Midea Energy

NEPCSO-1250UD

Applications

- Renewable power plant integration (ramp rate control, energy shifting)
- Grid ancillary control (frequency regulation, peak shaving)
- Distributed network and micro-grid (peak shaving, autonomous operation)

Great Performance

- High power density, excellent heat dissipation, ensuring stable operation of equipment
- Comprehensive detections and protections, ensuring the reliable operation of equipment
- Compatible with a variety of communication protocols

Grid Support

- Equipped with PQ, VF, SVG, VSG and other functions
- Supporting low/high voltage ride through (L/HVRT)

Easy O&M

- Integrated monitoring function and fast troubleshooting
- Modular design, easy to maintain

Parameter	NEPCSO-1250UD (IEC version)
DC-side	
DC voltage range	1000 V-1500 V
Max. DC voltage	1500 V
Max. DC current	1323 A
AC-side (on-grid)	
Rated power	1250 kW @ 45°C
Max. AC output power	1375 kW @ 30°C
Rated AC voltage	690 V AC, 3W + PE
AC voltage range	587–759 V
Rated grid frequency	50 Hz/60 Hz
Grid frequency range	45–55 Hz/55–65 Hz
Max. AC current	1151A @ 30℃
AC current THD (THDi)	< 3% (at rated power)
Power factor	> 0.99 (at rated power)
AC-side (off-grid)	
Rated AC voltage	690 V, 3W + PE
AC voltage range	587–759 V
AC voltage THD (THDu)	< 3% (linear load)
DC voltage component	< 0.5% Un (linear balance load)
Unbalanced load capacity	100% unbalanced load
Rated grid frequency	50 Hz/60 Hz
Efficiency	
Max. efficiency/CEC efficiency	99%
Protection	
DC breaker	Supported
DC fuse	Supported
AC breaker	Supported
AC overcurrent protection	Supported
Insulation impedance detection	Supported
General parameters	
Dimensions (W × D × H)	700 mm × 1300 mm × 2328 mm
Weight (approx.)	≤1050 kg
Operating ambient temperature range	–35°C to +60°C (> 45°C derating)
Relative humidity range	0–100% (non-condensing)
Parameter	
Max. operating altitude	5000 m (> 3000 m derating)
Ingress protection (IP) rating	IP65 (electronic cavity), IP55 (main air duct)
Anti-corrosion degree	C4 , C5 (optional)
Cooling method	Forced air cooling
Isolation mode	Non-isolated type (transformer external)
Communication interface	RS485, CAN, Ethernet, Fiber (optional)
Communication protocol	Modbus TCP, IEC 104, IEC 61850
Standard compliance	EN 50549, IEC 62477, IEC 61000