

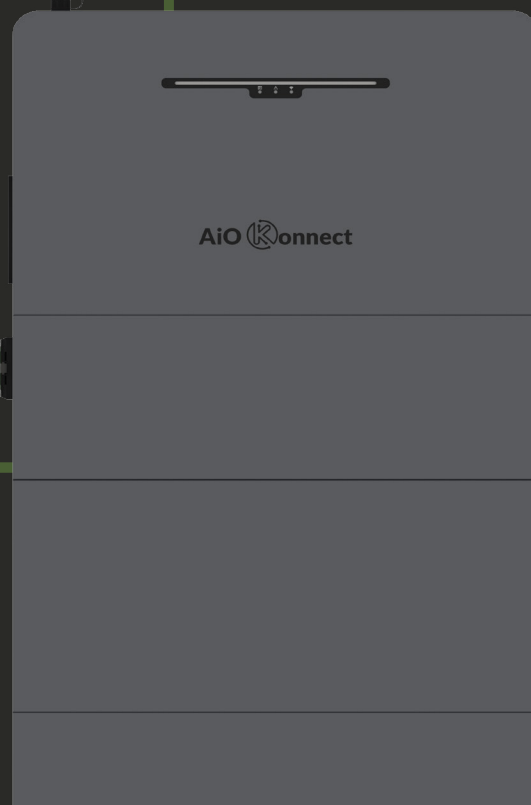


DATA SHEET

Residential ESS All-In-One

5K AiO

5500-1PH



PV INPUT DATA

| | | | | | |
|------------------------|-------|---------------------------|--------|--------------------------------|-------|
| Max. PV Power / W | 10000 | Nominal Input Voltage / V | 360 | Max. Short Current / A | 20/20 |
| Max. Input Voltage / V | 600 | MPP Voltage Range / V | 80-550 | No. of MPP Trackers | 2 |
| Min. DC Voltage / V | 70 | Max. Input Current / A | 16/16 | No. of Strings Per MPP Tracker | 1 |

BATTERY INPUT DATA

| | | | |
|---|-------------------|---|--------------------------|
| Max. Charging Voltage / V | <=60 (Adjustable) | Charging Strategy for Li-ion Battery | Self Adaptation to BMS |
| Max. Charging / Discharging Current / A | 120 | Charging Strategy for Lead-Acid Battery | 3 Stages Curve |
| Max. Charging / Discharging Power / W | 5000 | Temperature Sensor | Optional (for Lead-Acid) |

AC OUTPUT / INPUT DATA

| | |
|---|---------------------------|
| Rated AC Power / W | 5000 |
| Max. Apparent AC Power / VA | 5500 |
| Rated Active AC Power from Grid / VA | 9000 |
| Max. Apparent AC Power from Grid / VA | 10000 |
| Rated Grid Voltage (AC Voltage Range) / V | 220 / 230 / 240 |
| Rated Grid Frequency / Hz | 50 / 60 |
| Rated AC Output Current / A | 21.7 |
| Max. AC Output Current / A | 23.9 |
| Max. AC Current from Grid / A | 40.0 |
| Displacement Power Factor | 0.8 Leading - 0.8 Lagging |
| Total Harmonic Distortion (THDi, Rated Power) | <3% |
| Grid Connection | L / N / PE |

AC OUTPUT DATA (BACK UP)

| | |
|---------------------------------|---|
| Rated Power / W | 5000 |
| Rated Output Voltage / V | 230 |
| Rated Output Frequency / Hz | 50 / 60 |
| Peak Output Apparent Power / VA | 2 times of rated power for 3000-4000W @105; 1.5 times for 6000 / 5000 |
| Rated Output Current / A | 21.7 |
| Switch Time / ms | <10 |
| THDV@ Rated Power | <2% |

PROTECTION

| | | | | | |
|---|------------|---------------------------------|-------------------------|----------------------------------|------------|
| Anti-Islanding Protection | Integrated | Output Over Circuit Protection | Integrated | Battery Reverse Protection | Integrated |
| PV String Input Reverse Polarity Protection | Integrated | Output Short Circuit Protection | Integrated | Battery Terminal Temp Protection | Integrated |
| Insulation Resistor Protection | Integrated | Over Voltage Protection | Integrated | Rapid Shutdown | Optional |
| Residual Current Monitoring Unit | Integrated | Surge Protection | DC Type II, AC Type III | AFCI | Optional |

GENERAL DATA

| | |
|--------------------------|---------------------------|
| Dimensions (W*H*D) / mm | 600*367*196 |
| Weight / kg | 21.5 |
| User Interface | LCD & LED |
| PV Connection Type | MC4 |
| AC Connection Type | OT Terminals and Shedding |
| Battery Connection Type | Plug-In |
| Communication with Cloud | WiFi/4G/LAN (opt) |
| Communication with BMS | CAN/RS485 |
| Cooling Method | Natural |

| | |
|---------------------------------------|--|
| Communicating with CT/Meter | RS485 |
| Operating Ambient Temp / °C | -30 ~ +60 |
| Allowable Relative Humidity Range / % | 0-100 |
| Max. Operating Altitude / M | 3000 |
| Degree of Protection | IP65 |
| Climatic Category (IEC60721-3-4) | 4K4H |
| Topology | Transformer-less for PV Side / HF for Battery Side |
| Max. Parallel Number | 9 |

EFFICIENCY

| | |
|---|--------|
| MPPT Efficiency | 99.90% |
| Euro Efficiency | 97.60% |
| Max. Efficiency | 98.00% |
| Charged Efficiency @ PV Battery | 96.00% |
| Charged / Discharged Efficiency Battery <-> Grid/Load | 95.00% |

PHYSICAL CHARACTERISTICS

| Stack Quantity (Batteries Only) | 1 | 2 | 3 | 4 |
|---------------------------------|-------------|-------------|--------------|--------------|
| Dimensions (W*D*H) / mm | 626*210*565 | 626*210*845 | 626*210*1125 | 626*210*1405 |
| Weight / kg | 58.2 | 104.1 | 150.6 | 196.8 |

ELECTRICAL CHARACTERISTICS

| | | | | |
|---|--|-------|-------|-------|
| Battery Type | LFP | | | |
| Total Energy Capacity / kWh | 5.12 | 10.24 | 15.36 | 20.48 |
| Usable Energy Capacity / kWh | 4.6 | 9.2 | 13.8 | 18.4 |
| Battery Capacity (Nominal) / Ah | 100 | 200 | 300 | 400 |
| Voltage Range (Usable) / V | 48 - 57.6 | | | |
| Nominal Voltage / V | 51.2 | | | |
| Charge Current (Recommended) / A | 75 | | | |
| Discharge Current (Recommended) / A | 100 | | | |
| Max. Continuous Discharge Current / A | 100 | | | |
| Cycle Life @ 25 (Standard Charge and Discharge) | ≥8000 | | | |
| Max. Depth of Discharge | 90% | | | |
| DC Disconnect | Mos / Fuse | | | |
| Monitoring Parameters | System Voltage, System Current, Cell Voltage, Cell Temperature | | | |
| Wall Mounting | ✓ | ✓ | ✗ | ✗ |
| Floor Installation | ✓ | ✓ | ✓ | ✓ |

OPERATING CONDITIONS

| | |
|--|------------------------------|
| Condition | Indoor & Outdoor Conditioned |
| Operating Temperature (Charge / Discharge) | 0 ~ 55°C / -20 ~ 60°C |
| Operating Temperature (Recommended) | 15 ~ 30°C |
| Storage Temperature | -20 ~ 60°C |
| Humidity | 5% ~ 95% |
| Altitude | Max. 2000m |
| Natural Convection | Natural Convection |



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