

UHC Series 4~12KW Three Phase Hybrid Inverter



UHC - 4~12KT suit household and small commercial applications. Hybrid and AC-coupled solution provide flexible options for both new and retrofit systems, with the feature of Max.10 units inverter in parallel, offering a solution for small commercial project.

All of them ensure the most efficient use of solar energy at home, increase self-consumption and grid independence, reduce your electricity bills.



Leading Technology

- Max. 15A PV input current per string
- Less than 10ms UPS-level switching
- 98.2% max. efficiency



High Reliability

- IP65 protection degree
- Compact and elegant design with integrated diecasting technology
- Long-term efficient operation with advanced heat dissipation design



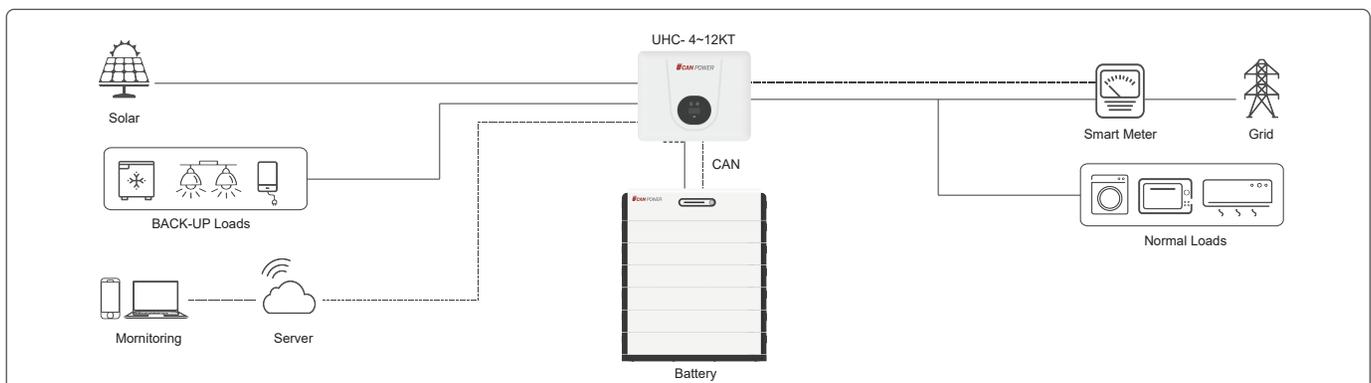
High Performance

- Up to 110% unbalanced load
- Max. 200% back-up output overloading @60s
- Parallel operation with max. 10 units



User-Friendly

- Easy installation and O&M with horizontal design and quick plug terminals
- Easy data check via both OLED display and App
- Ideal for residential application with low operating noise



| Model | UHC-4KT | UHC-5KT | UHC-6KT | UHC-8KT | UHC-10KT | UHC-12KT |
|---------------------------------|--|--------------|--------------|--------------|--------------|--------------|
| PV Input Data | | | | | | |
| Max. PV power | 6000W | 7500W | 9000W | 12000W | 15000W | 18000W |
| Max. DC voltage | 1000V | | | | | |
| Start-up voltage | 135V | | | | | |
| MPPT voltage range | 120~950V | 120~950V | 120~950V | 200~950V | 200~950V | 200~950V |
| Rated DC voltage | 620V | | | | | |
| No. of MPP trackers | 2 | | | | | |
| No. of string per MPP tracker | 1/1 | | | | | |
| Max. input current | 15A/15A | | | | | |
| Max. short current | 20A/20A | | | | | |
| Battery Input Data | | | | | | |
| Battery type | Li-Ion(LFP) | | | | | |
| Battery voltage range | 135~750V | | | | | |
| Max. charge power | 4000W | 5000W | 6000W | 8000W | 10000W | 12000W |
| Max. charge/discharge current | 25A/25A | | | | | |
| Communication | CAN | | | | | |
| AC Output Data (On-grid) | | | | | | |
| Rated AC power | 4000W | 5000W | 6000W | 8000W | 10000W | 12000W |
| Max. AC power output to grid | 4400VA | 5500VA | 6600VA | 8800VA | 11000VA | 13200VA |
| Max. AC power from grid | 8000VA | 10000VA | 12000VA | 16000VA | 16500VA | 16500VA |
| Max. AC current output to grid | 6.7A | 8.3A | 10A | 13.3A | 16.5A | 20A |
| Max. AC current from grid | 11.6A | 14.5A | 17.4A | 23.2A | 23.9A | 23.9A |
| Rated grid voltage | 3/N/PE, 220/380V, 230/400V, 240/415V | | | | | |
| Grid voltage range | 184V~276V | | | | | |
| Rated grid frequency | 50/60Hz | | | | | |
| Output power factor | ~1(0.8 leading to 0.8 lagging) | | | | | |
| Output THDi (@Rated output) | <3% | | | | | |
| AC Output Data (Back-up) | | | | | | |
| Rated output power | 4000W | 5000W | 6000W | 8000W | 10000W | 12000W |
| Max. output power | 4400W | 5500VA | 6600VA | 8800VA | 11000VA | 13200VA |
| Peak output power, Duration | 8000VA, 60s | 10000VA, 60s | 12000VA, 60s | 16000VA, 60s | 16500VA, 60s | 16500VA, 60s |
| Max. output current | 6.7A | 8.3A | 10A | 13.3A | 16.5A | 20A |
| Rated output voltage | 3/N/PE, 220/380V, 230/400V, 240/415V | | | | | |
| Rated output frequency | 50/60Hz | | | | | |
| Output THDv (@Liner load) | <3% | | | | | |
| Switch time | <10ms | | | | | |
| Efficiency | | | | | | |
| Max. efficiency | 98.1% | 98.1% | 98.1% | 98.2% | 98.2% | 98.2% |
| Euro efficiency | 97.3% | 97.3% | 97.3% | 97.4% | 97.4% | 97.4% |
| Protection | | | | | | |
| DC switch | Yes | | | | | |
| Protection | PV reverse polarity protection / Output over current protection / Output over voltage protection / Anti-islanding protection / Residual current detection / Insulation resistor detection / Battery reverse protection | | | | | |
| Surge protection level | PV: Type II, AC: Type III | | | | | |
| General Data | | | | | | |
| Dimension | 550×435×210mm | | | | | |
| Weight | 26kg | | | | | |
| Inverter topology | Non-isolated | | | | | |
| Standby self consumption | <15W | | | | | |
| Operating temperature range | -30 C ~60 C | | | | | |
| Relative humidity | 0~100% | | | | | |
| Operating altitude | <3000m | | | | | |
| Cooling | Natural | | | | | |
| Protection degree | IP65 | | | | | |
| Display | LCD&LED | | | | | |
| Communication | RS485, Optional: WiFi/LAN | | | | | |
| Standard warranty | Standard 5 years | | | | | |
| Certificates | | | | | | |
| EMC | EN61000 | | | | | |
| Safety | IEC62109-1, IEC62109-2 | | | | | |
| Grid | EN50549-1, IEC 62116, VDE-AR-N-4105, CEI 0-21, C10/11 | | | | | |

Information may be subject to change without notice during product improving.