

Next-Gen Solar Hybrid Inverters



G3 Series

**3-Phase • IP66
10KW • 12KW • 15KW**



IP66 PROTECTION RATING

Sealed against dust & moisture for worry free performance



2 × PV SOLAR

Dual MPPT-oversize the array up to 200% of rating



200% OVERLOAD

Handles 200% overload for up to 10 seconds



HIGH EFFICIENCY

>97% efficient - high-frequency IGBT design



< 5 MS SWITCH-OVER

Near-instant switchover, no compressor restart



ON-GRID MODE

Runs in pure on-grid mode without battery requirement



SMART LOAD

Sheds non-essential loads based on Battery SOC, diverts surplus solar



BALANCE PHASES

100% unbalanced output-up to 50% on one phase



PARALLEL READY

Up to 6 units in parallel for higher load



LOWER BILLS

Time-of-Use ready-shift heavy loads to cheap hours



KENT CENTCOM™ CLOUD

For seamless monitoring, configuration, & remote diagnosis



4G DATA LOGGER

Data on Indian server with 5-year 4G data pack

Technical Specifications

Model	G3-10K		G3-12K	G3-15K
Product Code	131009		131010	131011
Suitable Load	3ACs + 5Kw		4ACs + 6Kw	5ACs + 7Kw
Battery Input Data				
Battery type	Li-ion / Lead-acid			
Battery Voltage Range (V)	40 - 60			
Max. Charge/Discharge Current (A)	220	250	290	
Number of Battery Inputs	2			
Communication	CAN / ₹485			
PV String Input DC				
Max. PV array size (Kw)	20	24	30	
Max. usable PV input power [Kw]	16	19.2	24	
Max. PV Input Voltage (V)	1000			
Rated PV Input Voltage (V)	550			
Start-up voltage (V)	160			
MPPT voltage range (V)	200 - 850			
Max. PV Input Current (A)	20 / 40		40 / 40	
Max. short circuit current (A)	30 / 50		50 / 50	
No. of MPP Trackers/No. of Strings per MPP Tracker	2 / 3		2 / 4	
AC Output Data (Grid side)				
Rated AC output power (Kw)	10	12	15	
Max. apparent output power (KVA)	10	12	15	
Operation phase	3/N/PE			
Rated grid voltage (V)	380 V/400 V			
Rated grid frequency (Hz)	50 / 60			
Rated grid output current (A)	15.2/ 14.4	18.2/17.3	22.8/21.7	
Power factor	>0.99 [0.8 leading - 0.8 lagging]			
THDi	<3%			
AC Input Data (Grid)				
Input Voltage Range (V)	323 - 460 V			
Max. Input Current (A)	22.8 / 21.7	27.3 / 26.0	34.2 / 32.5	
AC Input Data (Generator)				
Max. input power (Kw)	10	12	15	
Max. input current (A)	15.2	18.2	22.8	
Rated input voltage (V)	3/N/PE, 380/400 V			
Rated input frequency (Hz)	50 / 60			
Output AC (Back-up)				
Rated AC output power (Kw)	10 kW	12 kW	15 kW	
Max. AC output power	2 times of rated power, 10 s			
Back-up switch time	< 5 ms			
Rated output voltage (V)	3/N/PE, 380 V / 400 V			
Rated Outputfrequency (Hz)	50 / 60			
Rated output current (A)	15.2/14.4	18.2 /17.3	22.8 / 21.7	
Max. continuous output current (A)	15.2	18.2	22.8	
Max. continuous AC passthrough current (A)	50			
THDv (@linear load)	< 3%			
Efficiency				
Max. efficiency	97.60%			
BAT discharged to AC max. efficiency	94.50%			
BAT charged by PV / AC max. efficiency	95.0% / 94.4%			
Equipement Protection				
Anti-islanding protection	Yes			
Insulation resistance monitoring	Yes			
Output over current protection	Yes			
Short circuit protection	Yes			
DC reverse-polarity protection	Yes			
Surge Protection	Yes			
General Data				
Dimensions (W xHx D) (mm)	430 x 660 x 305			
Weight (Kg)	42			
Topology	Non-isolated			
Operating ambient temperature range (°C)	-25 ~ +60			
Ingress protection	IP66			
Noise (dB)	< 65			
Cooling concept	Intelligent fan-cooling			
Max. operating altitude (m)	4000			
Grid connection standard	IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, Sri Lanka, EN 50438L, Vitnam, MEA, PEA			
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3			
Features				
DC Connection	MC4 Quick connection plug (PV) & Screw terminal (Battery)			
AC Connection	Screw terminal			
Display	7.0" LCD display & Bluetooth + APP			
Communication	CAN, RS485, Ethernet, Optional: S3-WiFi-ST, Cellular, LAN			

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