NUOVOLT
FUTURE OF INTELLIGENT POWER

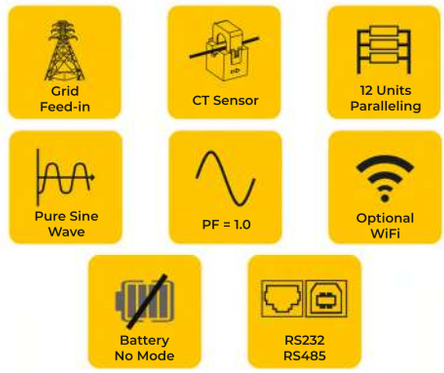
MPPT SMART INVERTER
datasheet

6.2kW 48V (Hybrid) 230VAC Output

Features

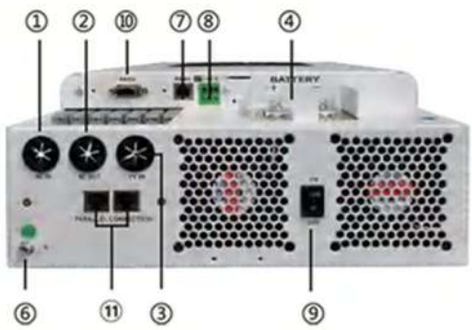
* Self-consumption and grid feed-in
* Programmable multiple operating modes: grid-tie, off-grid, and grid-tie with backup
* Backflow prevention and grid connection function via external CT sensor
* Parallel operation of up to 12 units (single-phase or three-phase)
* Plug-and-play WiFi dongle support
* Output power factor: 1.0
* Wide PV input voltage range: Max. 500Vdc
* Built-in MPPT solar charge controller: 120A
* WiFi remote monitoring (optional)
* Removable dust cover for harsh environments
* User-adjustable charging current and voltage
* Programmable supply priority for PV, battery, or grid
* Multiple output priority support: SBU / SUB / SUF / ZEC
* EQ function to optimize battery performance and extend lifespan





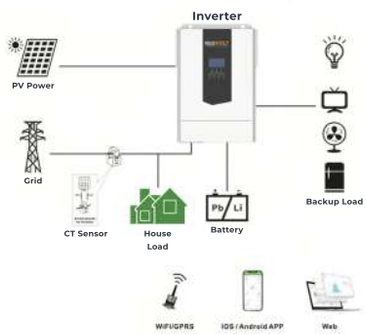
MODEL	48V 6.2kW (HYBRID)
Phase	1 Phase Input / 1 Phase Output
Maximum PV Input Power	6.500W
Parallel Operation	YES (Max. 12 Units)
Nominal Output Power	6.200VA / 6.200W
Lithium Battery Activation	YES (Solar Panel or Grid)
Lithium Battery Communication	YES
Built-in Wi-Fi	Optional
Grid-Tie Operation	
PV INPUT (DC)	
Nominal DC Voltage / Maximum DC Voltage	360Vdc / 500Vdc
Start-up Voltage / Initial Feed-in Voltage	150Vdc / 120Vdc
MPPT Voltage Range	60Vdc / 500Vdc
Number of MPP Trackers / Maximum Input Current	1 / 27A
GRID OUTPUT (AC)	
Nominal Output Voltage	220 / 230 / 240VAC
Output Voltage Range	170 - 280 VAC or 90 - 280VAC
Nominal Output Current	27A
Power Factor	0.6 ~ 1 (Inductive or Capacitive)
Maximum Conversion Efficiency (DC/AC)	94%
OFF-GRID OPERATION	
AC INPUT	
AC Start-up Voltage / Automatic Restart Voltage	100VAC / 90VAC
Acceptable Input Voltage Range	170 - 280 VAC or 90 - 280VAC
Maximum AC Input Current	40A
PV INPUT (DC)	
Maximum DC Voltage	500VDC
MPPT Voltage Range	60VDC ~ 500VDC
Number of MPP Trackers / Maximum Input Current	1 / 27A
BATTERY MODE OUTPUT (AC)	
Nominal Output Voltage	220 / 230 / 240VAC
Output Waveform	Pure Sine Wave
Efficiency (DC to AC Conversion)	94%
HYBRID (BLENDED) WORK	
PV INPUT (DC)	
Nominal DC Voltage / Maximum DC Voltage	360Vdc / 500Vdc
Start-up Voltage / Initial Feed-in Voltage	150Vdc / 120Vdc
MPPT Voltage Range	60Vdc / 500Vdc
Number of MPP Trackers / Maximum Input Current	1 / 27A
GRID OUTPUT (AC)	
Nominal Output Voltage	220 / 230 / 240VAC
Output Voltage Range	170 - 280 VAC or 90 - 280VAC
Nominal Output Current	27A
AC INPUT	
AC Start-up Voltage / Automatic Restart Voltage	100 VAC / 90VAC
Acceptable Input Voltage Range	170 - 280 VAC or 90 - 280VAC
Maximum AC Input Current	40A
BATTERY MODE OUTPUT (AC)	
Nominal Output Voltage	48Vdc
Efficiency (DC to AC Conversion)	94%
BATTERY & CHARGER	
Nominal DC Voltage	48Vdc
Maximum Solar Charging Current	120A
Maximum AC (Grid) Charging Current	80A
Maximum Total Charging Current	120A
GENERAL FEATURES	
PHYSICAL	
Dimensions (D × W × H) mm	456,8 x 314,7 x 131
Package Dimensions (D × W × H) mm	540 x 390 x 210
Net Weight (kg)	9,6
Gross Weight (kg)	10,9
Communication Port	RS232 + RS485 + External CT Connection Port
ENVIRONMENTAL	
Humidity	5% to 95% Relative Humidity (Non-Condensing)
Operating Temperature	-10 °C to 55 °C
Koruma Sınıfı	IP21

Bottom View



1. AC input (Grid input)
2. AC output
3. PV input (Solar panel input)
4. Battery input
5. Grounding
6. RS485 communication port
7. AC grid current sensor
8. Power on/off switch
9. RS232 communication port
10. Parallel communication port

System Diagram





Max. 12 units can be connected in parallel.

Product specifications are subject to change without prior notice.

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