



Product Features

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200% Off-grid Output Overload
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SiC Technology
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Support OTA Upgrade
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180mm Ultra-thin
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2 Independent Battery Ports for Mixture Use of Old & New Battery
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200A Grid Input Support Whole Home Loads
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200A Executive Generator Port, Smart Monitoring
- 

4 MPPTs
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AFCI Function

| Model Name                                   | Isuna<br>U5K-PH-US                                                                                                                                                                                                                                       | Isuna<br>U6K-PH-US | Isuna<br>U8K-PH-US | Isuna<br>U10K-PH-US | Isuna<br>U12K-PH-US | Isuna<br>U15K-PH-US | Isuna<br>U20K-PH-US |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|
| Off-grid Output                              |                                                                                                                                                                                                                                                          |                    |                    |                     |                     |                     |                     |
| Norminal Output Power                        | 5kW                                                                                                                                                                                                                                                      | 6kW                | 8kW                | 10kW                | 12kW                | 15kW                | 20kW                |
| Norminal Output Current                      | 21A                                                                                                                                                                                                                                                      | 25A                | 33.5A              | 41.7A               | 50A                 | 62.5A               | 83.5A               |
| Peak Power- Duration                         | 110% for long term, 160% in 10s, 200% in 100ms*                                                                                                                                                                                                          |                    |                    |                     |                     |                     |                     |
| Norminal Frequency                           | 50Hz/60Hz                                                                                                                                                                                                                                                |                    |                    |                     |                     |                     |                     |
| Generator Port AC Input Power                | 48kW                                                                                                                                                                                                                                                     |                    |                    |                     |                     |                     |                     |
| Generator Port AC Input Current              | 200A                                                                                                                                                                                                                                                     |                    |                    |                     |                     |                     |                     |
| Off-grid Switching Time                      | <8ms                                                                                                                                                                                                                                                     |                    |                    |                     |                     |                     |                     |
| On-grid Parameter                            |                                                                                                                                                                                                                                                          |                    |                    |                     |                     |                     |                     |
| Nominal Output Power                         | 5kW                                                                                                                                                                                                                                                      | 6kW                | 8kW                | 10kW                | 12kW                | 15kW                | 20kW                |
| Nominal Output Current                       | 21A                                                                                                                                                                                                                                                      | 25A                | 33.5A              | 41.7A               | 50A                 | 62.5A               | 83.5A               |
| Nominal Grid Voltage                         | 120V/240V/208V (240V/208V Single phase support)                                                                                                                                                                                                          |                    |                    |                     |                     |                     |                     |
| Nominal Input Power from Grid                | 48kW                                                                                                                                                                                                                                                     |                    |                    |                     |                     |                     |                     |
| Norminal Input Current from Grid             | 200A                                                                                                                                                                                                                                                     |                    |                    |                     |                     |                     |                     |
| PV Input                                     |                                                                                                                                                                                                                                                          |                    |                    |                     |                     |                     |                     |
| Max. DC Input Power                          | 10000Wp                                                                                                                                                                                                                                                  | 12000Wp            | 16000Wp            | 20000Wp             | 24000Wp             | 30000Wp             | 30000Wp             |
| Starting Voltage                             | 95V                                                                                                                                                                                                                                                      |                    |                    |                     |                     |                     |                     |
| MPPT Voltage Range                           | 80-500V                                                                                                                                                                                                                                                  |                    |                    |                     |                     |                     |                     |
| Numbers of MPPT                              | 4                                                                                                                                                                                                                                                        |                    |                    |                     |                     |                     |                     |
| Max. Input String Per MPPT                   | 1/1/1/1                                                                                                                                                                                                                                                  | 1/1/1/1            | 1/1/1/1            | 1/1/1/1             | 1/1/1/1             | 2/2/1/1             | 2/2/2/2             |
| Max. DC Input Current                        | 18A                                                                                                                                                                                                                                                      | 18A                | 18A                | 18A                 | 18A                 | 36/36/18/18A        | 36A                 |
| Short-circuit Current                        | 22A                                                                                                                                                                                                                                                      | 22A                | 22A                | 22A                 | 22A                 | 44/44/22/22A        | 44A                 |
| Battery Parameter                            |                                                                                                                                                                                                                                                          |                    |                    |                     |                     |                     |                     |
| Battery Type                                 | Lithium-ion/Lead-acid/Sodium-ion(optional)                                                                                                                                                                                                               |                    |                    |                     |                     |                     |                     |
| Battery Voltage Range                        | 80-480V                                                                                                                                                                                                                                                  |                    |                    |                     |                     |                     |                     |
| Battery Charging/Discharging Current         | 50A*2                                                                                                                                                                                                                                                    |                    |                    |                     |                     |                     |                     |
| Efficiency                                   |                                                                                                                                                                                                                                                          |                    |                    |                     |                     |                     |                     |
| Max. Efficiency                              | 97.6% (TBD)                                                                                                                                                                                                                                              |                    |                    |                     |                     |                     |                     |
| CEC Efficiency                               | 97.2% (TBD)                                                                                                                                                                                                                                              |                    |                    |                     |                     |                     |                     |
| PV Charge to Battery                         | 97.7% (TBD)                                                                                                                                                                                                                                              |                    |                    |                     |                     |                     |                     |
| Max. Battery Charging/Discharging Efficiency | 96.6% (TBD)                                                                                                                                                                                                                                              |                    |                    |                     |                     |                     |                     |
| General Data                                 |                                                                                                                                                                                                                                                          |                    |                    |                     |                     |                     |                     |
| Dimensions (W*H*D)[in/mm]                    | 31.5*18.5*7.1/800*470*180                                                                                                                                                                                                                                |                    |                    |                     |                     |                     |                     |
| Weight[lb/Kg]                                | 105/48 (TBD)                                                                                                                                                                                                                                             |                    |                    |                     |                     |                     |                     |
| Protection Grade                             | IP66/NEMA 4X                                                                                                                                                                                                                                             |                    |                    |                     |                     |                     |                     |
| Cooling Method                               | Intelligent Air Cooling                                                                                                                                                                                                                                  |                    |                    |                     |                     |                     |                     |
| Communication Method                         | LED/WIFI/LAN/4G/Bluetooth/RS485                                                                                                                                                                                                                          |                    |                    |                     |                     |                     |                     |
| No-load Loss                                 | <90W                                                                                                                                                                                                                                                     |                    |                    |                     |                     |                     |                     |
| Operating Temperature Range[°F/°C]           | -13~140/-25~60, >104/40 Derating                                                                                                                                                                                                                         |                    |                    |                     |                     |                     |                     |
| Protection                                   | DC Switch; Ground Fault Detection; PV Quick Shutdown Control; PV Arc Fault Detection; PV Input Lightning Protection; PV Reverse Polarity Protection; Battery Reverse Protection; Surge Protection: DC Type II /AC Type II; AC Grid Input Circuit Breaker |                    |                    |                     |                     |                     |                     |
| Certification                                |                                                                                                                                                                                                                                                          |                    |                    |                     |                     |                     |                     |
| CE/EMC                                       | UL 1741, CSA 22.2 No. 107-01, UL 1998, UL1699B, FCC part15 CLASS B                                                                                                                                                                                       |                    |                    |                     |                     |                     |                     |
| Grid                                         | UL1741 SB, California Rule 21, HECO Rule 14, IEEE 1547, IEEE 1547.1                                                                                                                                                                                      |                    |                    |                     |                     |                     |                     |

\*Overload output must include sufficient PV output,200% output must work with battery voltage under 470V