

HEGA large C&I inverter series

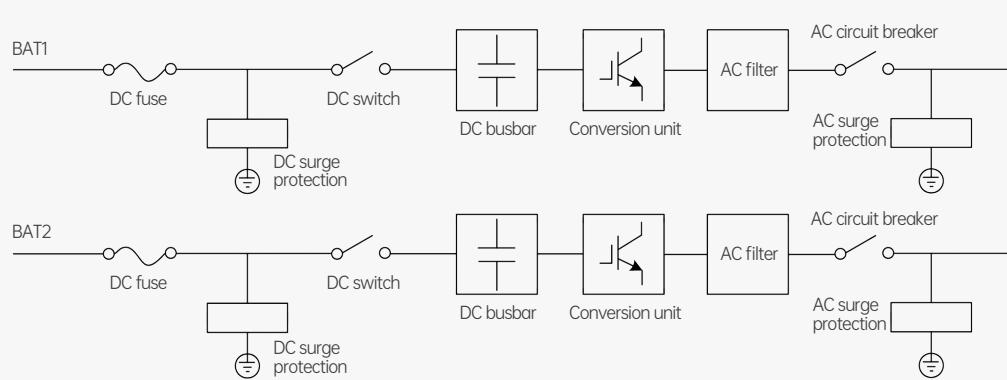
1500V-Centralised Power Conversion System



KEY FEATURES

- Compact footprint, installation area reduced by 45% (1,700 × 1,000 mm).
- Compatible with multiple energy storage media, including lithium batteries, sodium-ion batteries, flow batteries, hydrogen fuel cells, and supercapacitors.
- Supports multiple operating modes (PQ / VF / VSG) with grid-forming capability.
- Three-level topology with peak efficiency up to 99.01%.
- IP66-rated enclosure with optional C3–C5 anti-corrosion protection.
- Intelligent thermal management, no derating at ambient temperatures up to 45°C.

BLOCK DIAGRAM



| Rated power (kW) | 2,400 | 2,750 | 3,150 | 2,500 | 3,450 |
|---------------------------------------|-------------|-------------|--|---------------|-----------|
| DC data | | | | | |
| DC voltage range (V) | 696 ~ 1,500 | 800 ~ 1,500 | 920 ~ 1,500 | 1,000 ~ 1,500 | |
| Max. DC current (A) | | 1,935*2 | | 1,402*2 | 1,935*2 |
| Number of DC input circuits | | | 2 | | |
| AC data | | | | | |
| Rated power (kW) | 2,400 | 2,750 | 3,150 | 2,500 | 3,450 |
| Max. output power (kW) | 2,640 | 3,025 | 3,465 | 2,750 | 3,795 |
| Reactive power range (kvar) | 0 ~ 2,520 | 0 ~ 2,888 | 0 ~ 3,308 | 0 ~ 2,625 | 0 ~ 3,623 |
| Rated AC current (A) | | 2,886 | | 2,092 | 2,886 |
| Grid type | | | 3W+PE | | |
| Isolation method | | | No isolation | | |
| Grid-connected operation data | | | | | |
| Rated grid frequency (Hz) | | | 50 / 60 | | |
| Total harmonic distortion of current | | | < 3% (Rated power) | | |
| Power factor | | | - 1 ~ 1 | | |
| Charge-discharge conversion time (ms) | | | < 30 | | |
| Voltage regulation accuracy | | | ±1% | | |
| Current stability accuracy | | | ±2% | | |
| Off-grid operation data | | | | | |
| Rated output voltage (V) | 480 | 550 | 630 | 690 | |
| Voltage imbalance | | | 2%, not exceeding 4% for short periods | | |
| THDu | | | < 3% (No load or rated resistive load) | | |
| Dynamic voltage transient range | | | 10% (under resistive load/balanced load conditions, when the load suddenly changes from 20% to 100% or from 100% to 20%) | | |
| Output overvoltage protection value | | | Adjustable | | |
| Output undervoltage protection value | | | Adjustable | | |
| General data | | | | | |
| Applicable grounding system | | | IT | | |
| Max. efficiency | | | 99.01% | | |
| Allowable ambient temperature (°C) | | | - 40 ~ + 60 (Use with derating above 45) | | |
| Allowable relative humidity | | | 0 ~ 100% (No condensation) | | |
| Allowable altitude (m) | | | < 5,000 (A reduction of over 3,000) | | |
| Noise (dB) | | | 75 | | |
| DI interface | | | Group 4 | | |
| DO interface | | | Group 1 | | |
| Corrosion resistance grade | | | C3 (C4 / C5 optional) | | |
| Overvoltage protection | | | DC Type II / AC Type III | | |
| Wiring method | | | Bottom-in-bottom-out | | |
| Protection grade | | | IP66 | | |
| Cooling method | | | Intelligent heat exchange | | |
| Indicator light | | | Touch screen | | |
| Communication interface | | | Ethernet, RS485 | | |
| Communication protocol | | | Modbus TCP / RTU, IEC61850, IEC104 | | |
| Dimensions (W*H*D) (mm) | | | 1,700*2,633*1,319 (with radiator) | | |
| Weight (kg) | | | ≤ 2,300 | | |
| Certification | | | CGC, high/low voltage ride-through | | |