

**GUDEOX**

# QH-T12~20K Three-phase Hybrid Inverter

12kW / 15kW / 20kW



## Efficient and reliable

Retrofit function: intelligent AC coupling solution for easy upgrade of existing grid-connected systems

Smart UPS, plug & play, seamless switching under 20 seconds to give sufficient backup power for emergency use

Up to 200% surge power backup overload capability in 10 seconds



## User friendly

Color LED display with intuitive multilingual software

Online monitoring via app

Remote control and upgrade function



## Easy to install

Compatible with lithium-ion, lead-acid and sodium batteries

Pre-wired communication cables for plug and play

Supports single-phase and three-phase flexible parallel installation

| **POWERING A SUSTAINABLE WORLD** |

| Technical Data                    | QH-T12K  | QH-T15K       | QH-T20K       |
|-----------------------------------|--|---------------|---------------|
| <b>Input DC (PV side)</b>         |  |               |               |
| Recommended maximum PV power      | 19.2kW   | 24kW          | 32kW          |
| Start-up voltage                  | 160V   |               |               |
| Maximum input voltage             | 1000V  |               |               |
| Rated voltage                     | 600V   |               |               |
| MPPT voltage range                | 200V~850V  |               |               |
| Maximum input current             | 20A / 20A / 20A / 20A  |               |               |
| Maximum short circuit current     | 30A / 30A / 30A / 30A  |               |               |
| Number of MPPT / Strings per MPPT | 4/4  |               |               |
| <b>Battery</b>                    |  |               |               |
| Battery type                      | Lithium / Lead-acid  |               |               |
| Battery voltage range             | 120V~800V  |               |               |
| Maximum charge/discharge power    | 12kW   | 15kW          | 20kW          |
| Maximum charge/discharge current  | 50A  |               |               |
| Number of battery input           | 2  |               |               |
| Communication interface           | CAN/RS485  |               |               |
| <b>Output AC (Back-up)</b>        |  |               |               |
| Rated output power                | 12kW   | 15kW          | 20kW          |
| Maximum apparent output power     | 2 times of rated power, 10 S   |               |               |
| Back-up switch time               | <10 ms   |               |               |
| Rated output voltage              | 3P/N/PE, 380V / 400V   |               |               |
| Rated output frequency            | 50Hz   |               |               |
| Rated output current              | 18.2A / 17.3A  | 22.8A / 21.7A | 30.4A / 28.9A |
| THDv                              | <2% (@ linear load)  |               |               |
| <b>Input AC (Grid side)</b>       |  |               |               |
| Maximum input power               | 18kW   | 22.5kW        | 30kW          |
| Maximum input current             | 27.3A  | 34.2A         | 45.6A         |
| Rated input voltage               | 3P/N/PE, 380V / 400V   |               |               |
| Rated input frequency             | 50Hz   |               |               |
| <b>Output AC (Grid side)</b>      |  |               |               |
| Rated output power                | 12kW   | 15kW          | 20kW          |
| Maximum apparent output power     | 13.2kVA  | 16.5kVA       | 22kVA         |
| Rated grid voltage                | 3P/N/PE, 380V / 400V   |               |               |
| Rated grid frequency              | 50Hz   |               |               |
| Rated grid output current         | 18.2A / 17.3A  | 22.8A / 21.7A | 30.4A / 28.9A |
| Maximum output current            | 20A / 19A  | 25A / 23.9A   | 33.4A / 31.8A |
| Power factor                      | >0.99 (-0.8~+0.8 adjustable)   |               |               |
| THDi                              | <3%  |               |               |
| <b>Performance data</b>           |  |               |               |
| Maximum efficiency                | 98.5%  |               |               |
| EU efficiency                     | 97.5%  |               |               |
| Protection                        | Anti-islanding protection, Output over current protection, Short circuit protection, Integrated AFCI (DC arc-fault circuit protection), Integrated DC switch, DC reverse-polarity protection, PV over voltage protection, Battery reverse protection |               |               |
| DC connection                     | MC4 connector  |               |               |
| AC connection                     | Quick connection plug  |               |               |
| Display                           | LED + Bluetooth + APP  |               |               |
| Communication interface           | CAN, RS485, Wi-Fi, LAN (optional)  |               |               |
| <b>General data</b>               |  |               |               |
| Operating temperature             | -25°C~60°C   |               |               |
| Ingress protection rating         | IP66   |               |               |
| Cooling method                    | Intelligent redundant fan-cooling  |               |               |
| Maximum operating altitude        | 2000 m   |               |               |
| Certifications                    | EN61000-6-1/2/3/4, IEC/EN 62109-1/2, IEC61140, CEI 0-21/CEI 0-16   |               |               |
| Weight                            | 38 kg  |               |               |
| Dimensions (WxDxH)                | 420x235x530 mm   |               |               |