

MPS

Microgrid hybrid inverter

400V  
Microgrid series



KEY STRENGTHS

- Integrated PV/MPPT module/transformer/STS and maintenance bypass.
- Supports 100% unbalanced loads.
- Supports parallel connection of multiple machines.
- Global debut of MPPT adaptive boost/buck technology, enabling flexible PV capacity configuration.
- Supports DG load rate control to improve fuel economy.
- Supports flexible configuration of control strategies.

APPLICATIONS



Off-grid mine



Off-grid island



Nomadic farm



Villages without electricity

MPS microgrid series



|                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |
| MPS0030/MPS0050                                                                     | MPS0100/MPS0150                                                                     | MPS0250                                                                             | MPS0500                                                                             |

| Model                      | MPS0030                                                              | MPS0050       | MPS0100         | MPS0150               | MPS0250                               | MPS0500                                 |
|----------------------------|----------------------------------------------------------------------|---------------|-----------------|-----------------------|---------------------------------------|-----------------------------------------|
| AC(on-grid)                |                                                                      |               |                 |                       |                                       |                                         |
| Max. output power (kVA)    | 33                                                                   | 55            | 110             | 165                   | 275                                   | 550                                     |
| Rated output power (kW)    | 30                                                                   | 50            | 100             | 150                   | 250                                   | 500                                     |
| Rated voltage(V)           | 400                                                                  |               |                 |                       |                                       |                                         |
| Voltage range (V)          | 320~460                                                              |               |                 |                       |                                       |                                         |
| Rated current (A)          | 43                                                                   | 72            | 144             | 216                   | 361                                   | 722                                     |
| Rated frequency (Hz)       | 50 / 60                                                              |               |                 |                       |                                       |                                         |
| Frequency range (Hz)       | 45~55 / 55~65                                                        |               |                 |                       |                                       |                                         |
| THDi                       | <3%                                                                  |               |                 |                       |                                       |                                         |
| Power factor               | 1leading~1lagging(settable)                                          |               |                 |                       |                                       |                                         |
| Grid type                  | 3W+N+PE                                                              |               |                 |                       |                                       |                                         |
| AC(off-grid)               |                                                                      |               |                 |                       |                                       |                                         |
| Max. output power (kVA)    | 33                                                                   | 55            | 110             | 165                   | 275                                   | 550                                     |
| Rated power (kW)           | 30                                                                   | 50            | 100             | 150                   | 250                                   | 500                                     |
| Rated voltage (V)          | 400                                                                  |               |                 |                       |                                       |                                         |
| Rated current (A)          | 43                                                                   | 72            | 144             | 216                   | 361                                   | 722                                     |
| THDu                       | ≤1% linear; or ≤5% nonlinear                                         |               |                 |                       |                                       |                                         |
| Rated frequency (Hz)       | 50 / 60                                                              |               |                 |                       |                                       |                                         |
| Overload capacity          | 110% long-term, 120% 1min                                            |               |                 |                       |                                       |                                         |
| PV input                   |                                                                      |               |                 |                       |                                       |                                         |
| Max. PV input voltage (V)  | 1,000                                                                |               |                 |                       |                                       |                                         |
| Max. PV power (kW)         | 82.5                                                                 | 82.5          | 165/247.5       | 165/247.5/330         | 330/412.5                             | 660/742.5/825                           |
| MPPT module quantity       | 1                                                                    | 1             | 2/3             | 2/3/4                 | 4/5                                   | 8/9/10                                  |
| MPPT voltage range (V)     | 250~1,000                                                            |               |                 |                       |                                       |                                         |
| Battery                    |                                                                      |               |                 |                       |                                       |                                         |
| Battery voltage range (V)  | 250~850                                                              | 320~850       | 420~950         | 420~950               | 420~950                               | 500~950                                 |
| Max. charging power (kW)   | 33                                                                   | 55            | 110             | 165                   | 275                                   | 550                                     |
| General data               |                                                                      |               |                 |                       |                                       |                                         |
| Dimension W*D*H (mm)       | 800*800*1,900                                                        | 800*800*1,900 | 1,200*800*2,050 | 1,200*800*2,050       | (600*720*2,050)*1+<br>1,200*800*2,050 | (600*720*2,050)*2+<br>1,600*1,050*2,050 |
| Weight (kg)                | 620                                                                  | 720           | 1,120 / 1,150   | 1,250 / 1,280 / 1,310 | 1,950 / 1,980                         | 3,205/3,235/3,265                       |
| Operation temperature (°C) | -30 ~ +55                                                            |               |                 |                       |                                       |                                         |
| Relative humidity          | 0 ~95% non-condensing                                                |               |                 |                       |                                       |                                         |
| Ingress protection         | IP20                                                                 |               |                 |                       |                                       |                                         |
| Noise emission (dB)        | <70                                                                  |               |                 |                       |                                       |                                         |
| Operating altitude (m)     | > 3,000 power derating                                               |               |                 |                       |                                       |                                         |
| Cooling                    | Forced air cooling                                                   |               |                 |                       |                                       |                                         |
| Display and communication  |                                                                      |               |                 |                       |                                       |                                         |
| Display                    | LCD touch panel                                                      |               |                 |                       |                                       |                                         |
| BMS communication          | RS485, CAN                                                           |               |                 |                       |                                       |                                         |
| EMS communication          | RS485, TCP / IP                                                      |               |                 |                       |                                       |                                         |
| Certificates               | EN 62109-1/-2, EN 62477-1, EN 61000-6-2/-6-4, NRS 097-2-1:2024, ASGC |               |                 |                       |                                       |                                         |