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 Coupled PV System



Model No.	IG3.0	IG5.0	IG15.0-3P	IG30.0
Phase	Single Phase		Three Phase	

## DC input

Max.DC input power (KW)	3.5	5.8	18	45
Max/Rated DC input voltage (V)	600/330		1000/600	1100/600
Start-up voltage (V)	90	120	180	180
MPPT voltage range (V)	80~500	90~520	160~850	200~1000
Max input/Max short circuit current(A)	11/17.2	11+11/17.2+17.2	22+22/34.3+34.3	32+32+32/50+50+50
MPPT number / Max input strings number	1/1	2/2	2/4	3/6

## AC output

Max/Rated output power (KW)	3.3/3	5/5	18.7/17	33/30
Max.apparent output power (KVA)	3.3	5	18.7	33
Rated grid voltage (V)	1/N/PE, 220/230		3/N/PE ~ 400	3/N/PE, 220/380, 230/400
Rated grid output current (A)	13.6/13	22.7/21.7	25.8/24.6	45.6/43.3
Power factor (at rated output power)	0.8leading~0.8lagging		>0.99 (0.8leading~0.8lagging)	
THDi (at rated output power)	<3%	<1.5%	<1.5%	<3%

## Efficiency

Max/EU efficiency	0.975/0.968	0.981/0.973	0.987/0.981	0.988/0.983
MPPT efficiency	>99.5%			

## General Data

Dimensions (mm)	310*373*160	310*543*160	310*563*219	647*629*252
Weight (kg)	7.7	11.5	19.8	45
Topology	Transformerless			
Operating temperature range/humidity	-25°C~60°C; 0~100% Condensing			
Protection category	IP65			
Protection	DC reverse-polarity; Short circuit; Output over current; Surge protection; Grid monitoring; Residual current detection; Anti-islanding; Temperature			
Noise emission (typical)	<20dBA	<20dBA	<60dBA	<30dBA
Cooling concept	Natural convection		Intelligent redundant fan-cooling	
Max.operation altitude (m)	4000	4000	2000	4000
Designed lifetime (years)	>20	>20	>20	25
Grid connection standard	VDE-AR-N4105,VDEV0124,VDEV0126-1-1, UTE C15-712-1, NRS097-1-2,G98, G99, EN 50549-1/-2, RD1699, UNE 206006, UNE 206007-1, IEC61727			G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, RD 1699 / RD 244 / UNE 206006 / UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC60068, IEC 61683, EN 50530
Safety / EMC standard	IEC62109-1/-2, IEC62116, EN61000-6-1/-2/-3/-4	IEC 62109-1/-2, IEC62116, EN61000-6-2/-3	IEC62109-1/-2, IEC62116, EN61000-6-1/-2/-3/-4	EC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4
DC Connection	MC4 connector			
AC Connection	IP67 rated plug			OT Terminal
Communication connections	RS485,Optional:Wi-Fi, GPRS			
Monitoring	WiFi or GPRS			RS485, Optional:WiFi or GPRS
Display	LCD			