

Residential Energy Storage Inverter



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Hybrid Inverter



Single Phase LV 3-6 kW

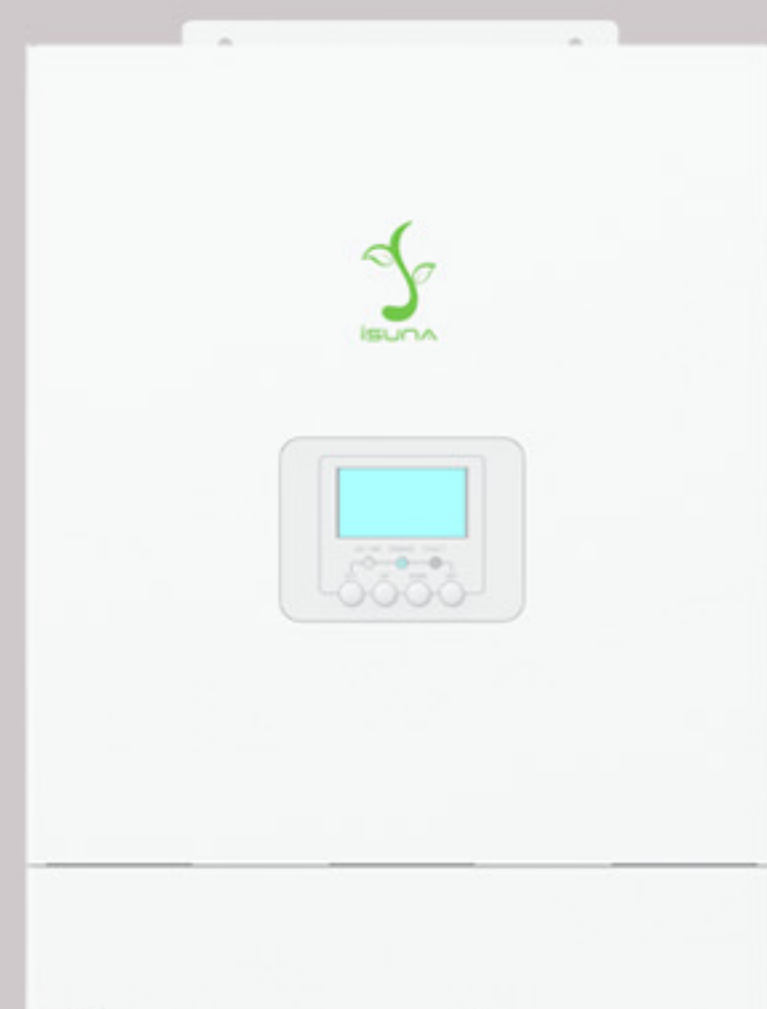


Three Phase HV 10-20 kW



Three Phase LV/HV 5-12 kW

Off-grid Hybrid Inverter



Single Phase LV 3-6 kW



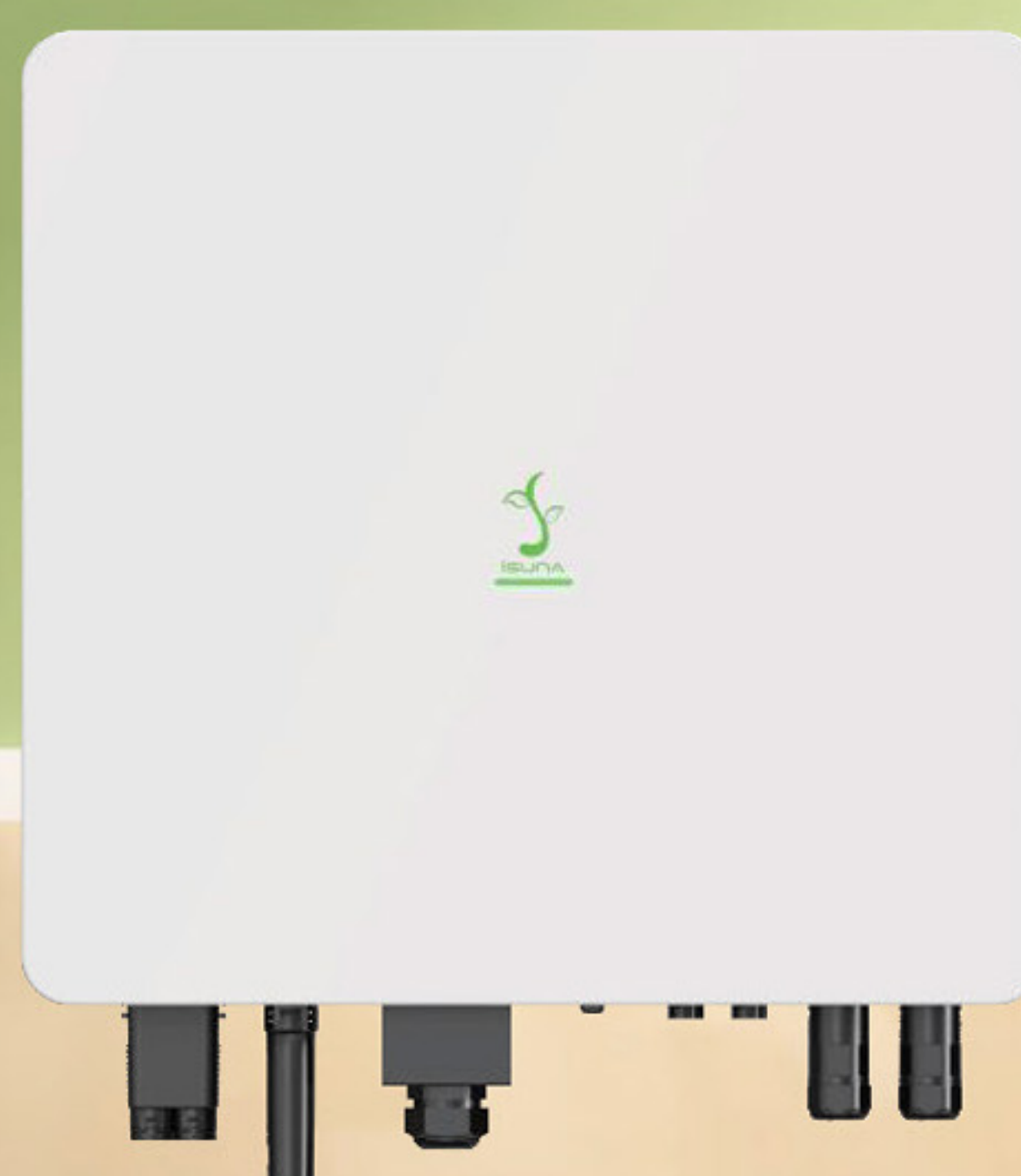
Single Phase LV 8-12 kW



Three Phase HV 10-20 kW

Hybrid | Single Phase | Low Voltage

3/3.6/4/4.6/5/6kW



Product Features



SiC Technology
98% Efficiency



6 Units Parallel



Max. Input Current 18A
1.8 Times PV Array Input



IP65 Protection



<10ms On/Off-grid
Switchover



Natural Cooling
(noise<25dB)

Model Name	Isuna 3000S	Isuna 3600S	Isuna 4000S	Isuna 4600S	Isuna 5000S	Isuna 6000S
Off-grid Output						
Nominal Output Power	3000W	3600W	4000W	4600W	5000W	6000W
Nominal Voltage	220V/230V/240V					
Nominal Frequency	50/60Hz					
Nominal Output Current	13.6A	16.4A	18.2A	20.8A	22.7A	27.2A
Output THDu	<2%					
On-grid Parameter						
Nominal Output Power	3000W	3600W	4000W	4600W	5000W	6000W
Max. Output Current	13.6A	16.4A	18.2A	20.8A	22.7A	27.2A
Nominal Grid Voltage	220V/230V/240V					
Max. Input Current from Grid	16.4A	22.7A		27.2A		
Grid Voltage Range	184-276V					
Frequency Range	45-65Hz					
PV Input						
Max. Input Power	5400Wp	7200Wp		9000Wp		10800Wp
Starting Voltage	95V					
Max. Input Voltage	600V					
MPPT Voltage Range	80-550V					
Full Load MPPT Voltage Range	350-500V					
Number of MPPT	2					
Max. Input String Per MPPT	1					
Nominal Input Voltage	360V					
Max. Input Current	18A/18A					
Battery Parameter						
Battery Type	Lithium-ion					
Nominal Battery Voltage	51.2V					
Battery Voltage Range	42-58V					
Max. Charging Voltage	≤60V					
Max. Continuous Charging/Discharging Current	75A	85A		100A		
Efficiency						
Max. Efficiency	97.5%		97.8%		98.0%	
European Efficiency	97.2%		97.3%		97.5%	
Max. Battery Charging/Discharging Efficiency	95.2%					
General Data						
Size(W*H*D)	500mm*470mm*180mm					
Weight	21kg					
Noise	<25dB(A)					
Operating Temperature Range	-25℃~~+60℃					
Cooling Method	Natural Cooling					
Ingress Protection Grade	IP65					
Mornitoring	LED/APP/WIFI/4G/Bluetooth					
Communication Port	RS485/CAN/DRED/Dry contact/Parallel port					
Protection	DC Switch;PV Insulation Resistance Detection;residual current monitoring;Anti-islanding protection;AC Short circuit protection;AC Overvoltage and overload protection;AC Overvoltage protection:LEVEL III; PV&Battery:LEVEL II;Surge protection;Lightning protection;Reverse polarity protection(PV&Battery)					
Certification						
CE_LVD	IEC 62109-1, IEC 62109-2, EN 62109-1, EN 62109-2					
CE EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4					
Grid	VDE-AR-N 4105, C10-11,G98/G99, CEI 0-21, EN50549,NRS 097-2-1, R25,UNE 217001, UNE 217002,NTS 2.1,AS 4777.2					

Hybrid | Three Phase | High Voltage

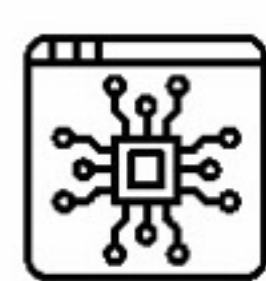
10/12/15/18/20kW



Product Features



Support 100% Three Phase Unbalance



**SiC Technology
98.2% Efficiency**



15 Units Parallel



Supports 130-200% Instant Overload (60s)



2 Independent Battery Ports for Mixture Use of Old & New Battery



1.5 Times DC/AC Ratio



Max. Grid Current Ratio 1:1.8



Support Altitude 5000m (>3000m Derating)

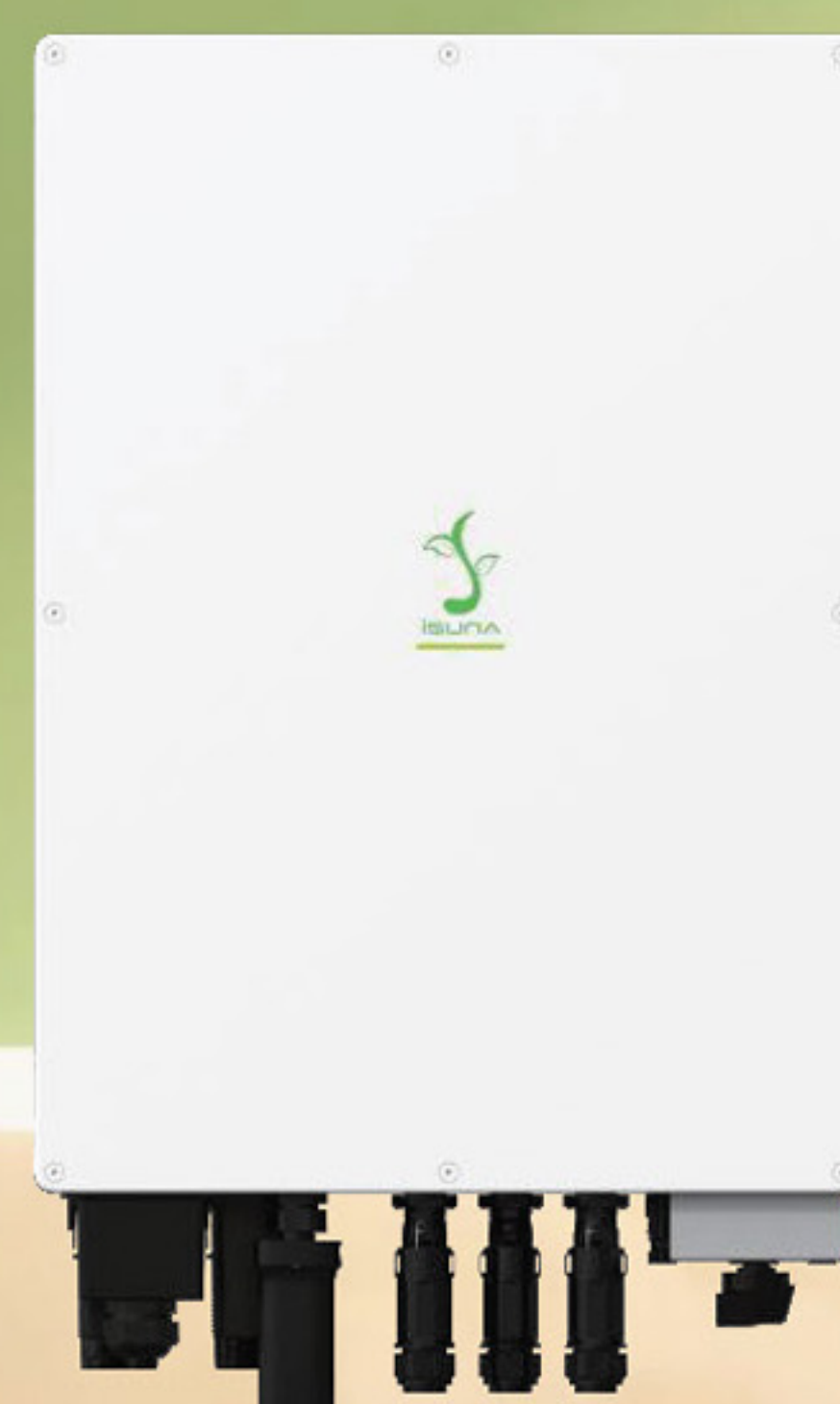


Support AC Couple

Model Name	Isuna 10000T	Isuna 12000T	Isuna 15000T	Isuna 18000T	Isuna 20000T
Off-grid Output					
Nominal Output Power	10kW	12kW	15kW	18kW	20kW
Nominal Voltage	3/N/PE, 220/380Vac, 230/400Vac				
Nominal Frequency	50/60Hz				
Output THDu	<3%				
Nominal Output Current	15A	18A	22.5A	27A	30A
On-grid Parameter					
Nominal Output Power	10kW	12kW	15kW	18kW	20kW
Max. Output Power	11kVA	13.2kVA	16.5kVA	19.8kVA	22kVA
Max. Input Power from Grid	20kVA	24kVA	30kVA	36kVA	40kVA
Max. Input Current from Grid	29A	35A	44A	52A	58A
Max. Output Current	16A	20A	24A	29A	32A
Nominal Grid Voltage	3/N/PE, 220/380V, 230/400V, 240/415V				
Grid Voltage Range	184-276V/320-480V				
PV Input					
Max. Input Power	15000Wp	18000Wp	22500Wp	27000Wp	30000Wp
Max. Input Voltage	1000V				
Number of MPPTs	2				
Max. Input Strings Per MPPT	2				
MPPT Voltage Range	180-960V				
Full Load MPPT Voltage Range	250-850V	290-850V	350-850V	410-850V	450-850V
Nominal Input Voltage	600V				
Starting Voltage	200V				
Max. Input Current	25A/25A				
Short-Circuit Current	30A/30A				
Battery Parameter					
Battery Type	Lithium-ion				
Number of Battery Input	2				
Battery Voltage Range	180-800V				
Full Load Battery Voltage Range	210-800V	250-800V	300-800V	360-800V	400-800V
Peak Charging/Discharging Current & Duration	35A/35A(60s)				
Max. Charging/Discharging Current	25A+25A				
Efficiency					
Max. Efficiency	98.20%				
European Efficiency	97.70%				
Max. Battery Charging/Discharging Efficiency	97.80%				
General Data					
Size(W*H*D)	573mm*509mm*219mm				
Weight	35kg				
Noise	<45db(A)				
Operating Temperature Range	-25℃~+60℃				
Cooling Method	Air Cooling				
Ingress Protection Grade	IP65				
Communication Port	RS485/CAN/DRED/Dry contact/Parallel port				
Monitoring	LED/APP/WIFI/4G/Bluetooth				
Protection	DC Switch, AC Overvoltage Protection, AC Overcurrent Protection, AC Short Circuit Protection, Anti-islanding Protection, Residual Current Monitoring, PV Insulation Resistance Detection, Surge Protection:LEVEL II , Reverse Polarity Protection(PV&Battery);Lightning Protection				
Certification					
CE_LVD	IEC 62109-1, IEC 62109-2, EN 62109-1, EN 62109-2				
CE EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4				
Grid	VDE-AR-N 4105, C10-11, G98/G99, CEI 0-21, EN50549, NRS 097-2-1, AS 4777.2, R25,UNE217001,UNE217002,NTS 2.1				

Hybrid | Three Phase | Low Voltage

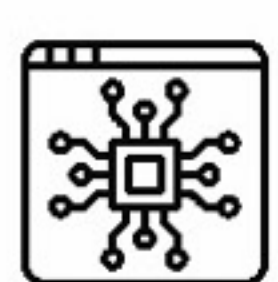
5/8/10/12kW



Product Features



200% Off-grid Output Overload



SiC Technology



Support OTA Upgrade



165mm Ultra-thin



2 Independent Battery Ports for Mixture Use of Old & New Battery



Max. PV Input Current 20A



Independent Generator Port Smart Monitoring



3 MPPTs

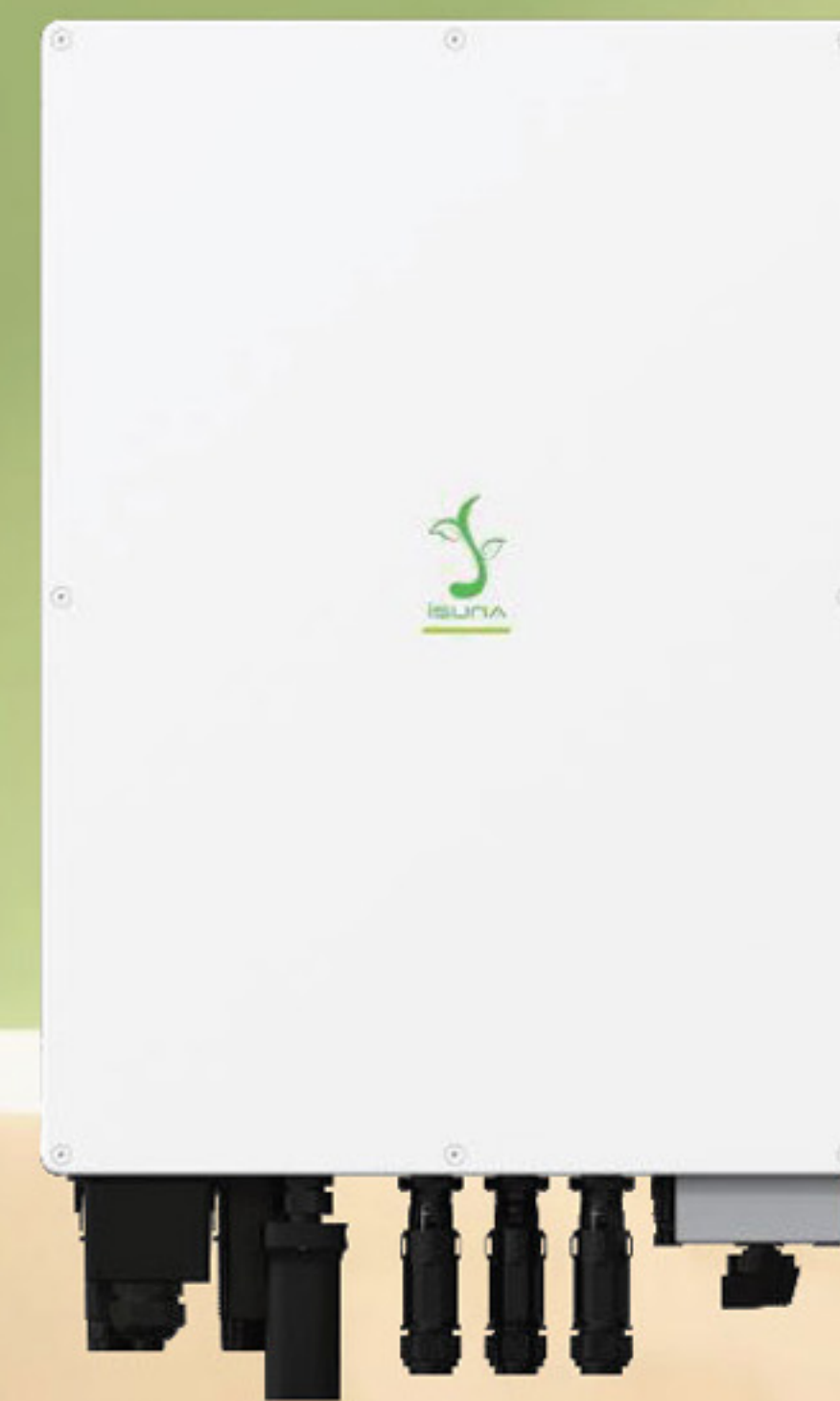


AFCI/PID Function

Model Name	Isuna D5K-TL	Isuna D8K-TL	Isuna D10K-TL	Isuna D12K-TL
Off-grid Output				
Nominal Output Power	5kW	8kW	10kW	12kW
Max. Output Current	15A	24A	30A	30A
Peak Power & Duration	10kW-10s	16kW-10s	20kW-10s	20kW-10s
Nominal Output Voltage	3/N/PE, 220/380Vac, 230/400Vac			
Generator Port	Support			
On-grid Parameter				
Nominal Output Power	5kW	8kW	10kW	12kW
Max. Output Power	6kW	9.6kW	12kW	14.4kW
Max. Input Power from Grid	10kW	16kW	20kW	24kW
Max. Input Current from Grid	15A	24A	30A	36.4A
Max. Output Current	9A	15A	18A	22A
Nominal Voltage	3/N/PE, 220/380Vac, 230/400Vac			
Grid Voltage Range	184-276V(P2N)			
PV Input				
Max. Input Power	7500Wp	12000Wp	1500Wp	18000Wp
Max. Input Voltage	1000V			
Number of MPPT	3			
Max. Input String Per MPPT	1/1/1			
MPPT Voltage Range	160-960V			
Nominal Voltage	600V			
Starting Voltage	160V			
Max. Input Current	20A/20A/20A			
Short-Circuit Current	24A/24A/24A			
Battery Parameter				
Battery Type	Lithium-ion			
Number of Battery Input	2			
Battery Voltage Range	33-60V(TBD)			
Max. Charging/Discharging Current	52.5A/52.5A	85A/85A	105A/105A	125A/125A
Peak Charging/Discharging Current&Duration	55A/55A(60s)	90A/90A(60s)	110A/110A(60s)	130A/130A(60s)
Communication Port	RS485/CAN			
Efficiency				
Max. Efficiency	98.20%(TBD)			
European Efficiency	97.70%(TBD)			
Max. Battery Charging/Discharing Efficiency	96.0%(TBD)			
General Data				
Size(W*H*D)	465mm*650mm*165mm			
Weight	39kg			
Noise	<45db(A)			
Operating Temperature	-25℃~+60℃(>45℃ Derating)			
Cooling Method	Smart Cooling			
Protection Grade	IP65/IP66			
Topology	Isolation			
Monitoring	WIFI/4G/Bluetooth/RS485			
Protection	DC Switch;Reverse Polarity Protection(BAT);AC Overvoltage/Overcurrent/Short Circuit Protection;Anti-islanding Protection;Residual Current Monitoring;Insulation Resistance Detection;Surge Protection:DC Type II / AC Type III;AFCI(Optional);PID(Optional)			
Certification				
CE-LVD	IEC62109-1&2, IEC62040-1			
CE-EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4 EN 61000-4-16, EN 61000-4-18,EN 61000-4-29			
Grid	VDE-AR-N 4105;VDE 0126-1-1 EN 50549-1;G98,G100; CEI 0-21;AS/NZS4777.2 NRS 097-2-1;			

Hybrid | Three Phase | High Voltage

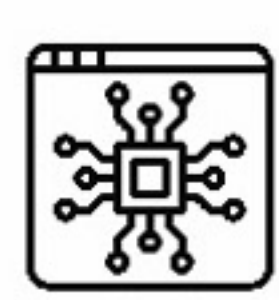
5/8/10/12kW



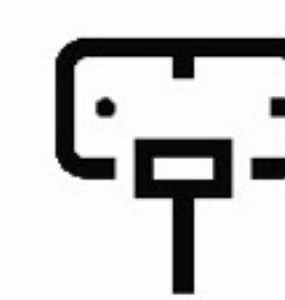
Product Features



200% Off-grid Output Overload



SiC Technology



Support OTA Upgrade



165mm Ultra-thin



2 Independent Battery Ports for Mixture Use of Old & New Battery



Max. PV Input Current 20A



Independent Generator Port Smart Monitoring



3 MPPTs

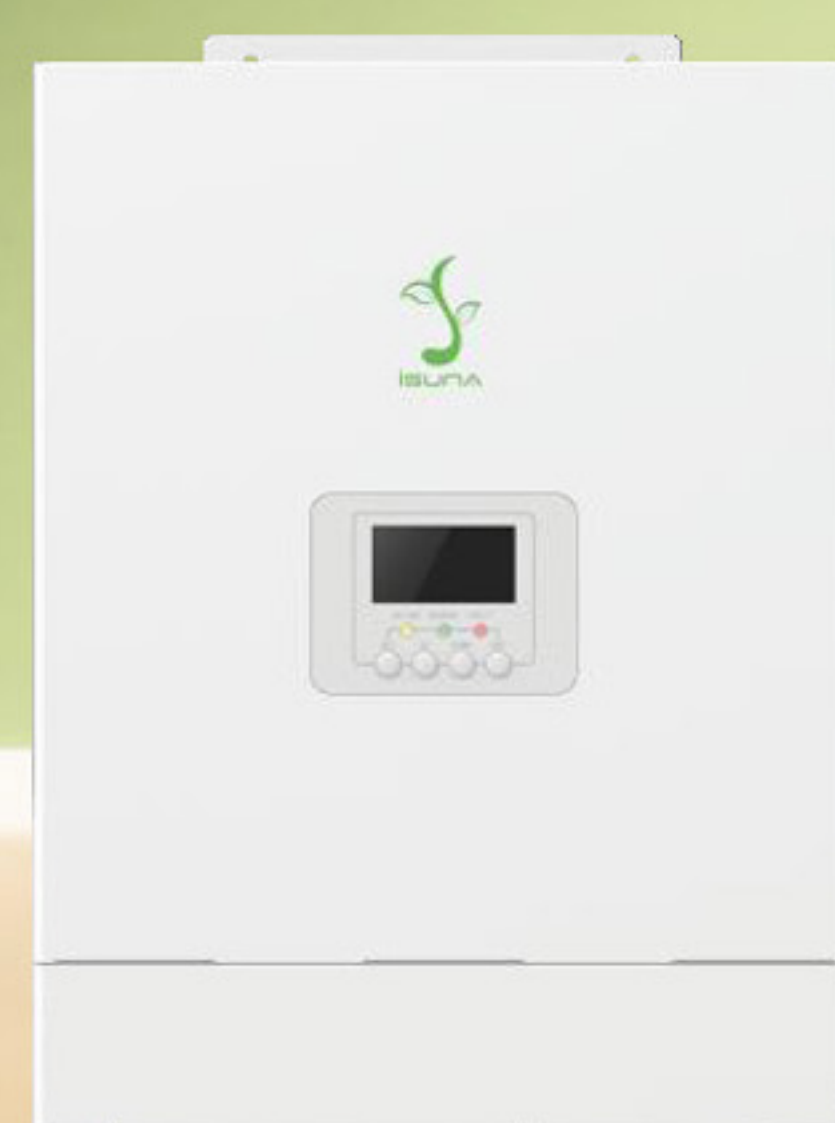


AFCI/PID Function

Model Name	Isuna D5K-TH	Isuna D8K-TH	Isuna D10K-TH	Isuna D12K-TH
Off-grid Output				
Nominal Output Power	5kW	8kW	10kW	12kW
Max. Output Current	15A	24A	30A	30A
Peak Power & Duration	10kW-10s	16kW-10s	20kW-10s	20kW-10s
Nominal Output Voltage	3/N/PE, 220/380Vac, 230/400Vac			
Generator Port	Support			
On-grid Parameter				
Nominal Output Power	5kW	8kW	10kW	12kW
Max. Output Power	6kW	9.6kW	12kW	14.4kW
Max. Input Power from Grid	10kW	16kW	20kW	24kW
Max. Input Current from Grid	15A	24A	30A	36.4A
Max. Output Current	9A	15A	18A	22A
Nominal Voltage	3/N/PE, 220/380Vac, 230/400Vac			
Grid Voltage Range	184-276V(P2N)			
PV Input				
Max. Input Power	7500Wp	12000Wp	1500Wp	18000Wp
Max. Input Voltage	1000V			
Number of MPPT	3			
Max. Input String Per MPPT	1/1/1			
MPPT Voltage Range	160-960V			
Nominal Voltage	600V			
Starting Voltage	160V			
Max. Input Current	20A/20A/20A			
Short-Circuit Current	24A/24A/24A			
Battery Parameter				
Battery Type	Lithium-ion			
Number of Battery Input	2			
Battery Voltage Range	130-800V			
Max. Charging/Discharging Current	25A/25A	25A/25A	25A/25A	25A/25A
Peak Charging/Discharging Current&Duration	35A/35A(60s)	35A/35A(60s)	35A/35A(60s)	35A/35A(60s)
Communication Port	RS485/CAN			
Efficiency				
Max. Efficiency	98.20%(TBD)			
European Efficiency	97.70%(TBD)			
Max. Battery Charging/Discharing Efficiency	96.0%(TBD)			
General Data				
Size(W*H*D)	465mm*560mm*165mm			
Weight	39kg			
Noise	<45db(A)			
Operating Temperature	-25℃~+60℃(>45℃ Derating)			
Cooling Method	Smart Cooling			
Protection Grade	IP65/IP66			
Topology	Isolation			
Monitoring	WIFI/4G/Bluetooth/RS485			
Protection	DC Switch;Reverse Polarity Protection(BAT);AC Overvoltage/Overcurrent/Short Circuit Protection;Anti-islanding Protection;Residual Current Monitoring;Insulation Resistance Detection;Surge Protection:DC Type II / AC Type III;AFCI(Optional);PID(Optional)			
Certification				
CE-LVD	IEC62109-1&2, IEC62040-1			
CE-EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4 EN 61000-4-16, EN 61000-4-18,EN 61000-4-29			
Grid	VDE-AR-N 4105;VDE 0126-1-1 EN 50549-1;G98,G100; CEI 0-21;AS/NZS4777.2 NRS 097-2-1;			

Off-grid | Single Phase | Low Voltage

3/4/5/6/8/10/12kW



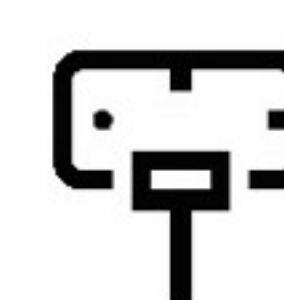
Product Features



2 Times Grid Input Power



**Max. Efficiency 97.5%
3-5% Higher**



6 Units Parallel



**Compatible with
Lead-acid/Lithium
Batteries**



**1.8Times DC/AC Ratio
18A PV Current**



**5 Years' Standard
Warranty**



**≤50°C Ambient
Temperature without
Derating**



**APP Monitoring
Support OTA Upgrade**



2-4 MPPTs

Model Name	Isuna 3000SO	Isuna 4000SO	Isuna 5000SO	Isuna 6000SO	Isuna 8000SO	Isuna 10000SO	Isuna 12000SO
Off-grid Output							
Max. Output Power	3kVA	4kVA	5kVA	6kVA	8kVA	10kVA	12kVA
Nominal Output Voltage	220Va						
Output Voltage Range	220Vac±10%						
Nominal Output Current	13.6A	18.2A	22.7A	27.2A	36.4A	45.4A	54.4A
Peak Power & Duration	4.5kVA(10s)	6kVA(10s)	8kVA(10s)	8kVA(10s)	12kVA(10s)	16kVA(10s)	16kVA(10s)
Grid Parameter							
Max. AC Input Current	60A				100A		
Norminal AC Voltage	220Vac						
AC Voltage Range	176-264V						
Nominal AC Frequency	50/60Hz						
THDi	<3%						
Battery Parameter							
Battery Type	Lithium-ion/Lead-Acid						
Nominal Battery Voltage	48V/51.2V						
Battery Voltage Range	42-58V						
Max.Charging Voltage	58V						
Charging Curve	3 stages						
Max. Charging Current	60A	80A	100A		200A		
Max. Discharging Current	60A	80A	100A	120A	200A		
PV Input							
Max. DC Input Power	6600W	7000W	8000W	9000W	14000W	16000W	18000W
Starting Voltage	120V						
Input Voltage Range	100-500V						
MPPT Voltage Range	100-500V						
Full Load MPPT Voltage Range	350-450V				320-500V		
Numbers of MPPT	2				4		
Max. Input String Per MPPT	1						
Nominal Input Voltage	360V						
Max. DC Input Current	18A/18A				18A/18A		
Max. Short-circuit Current	22A/22A						
Efficiency							
European Efficiency	97.2%		97.3%		97.2%	97.3%	
Max.Efficiency	97.4%		97.5%		97.4%	97.5%	
Max. Battery Charging/Discharging Efficiency	94.00%						
General Data							
Size(W*H*D)	360mm*470mm*114mm				480mm*500mm*200mm		
Weight	14kg				29kg		
Noise	< 45dB(A)				< 45dB(A)		
Operating Temperature Range	-25℃~60℃ (> 45℃ power-down)						
Cooling Method	Air cooling						
Parallel Units	6				1		
Warranty	5 years						
Ingress Protection Grade	IP20						
Monitoring	LCD/LED/APP/WIFI/Bluetooth						
Communication Port	CAN+RS485						
Protection	Reverse Polarity Protection;Over Current/Voltage Protection; AC Short-circuit Protection;PV Ground Fault Monitoring;Over Temperature Protection						
Certification							
CE-LVD	EN 62109-2:2011 EN 62109-1:2010						
CE-EMC	EN61000-6-1, EN61000-6-2						



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