

# HIGH VOLTAGE RESIDENTIAL SERIES

## THREE-PHASE HYBRID INVERTER AU4/5/6/8/10/12/15KETH



**AFCI**  
Intergrated



Rated <2% harmonics



Support 110% three-phase  
unbalanced output



18A large components  
fully compatible,  
ermatching ov



Power supply can be  
switched automatically  
and switching time  
within 10ms



Supports parallel connection



Off-grid switching



Dry node start generator



Support SUNSPEC protocol

## Technical Specification

|                                   | AU4KETH                                                                                                                                                                                                                                                                                                                                                                                                                        | AU5KETH   | AU6KETH   | AU8KETH           | AU10KETH    | AU12KETH    | AU15KETH    |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|-------------------|-------------|-------------|-------------|
| PV INPUT                          |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           |                   |             |             |             |
| Max.DC Input Power [W]            | 6000                                                                                                                                                                                                                                                                                                                                                                                                                           | 7500      | 9000      | 12000             | 15000       | 18000       | 22500       |
| Max. DC Input Voltage [V]         |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           | 1000              |             |             |             |
| Rated DC Input Voltage [V]        |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           | 620               |             |             |             |
| Start-Up Voltage [V]              |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           | 160               |             |             |             |
| MPPT Voltage Range [V]            |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           | 160~950           |             |             |             |
| Max. Input Current [A]            |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           | 18/36             |             |             |             |
| Max. Short Circuit Current [A]    |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           | 23/46             |             |             |             |
| Number Of MPP Trackers            |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           | 2                 |             |             |             |
| Strings Per MPP Tracker           |                                                                                                                                                                                                                                                                                                                                                                                                                                |           | 1/1       |                   |             |             | 1/2         |
| AC INPUT                          |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           |                   |             |             |             |
| Rated Input Voltage [V]           |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           | 400/380,3L/N/PE   |             |             |             |
| Max. Input Power [W]              | 8000                                                                                                                                                                                                                                                                                                                                                                                                                           | 10000     | 12000     | 16000             | 20000       | 24000       | 30000       |
| Max. Input Current [A]            | 12.2                                                                                                                                                                                                                                                                                                                                                                                                                           | 15.2      | 18.2      | 24.3              | 30.3        | 36.4        | 45.5        |
| AC OUTPUT_ GRID                   |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           |                   |             |             |             |
| Rated Output Power [W]            | 4000                                                                                                                                                                                                                                                                                                                                                                                                                           | 5000      | 6000      | 8000              | 10000       | 12000       | 15000       |
| Max. Output Apparent Power [VA]   | 4400                                                                                                                                                                                                                                                                                                                                                                                                                           | 5500      | 6600      | 8800              | 11000       | 13200       | 16500       |
| Rated Output Voltage [V]          |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           | 400/380,3L/N/PE   |             |             |             |
| Rated Output Frequency [Hz]       |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           | 50/60             |             |             |             |
| Max. Output Current [A]           | 6.7                                                                                                                                                                                                                                                                                                                                                                                                                            | 8.3       | 10        | 13.3              | 16.5        | 20          | 25          |
| THDi                              |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           | <2%               |             |             |             |
| Output Power Factor               |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           | adjustable +/-0.8 |             |             |             |
| AC OUTPUT _ OFF GRID              |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           |                   |             |             |             |
| AC Output (Backup) [V]            |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           | 400/380           |             |             |             |
| Rated Output Frequency [Hz]       |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           | 50/60             |             |             |             |
| Rated Output Power [W]            | 4000                                                                                                                                                                                                                                                                                                                                                                                                                           | 5000      | 6000      | 8000              | 10000       | 12000       | 15000       |
| Max. Output Current [A]           | 6.1                                                                                                                                                                                                                                                                                                                                                                                                                            | 7.6       | 9.1       | 12.1              | 15.2        | 18.2        | 22.7        |
| THDv                              |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           | 3%                |             |             |             |
| Switch Time [ms]                  |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           | <10               |             |             |             |
| BATTERY PARAMETERS                |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           |                   |             |             |             |
| Battery Type                      |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           | Lithium           |             |             |             |
| Voltage Range [V]                 |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           | 160~700           |             |             |             |
| Max. Charge/Discharge Power [W]   | 4000/4000                                                                                                                                                                                                                                                                                                                                                                                                                      | 5000/5000 | 6000/6000 | 8000/8000         | 10000/10000 | 12000/12000 | 15000/15000 |
| Max. Charge/Discharge Current [A] |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           | 30/ 30            |             |             |             |
| EFFICIENCY                        |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           |                   |             |             |             |
| MPPT Efficiency                   |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           | 99.9%             |             |             |             |
| Max. Efficiency                   | 97.9%                                                                                                                                                                                                                                                                                                                                                                                                                          |           | 98%       | 98.2%             |             | 98.4%       |             |
| Euro. Efficiency                  |                                                                                                                                                                                                                                                                                                                                                                                                                                | 96.8%     |           | 97.1%             | 97.2%       |             | 97.4%       |
| PROTECTION                        |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           |                   |             |             |             |
| Integrated                        | Isolation Device On The Input Side,Protection Against Island Operation,DC reverse Polarity Protection,Monitoring The Condition Of Insulation,DC Surge Protector,AC Surge Protector,Residual Current Monitoring (RCMU),AC Overcurrent Protection,AC Short Circuit Protection,Protection Against Island Operation,Protection Against Electric Arc,Remote Control Receiver, Protection Against Charging The Battery From The Grid |           |           |                   |             |             |             |
| OTHER PARAMETERS                  |                                                                                                                                                                                                                                                                                                                                                                                                                                |           |           |                   |             |             |             |
| Operating Temperature Range [°C]  | -25~+60                                                                                                                                                                                                                                                                                                                                                                                                                        |           |           |                   |             |             |             |
| Storage Temperature Range [°C]    | -30~+65                                                                                                                                                                                                                                                                                                                                                                                                                        |           |           |                   |             |             |             |
| Humidity Range                    | 0~95%                                                                                                                                                                                                                                                                                                                                                                                                                          |           |           |                   |             |             |             |
| Operating Altitude [m]            | <3000                                                                                                                                                                                                                                                                                                                                                                                                                          |           |           |                   |             |             |             |
| Ingress Protection                | IP66                                                                                                                                                                                                                                                                                                                                                                                                                           |           |           |                   |             |             |             |
| Topology                          | transformerless                                                                                                                                                                                                                                                                                                                                                                                                                |           |           |                   |             |             |             |
| Parallel Mode                     | Intergrated, max 10pcs                                                                                                                                                                                                                                                                                                                                                                                                         |           |           |                   |             |             |             |
| Communication                     | WiFi / RS485/ CAN (BMS)                                                                                                                                                                                                                                                                                                                                                                                                        |           |           |                   |             |             |             |
| Display                           | LCD                                                                                                                                                                                                                                                                                                                                                                                                                            |           |           |                   |             |             |             |
| Cooling Method                    | Natural                                                                                                                                                                                                                                                                                                                                                                                                                        |           |           |                   |             | Fan         |             |
| Size (W×H×D) [mm]                 | 520*400*230                                                                                                                                                                                                                                                                                                                                                                                                                    |           |           |                   |             |             |             |
| Weight [Kg]                       | 28                                                                                                                                                                                                                                                                                                                                                                                                                             |           |           |                   |             |             |             |
| Safety & EMC                      | EN IEC 61000-6-3:2021EN IEC 61000-6-2:2019EN 61000-3-12:2011EN IEC 61000-3-11:2019;IEC 62109-1:2010,EN 62109-1:2010, IEC 62109-2:2011,EN 62109-2:2011                                                                                                                                                                                                                                                                          |           |           |                   |             |             |             |
| Grid Connection Standard          | EN 50549-1:2019;IEC 62477-1:2022,EN 62477-1.2023;DIN VDE V 0124-100;VDE-AR-N 4105;CEI 021/016, NC RFG 2016-04; PSE 2018-12;CEI 0-21:2022-03                                                                                                                                                                                                                                                                                    |           |           |                   |             |             |             |
| Comapatible Batteries             | AUSTA Lih5/7.5/10/12.5/15Kwh; Pylontech Force H1/H2(-V2) Powercube X1/X2/H1/H2(-V2)                                                                                                                                                                                                                                                                                                                                            |           |           |                   |             |             |             |