

# THREE PHASE HYBRID INVERTER

**PSE-DUAL-12KW**

## NEXA SERIES



110% overload output  
(1.3times  $\leq$  60s)



Support dry contact  
starting generator



Normal operation of  
only-connection PV panels



UPS switch  
over time  $<$  10ms



Up to 2 times input



Dual back up output

**Max  
18**

The maximum current of  
a single string module is 10A



Supports a maximum of  
12 three-phase units



Support 110% three-phase  
unbalanced output

# NEXA Series



Support APP Online  
Operation & Maintenance



Battery Side High Frequency  
Transformer Isolation,  
Safe And Reliable



Support Battery  
Charging/Discharging  
According To The Time Setting



PV Input  
Reverse  
Polarity Protection

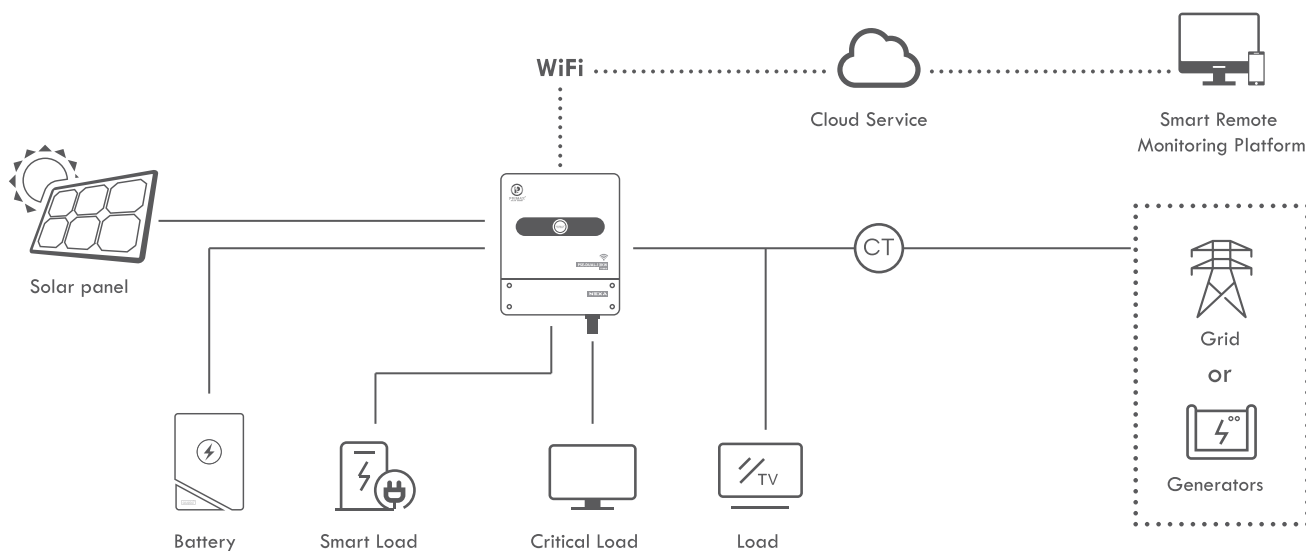


Output Over  
Current/Voltage  
Protection



The Battery Charge  
and Discharge Current  
Up to 120A

## Solution Diagram



## PSE-DUAL-12KW

| PV INPUT                           |      |                                               |
|------------------------------------|------|-----------------------------------------------|
| Max. DC input power                | [W]  | 18000                                         |
| Max. DC input voltage              | [V]  | 1000                                          |
| MPPT operating voltage range       | [V]  | 150-800                                       |
| Starting voltage                   | [V]  | 150                                           |
| Max. input current                 | [A]  | 36/18                                         |
| Number of MPP trackers             |      | 2                                             |
| Strings per MPP tracker            |      | 2/1                                           |
| AC OUTPUT (GRID)                   |      |                                               |
| Rated output power                 | [W]  | 12000                                         |
| Max. output apparent power         | [VA] | 13200                                         |
| Rated output voltage               | [V]  | 400                                           |
| Rated output frequency             | [Hz] | 50/60                                         |
| Max. output current                | [A]  | 20.0                                          |
| Output power factor                |      | -0.8 leading~+0.8 lagging                     |
| AC OUTPUT (TWO BACKUP)             |      |                                               |
| Full Max. output power             | [W]  | 12000                                         |
| Rated output voltage               | [V]  | 400(±2%)                                      |
| Rated output frequency             | [Hz] | 50/60 (±0.2%)                                 |
| Backup1 Max. output power          | [W]  | 12000                                         |
| Backup2 Max. output power          | [W]  | 12000                                         |
| Output Power Factor(off grid)      |      | -0.8 leading~+0.8 lagging                     |
| Output Current Harmonic Distortion |      | THD<3%(Nonlinear load); THD<1.5%(Linear load) |
| Max. output current                | [A]  | 20                                            |
| BATTERY PARAMETERS                 |      |                                               |
| Battery type                       |      | Lithium or lead acid battery                  |
| Rated battery voltage              | [V]  | 48                                            |
| Voltage range                      | [V]  | 44-60                                         |
| Max. charge/discharge current      | [A]  | 240                                           |
| EFFICIENCY                         |      |                                               |
| Max. efficiency (PV)               |      | 98%                                           |
| Max. efficiency (Battery)          |      | 94.5%                                         |
| European efficiency                |      | 97.5%                                         |
| PROTECTION                         |      |                                               |
| DC reverse-polarity protection     |      | Yes                                           |
| Short circuit protection           |      | Yes                                           |
| Output over current protection     |      | Yes                                           |
| Output over voltage protection     |      | Yes                                           |
| Insulation resistance monitoring   |      | Yes                                           |
| Residual current detection         |      | Yes                                           |
| Surge protection                   |      | Yes                                           |
| Grid monitoring                    |      | Yes                                           |
| Islanding protection               |      | Yes                                           |
| Temperature protection             |      | Yes                                           |
| Integrated DC switch               |      | Yes                                           |
| OTHERS                             |      |                                               |
| Operating temperature range        | [℃]  | -25~60                                        |
| Storage temperature range          | [℃]  | -30~65                                        |
| Humidity range                     |      | 0~95%                                         |
| Operating altitude                 | [m]  | ≤4000                                         |
| Topology                           |      | HF isolation (Battery side)                   |
| Cooling method                     |      | Natural                                       |
| Noise                              | [db] | <25                                           |
| Weight                             | [kg] | 35                                            |
| Size (W×H×D)                       | [mm] | 475×683×256                                   |

### STANDARD

EN62109-1/2, IEC62109-1/2, EMC61000, EN50549, IEC61727, IEC62116, IEC61683, VDE 4105/0124



<https://primaxsolarenergy.com/>