



NEXGEN 6kW

LOW VOLTAGE HYBRID INVERTER (Single PHASE)

High Efficiency



- » Wide MPPT voltage range for increased power generation
- » Max. string current 20A, suitable for high-current/double-sided components

User-Friendly



- » <4ms UPS-level switching
- » Smart load dual output interface protection
- » 6 editable charge/discharge times

Economical & Cost-Saving



- » Supports grid-connected and off-grid AC coupled access

Smart



- » Supports remote diagnostics and software updates
- » Easy to set up intelligent working modes
- » Compatible with diesel generators, can control the generator automatically start and stop

Safe & Reliable



- » Supports I-V curve scanning, accurately identifying string anomalies
- » Intelligent AFCI reduces fire risk (Optional)

Model:		CT NexGEN 6kW Hybrid-SP PV12000
PV INPUT		
MAX. PV access power		12000W
Max. PV input power		9kW
Max. input voltage		550V
Rated PV input voltage		360V
Start-up voltage		60V
MPPT voltage range		90-450V
Max. PV input current		20A/20A
Max. short circuit current		30A/30A
MPPT number/Max. input strings number		2/2
BATTERY		
Battery type		Lead-acid or Li-ion
Rated battery voltage		48V
Battery voltage range		40-60V
Max. charge / discharge current		135A/135A
Communication		CAN/RS485
Charging strategy for Li-ion battery		Self-adaption to BMS
AC OUTPUT		
Rated output power		6kW
Max. apparent output power		6.6kVA
Rated output voltage		220V/230V,L/N/PE
Output voltage range		160V-300V
Rated output frequency/frequency range		50Hz/60Hz (±5Hz)
Rated output current		26.1A
Max.output current		28.7A
power factor		>0.99(0.8 leading - 0.8 lagging)
THDi		<3%
AC INPUT		
Rated input power		6kW
Max. input power		9.2kW
Rated input voltage		220V/230V,L/N/PE
Rated input frequency		50/60Hz
Max. input current		40A
BACK-UP OUTPUT		
Rated output power		6kW
Max. output power		2 times of rated power, 10 s
Rated output voltage		220V/230V,L/N/PE
Rated output frequency		50/60Hz
Max. output switch time		28.7A
Back-up switch time		<4ms
THDv		<3%
EFFICIENCY		
MPPT efficiency		99.80%
Max. efficiency		97.70%
EU efficiency		96.70%
BAT charged/discharged Max efficiency		95.3% / 93.9%
PROTECTION		
Integrated DC switch		Yes
DC rever-polarity protection		Yes
Insulation impedance detection		Yes
Residual leakage current detection		Yes
Ground fault monitoring		Yes
Short circuit protection		Yes
Anti-islanding protection		Yes
DC/AC surge protection		DC:Type II;AC:Type II
DC arc-fault circuit protection		Optional
I/V curve scanning		Yes
Parallel connection number of inverter		Max.16
GENERAL		
Operating temperature range		-40 to 60°C
Max. operation altitude		4000m(Derating above 3000m)
Relative humidity		0~100%
Cooling concept		Smart Fan Cooling
Ingress protection		IP 66
Topology		Transformerless
Self consumption(night)		≤20W
Dimensions (W*H*D)		350*620*260mm
Weight		28kg
Type of PV terminal		MC4 connector
Type of PV terminal (Grid side)		Terminal
Warranty		10 Years*
COMMUNICATION		
Display		LCD+LED+Bluetooth+APP
Communication		WiFi+Bluetooth,Optional:GPRS,LAN ;BMS:RS485/CAN
CERTIFICATION		
Grid standards		IEC 61727/62116,IEC 61683,PEA
Safety/EMC		IEC/EN 62109-1/2,IEC/EN 62477-1, EN IEC61000-6-1/2/3/4