

NOVA 12K

PREMIUM SPLIT-PHASE HYBRID INVERTER

MODEL: NOVA 12K



FEATURES

- Support multiple input & output - Split phase 120V/240VAC Split phase, 120V/208V Split phase.
- Door-type cable compartment.
- Built-in 300A DC breaker and 60A AC breaker.
- Built-in AC coupled function.
- Built-in WiFi for mobile monitoring (APP is available).
- Accepts second input power source, generator input compatible.
- Built-in arc fault detection (AFD) and rapid shutdown (RSD).
- External CT sensor to guarantee 100% self-consumption.
- Built-in communication port for BMS (RS485).
- User-adjustable charging current and voltage.
- Parallel operation up to 6 units.
- Idle Consumption: -150W (±10%)



12KW PREMIUM SPLIT-PHASE HYBRID INVERTER SPECIFICATION

Phase	120/240V Split phase, 120V/208V Split phase
Maximum PV Input Power	12000W
Rated Output Power	10000VA/10000W
Maximum Charging Power	10000W

GRID-TIE OPERATION

PV INPUT(DC)	Maximum DC Voltage	600VDC
	Start-up Voltage/Initial Feeding Voltage	125VDC/160VDC
	MPP Voltage Range	120VDC~550VDC
	Number of MPP Trackers/ Maximum Input Current	2/18A (MAX 40A)
GRID OUTPUT(AC)	Nominal Output Voltage	120VAC(P-N)/208VAC(P-P)/240VAC(P-P)
	Output Voltage Range	105.5-132VAC (per phase)
	Nominal Output Current	41.7A per phase
	Power Factor	0.9lag to 0.9lead
EFFICIENCY	Maximum Conversion Efficiency(DC/AC)	96%

OFF-GRID, HYBRID OPERATION

AC INPUT	AC Start-up Voltage/Auto Restart Voltage	85 VAC(per phase)/90 VAC(per phase)
	Acceptable Input Voltage Range	90-140VAC(per phase)
	Maximum AC Input Current	60A per phase
PV INPUT(DC)	Maximum DC Voltage	600VDC
	Start-up Voltage/Initial Feeding Voltage	125VDC~160VDC
	MPP Voltage Range	120VDC~550VDC
	Number of MPP Trackers/ Maximum Input Current	2/18A
BATTERY MODE OUTPUT(AC)	Nominal Output Voltage	120VAC(P-N)/208VAC(P-P)/240VAC(P-P)
	Output Waveform	Pure Sine Wave
	Efficiency (DC to AC)	91%
BATTERY & CHARGER	DC Voltage Range / Nominal Voltage	40-62 VDC / 48 VDC
	Maximum Solar Charging Current	200A
	Maximum AC Charging Current	200A
	Maximum Charging Current	200A

GENERAL

PHYSICAL	Dimension, DxWxH(mm)	215.5x515x715
	Net Weight(kgs)	45
ENVIRONMENT	Operating Temperature	-25°C to 60°C(>45°C derating)
PROTECTION & CERTIFICATE	Safety	UL 1741SA, UL 1741SB, CSA 22.2.107.1, CEC
	Grid Connection Standard	IEEE 1547.1:2020; IEEE 1547:2018, California Rule 21, HECO Rule 14H
	EMC	FCC Part 15 Class B
	PV DC Switch - NEC 250.15	Yes
	Ground Fault Detection - NEC 690.5	Yes
	PV Rapid Shutdown Protection - NEC 690.12	Yes
	PV Arc Fault Detection - NEC 690.11	Yes
	PV Input Lightning Protection	Yes
	3 x 60A AC Input and Output Breaker	Built-in
200A x 2 Battery DC Breaker	Built-in	