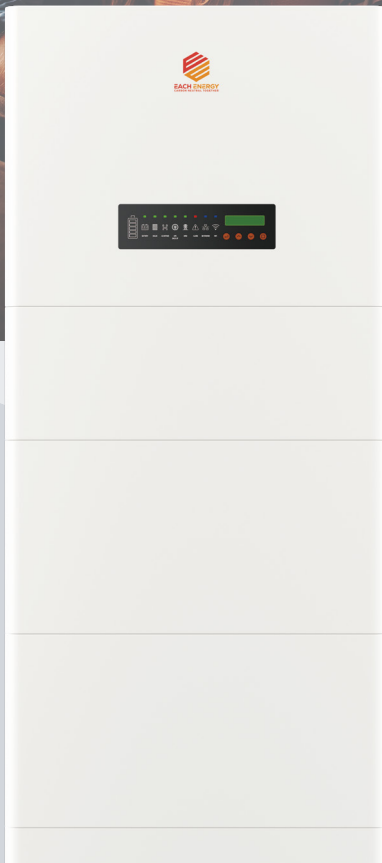


APHT4K/5K/6K/8K/10K/ 12K/15K/18K/20K-H All In One · ESS



Talented

- 98.6% max. efficiency
- 80-800V super wide battery voltage range
- Within 10ms UPS-level switching
- Max. 18A PV input current
- 100% full load charge and discharge

Powerful

- 21A/25A charging and discharging current, suitable to middle voltage and high voltage batteries
- 200% Recommended max. PV power input
- Max. 200% back-up output overloading @60s
- Parallel operation capacity with max. 6 units

Friendly

- Smaller cable size and conduit
- Longevity and almost no derating at high temperature
- Wifi and bluetooth connection
- IP66 protection degree

18A

PV Input Current

10ms

UPS-level Switching

110%

Unbalanced load



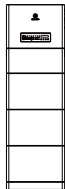
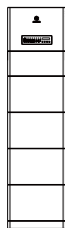
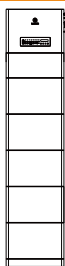
160%-200%

Back-up overloading@60S

| Model | APHT4K APHT5K APHT6K APHT8K APHT10K APHT12K APHT15K APHT18K APHT20K | | | | | | | | | |
|---|---|----------|-----|------|-------|-------|-------|----------|-------|--|
| Inverter Data | | | | | | | | | | |
| Battery type | Li-ion | | | | | | | | | |
| Battery voltage range(V) | 80~800 | | | | | | | | | |
| Max. charging/discharging current(A) | 25/25 | | | | | | | | | |
| Rated charging current/discharging current(A) | 21/21 | | | | | | | | | |
| Recommended max. PV power(KW) | 6.4 | 8 | 9.6 | 12.8 | 16 | 19.2 | 24 | 28.8 | 32 | |
| Max. input voltage(V) | 1100 | | | | | | | | | |
| MPPT voltage range(V) | 100~1000 | | | | | | | | | |
| Max. input current(A) | 20/20 | 20/20/20 | | | | | | 20/20/40 | | |
| Max. short circuit current(A) | 30/30 | 30/30/30 | | | | | | 30/30/60 | | |
| MPPT number | 2 | 3 | | | | | | 3 | | |
| Strings number per MPPT | 1/1 | 1/1/1 | | | | | | 1/1/2 | | |
| Rated grid voltage/range(V) (L/N/PE) | 220/380, 230/400, 240/415, 312~520 | | | | | | | | | |
| Rated output power(KW) | 4 | 5 | 6 | 8 | 10 | 12 | 15 | 18 | 20 | |
| Rated/Max. apparent output power(KVA) | 4/4 | 5/5 | 6/6 | 8/8 | 10/10 | 12/12 | 15/15 | 18/18 | 20/20 | |
| Rated grid output current(A) | 5.8 | 7.2 | 8.7 | 11.6 | 14.5 | 17.4 | 21.7 | 26.1 | 29 | |
| Max. output current(A) | 5.8 | 7.2 | 8.7 | 11.6 | 14.5 | 17.4 | 21.7 | 26.1 | 29 | |
| Peak apparent output power(KW), for 60S | 8 | 10 | 12 | 16 | 20 | 20 | 22.5 | 22.5 | 24 | |
| Back-Up/UPS switch time(ms) | <10 | | | | | | | | | |
| Rated frequency(Hz) | 50/60 | | | | | | | | | |
| Max. efficiency | 98.6% | | | | | | | | | |
| EU efficiency | 98.1% | | | | | | | | | |
| Topology | Transformerless | | | | | | | | | |
| Dimensions(mm) (W*H*D) | 630*450*178 | | | | | | | | | |
| Weight(Kg) | 31 | | | | | | | | | |

| | | | | | | | | | | |
|-------------------------------------|---|--|--|--|--|--|--|--|--|--|
| General Data | | | | | | | | | | |
| Shell material | Aluminium alloy | | | | | | | | | |
| Operating ambient temperature range | -25~60 C | | | | | | | | | |
| Ingress protection | IP66 | | | | | | | | | |
| Cooling concept | Smart fan&Natural convection | | | | | | | | | |
| Max. operation altitude(m) | 3000 | | | | | | | | | |
| Grid connection standard | AS/NZS4777:2020, EN50549-10:2022, G98:2021, G99:2021, NC RFG, ABNT NBR 16150, VDE-AR-N 4105, CEI0-21, CEI0-16, RD1699, NA/EEA, C10:2019, PPDS:2021, Tor+R25, IEC61683, IEC61727&62161 | | | | | | | | | |
| Safety/EMC standard | IEC-62109-1/-2, IEC-61000-6-1/-2/-3, NB/T32004 | | | | | | | | | |
| DC connection | MC4/D4 | | | | | | | | | |
| Communications | Wifi, 4G, GPRS, Bluetooth, RS485, CAN | | | | | | | | | |

| | | | | | | | | | | |
|--------------------------------|-------------|--|--|--|--|--|--|--|--|--|
| Battery Data(H4) | | | | | | | | | | |
| Model(KWh) | 4.03 | | | | | | | | | |
| Battery type | LFP | | | | | | | | | |
| Nominal Capacity(Ah) | 42 | | | | | | | | | |
| Nominal Energy(KWh) | 4.03 | | | | | | | | | |
| Nominal voltage/range(V) | 96/80~108 | | | | | | | | | |
| Rated Charge/Discharge Current | 0.5C/0.5C | | | | | | | | | |
| Max Charge/Discharge Current | 1C/1C | | | | | | | | | |
| Dimension(mm) | 630*630*178 | | | | | | | | | |
| Weight(Kg) | 53 | | | | | | | | | |
| Life Cycle(@25°C) | 6000 | | | | | | | | | |
| Life Time | ≥10years | | | | | | | | | |
| Operating Temperature(°C) | -20°C~60°C | | | | | | | | | |
| Depth of discharge(DoD) | 95% | | | | | | | | | |

| System Parameter | H4 | H8 | H12 | H16 | H20 |
|------------------------------------|---|---|--|---|---|
| System schematic |  |  |  |  |  |
| Qty. of batteries | 1 | 2 | 3 | 4 | 5 |
| Charge/Discharge temperature range | Charge: 0°C to 53°C/Discharge: -10°C to 53°C | | | | |
| Cycle life | 6000 | | | | |
| Nominal voltage(V) | 96 | 192 | 288 | 384 | 480 |
| Battery total energy(KWh) | 4.03 | 8.06 | 12.09 | 16.12 | 20.15 |
| Dimension(W*H*D) | 630*1080*178 | 630*1450*178 | 630*1820*178 | 630*2190*178 | 630*2560*178 |
| Weight(Kg) | 93 | 132 | 171 | 210 | 248 |

*Series operation capacity with max. 8 units