OFF-GRID SNV-GFT SERIES | Tower
10KVA - 120KVA

GFK33 Series Products use high speed DSP Control Unit, Advanced high speed IGBT, MOSFET components, with Pulse Width Modulation (SVPWM) technique disturbance type MPPT Control, and double conversion system configuration. Under high-speed DSP system control, the system can quickly track panels to do high-power, load change and efficient multi-level control system, even if the mains input voltage and frequency suddenly changes, over/under voltage, or power disturbances. It also can provide the load with regulated voltage and frequency power. System has a reliable, environmentally friendly, high intelligence and other characteristics.

Features:

High Reliability:

- High-speed micro-controller DSP digital control technology to achieve real-time control, parameter setting, data detection, self-test function to ensure high reliable operation of the system.
- With high speed switching characteristic, high voltage, highcurrent, low internal resistance, low dissipation IGBT, MOSFET power components based, to ensure system security and reliability.

N+1 Modularised Mppt Tracking System:

Multipath MPPT control system access, independent input, operation. More suitable for roof project, to improve power generation efficiency of the panels.

Pv Proactive Power Supply Fucntion:

After detects PV energy, system will enter MPPT status automatically and it will also adjust the power distribution, priority in the use of PV energy.

Intelligent Battery Management System:

- In this system, AC rectifier, MPPT controller controlled by intelligent data exchange and communication system, user can set battery capacity by themselves; battery configuration can be set by the operation interface, system will automatically adjust the charging current, charging voltage, and charging mode.
- In special cases, International Technical Engineer can adjust the charging rate and battery number according to the system configuration.

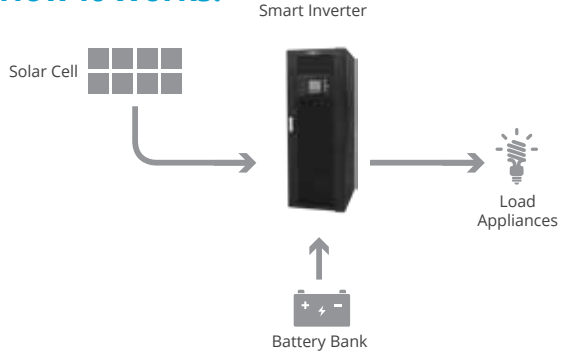
Plenteous Communication Interface:

- RS485, RS232 (standard) and SNMP (optional)
- Input dry contact to switch on/off inverter, clear abnormal, EPO remotely. Output dry contacts singles for remote alarm.

Plenteous Communication Interface:

system with intelligent peak load and shifting function, the user can set the appropriate time period electricity according to the local electricity policy, to achieve load shifting features directly in order to bring economic value.

How It Works:



ICA solar

SMART **INVERTER**

OFF-GRID SNV-GFT SERIES 10KVA - 120KVA

TECHNICAL SPECIFICATION

MODEL	SNV-GF 10K33	SNV-GF 20K33	SNV-GF 30K33	SNV-GF 40K33	SNV-GF 60K33	SNV-GF 80K33	SNV-GF 100K33	SNV-GF 120K33
RATED POWER (KVA)	10 KVA	20 KVA	30 KVA	40 KVA	60 KVA	80KVA	100KVA	120KVA
RATED POWER (KW)	9 KW	18 KW	27 KW	36 KW	54 KW	72KW	90KW	108KW
RATED CURRENT (KA)	15A	30A	45A	60A	91A	133Ah	151A	182A
OUTPUT POWER FACTOR	0.9							
RATED INPUT VOLTAGE	380V ± 20%							
RATED OUTPUT VOLTAGE	380V ± 1%							
REBATTERY VOLTAGE	360 Vdc							
BATTERY QUANTITY	12V x 30 pcs / 12V x 180 pcs							
WORKING MODE	AC and PV complementation							
PV INPUT								
MAX VOLTAGE	750 VDC							
BEST WORKING VOLTAGE	444~550 VDC							
FLOAT CHARGING VOLTAGE	414V ± 1%							
MAX EFFICIENCY	≥ 98%							
EQUALIZE CHARGE VOLTAGE	428V ± 1%							
MPPT MAX. CURRENT	60A		120A		180A	240A	360A	
MAX. PV POWER	25KW		2 x 25KW		3 x 25KW	4 x 25KW	6 x 25KW	
PV INPUT WAYS	1+1 RESERVED		2+1 RESERVED		3+1 RESERVED	4+4 RESERVED	6+2 RESERVED	
MPPT MODULAR	1+1 RESERVED		2+1 RESERVED		3+1 RESERVED	4+1 RESERVED	6+2 RESERVED	
AC RECTIFIER								
INPUT VOLTAGE RANGE	380V ± 20% Three Phases							
RATED FREQUENCY	50Hz / 60Hz ± 5Hz (Settable)							
SOFT START	0~100% 10s							
POWER FACTOR	0.8							
FLOAT CHARGE VOLTAGE	410V ± 1%							
MAX. VOLTAGE	415V ± 1%							
MAX CHARGE CURRENT	12A	25A	38A	50A	75A	167A	208A	250A
INVERTER								
INVERTER VOLTAGE	380 Vac Three Phases + N + G							
PHASE VOLTAGE SETTING	220 / 230 / 240 Vac (settable)							
OUTPUT VOLTAGE ACCURACY	± 1%							
VOLTAGE TRANSIENTS RANGE	± 5%							
TRANSIENT RECOVERY TIME	20 ms							
RATED FREQUENCY	50Hz / 60Hz ± 1Hz							
FREQUENCY TRACKING RANGE	50Hz / 60Hz ± 3 Hz							
CREST FACTOR	3 : 1							
WAVE	Sinusoidal							
THD	< 3% Linear Load							
VOLTAGE UNBALANCE	± 3% (100% Unbalanced Load)							
OVERLOAD	> 105%~110%: Transfer to bypass in 1 hour, Recover when Load < 100%, > 110%~125%: Transfer to bypass in 10 mins, Recover when Load < 100%, > 125%~150%: Transfer to bypass in 1 min, Recover when Load < 100%, > 150%: Transfer to bypass in 10 seconds, Recover when user confirmed							
SHORT CIRCUIT	System current limit, shut down immediately, require boot by user							
MAX EFFICIENCY	> 90%	> 91%	> 92%		> 93%			
BY PASS								
RATED VOLTAGE (V)	380 Vac three-phase + N+G							
VOLTAGE RANGE	±20%							
RATED FREQUENCY (HZ)	50 Hz / 60 Hz ± 5Hz							
MAX CURRENT	19A	38A	57A	76A	114A	152A	190A	228A
BATTERY MANAGEMENT								
EOD VOLTAGE SETTINGS	1.58V~1.83V							
CHARGING CURRENT SETTING	$0.07C_{10}$~$0.3C_{10}$ Settable (Factory Default :0.15C)							
BATTERY INTELLIGENT MANAGEMENT	Equalizing charging and float charging automatically transfer, automatic temp compenstion for battery							
STAGGERING DEPTH	18.5V~2.1V/Cell (settable)							
TRANSFER TIME	Inverter / Bypass transfer time : 0 ms							
COMMUNICATION INTERFACE								
REMOTE CONTROL INPUT	Inverter on, Inverter off, Abnormal Clear, Emergency Power Off (EPO)							
PC MONITORING INTERFACE	R5232, R5484, SNMP, WiFi, Bluetooth (Optional)							
DRY CONTACT	Bypass Input Abnormal, Rectifier Input Abnormal, system Fault, System Warning, Low Batt, Overload, Fans Fault, Generator ON/OFF							
ENVIRONMENT								
OPERATION TEMP.	0~40°C							
MAX. RELATIVE HUMIDITY	90% (Non Condensing)							
MAX. WORKING ATTITUDE	1000m (100m higher, 1% derated ; Max 4000m)							
IP RATING	IP20							
DIMENSIONS W x D x H (mm)	450 x 840 x 1100		600 x 700 x 1750				960 x 800 x 1700	
PACKING DIM. W x D x H (mm)	530 x 920 x 1140		690 x 790 x 1850				1040 x 890 x 1750	
WEIGHT (kg)	230	245	380	430	515	760	800	860

Specifications subject to change without prior notice