## **GSLENERGY**

## POWER Inverters GSL-H-12KLV-US



www.gsl-energy.com

## **GSL ENERGY**

- +0755-84515360
- sales@gsl-energy.com
- (k) www.gsl-energy.com

## Hybrid Series High Performace Inverter

GSL ENERGY has gone Above and Beyond to bring you the best technologies available to meet the ever changing demands of the renewable energy market. The New Hybrid Series High Performance Inverter delivers exceptional performance and unsurpassed quality in a All-In-One Solution for all your Energy needs.

#### Model GSL-H-12KLV-US

AC 220V Single Phase, 120/240V Split Phase, 120/208V Three Phase,

12kW EPS Output

10 Units Paralleling

**AC Coupling Function** 

3 MPPT Input for max input 18kW

Separated Generator Input

200A AC Passthrough Current

Peak Shaving Function

5in Color LCD, Touch Screen

10 Years Long Term Warranty



#### Applications

Solar Renewable Energy

**Back-Up Energy Systems** 

Home, Office and Trailer

**Multiple Protection Management System** 

Other electric applications with high energy requirements



Villa





Nomadic

area

Communication base station

ase station







Farm

Household n

Field power supply

#### Hybrid GSL-H-12KLV-US High Performance Inverter



#### **UNPARALLEL SAFETY**

The GSL Hybrid Series Inverter includes a complete intelligent and comprehensive Management Energy System for multiple connections with abundant safety features such as PV Arc Faut Detection, PV Input Lightning Protection, Output Over Current Protection among many other safety protection protocols.



#### LONG LIFE DESIGN

The GSL Hybrid Series has been developed to withstand the harsh conditions of today's weather and temperatures with an IP65 protection rating making the unit the best of its kind. Our quality assurance is backed up by a 5 year warranty.



#### UNSURPASSED PERFORMANCE

Our Hybrid Series Inverter is designed to excel in every application. With up to 190A continuous discharge current, rest assured the GSL Hybrid Inverter will deliver the energy you need when you need every time.



#### **UN MATCHED RELIABILITY**

Every GSL Energy product is born from meticulous research and development and is then subjected to rigorous testing. The Nexen Hybrid Series is no exception, offering you total versatility without sacrificing maximum performance and reliability.



#### EASY INSTALLATION

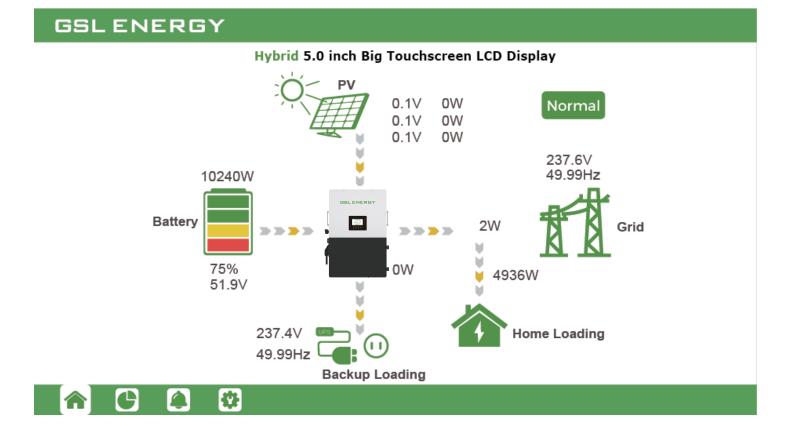
The GSL Hybrid Series Inverter can work as a stand-alone unit or it can be mounted as a wall accessory for that sleek compact design that not only saves you space, but will definitely improve the looks of you renewable or backup system.

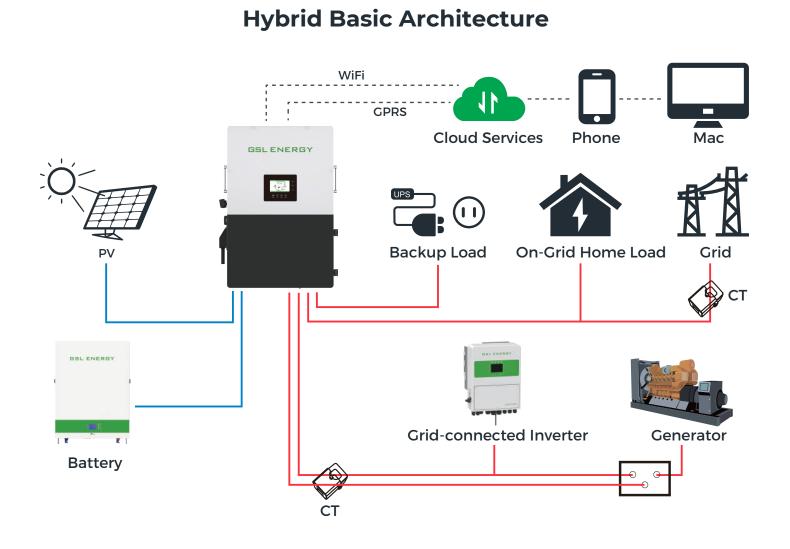
#### **Hybrid Key Features**

- 120V/240V Split phase Pure Sine Wave
- Self-consumption and feed-in to the grid.
- Auto restart while AC is recovering.
- Programmable supply priority for battery or grid.
- Multiple operation modes:On grid,off grid and UPS.
- Configurable battery charging current/voltage settings
- Configurable AC/Solar/Generator Charger Settings
- WIFI monitor Support Monitor System and Cloud Connect

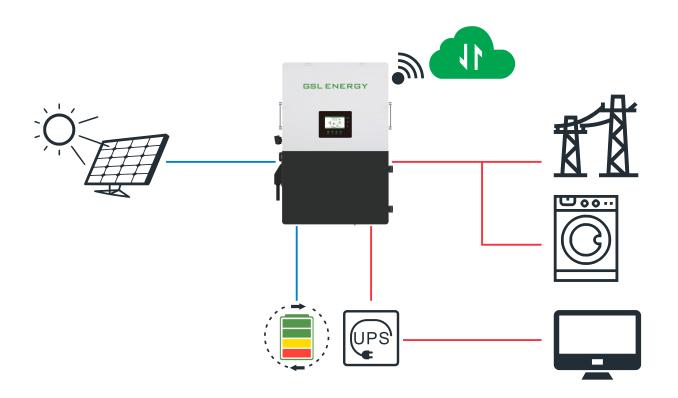
- Voltage Compatibility
- Multiple Stages Protection
- Smart Battery Charger Design
- Limit Prevent Function Overflow
- Bulit-In 3 strings of MPP trackers
- Smart MPPT Charging System
- Time of use function.
- Smart Load Function.

#### Hybrid 5.0 inch Big Touchscreen LCD Display

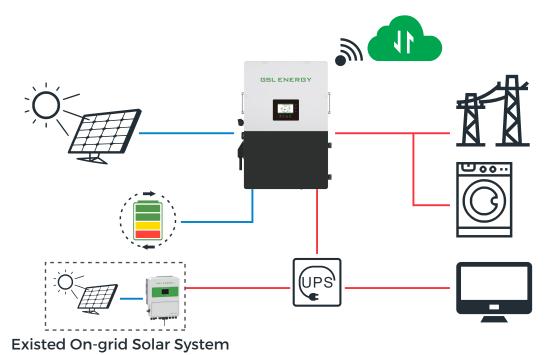




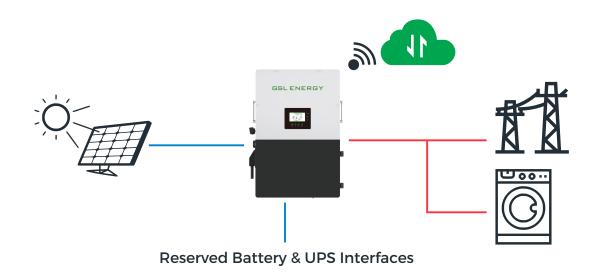
#### 1. Solar and battery storage system



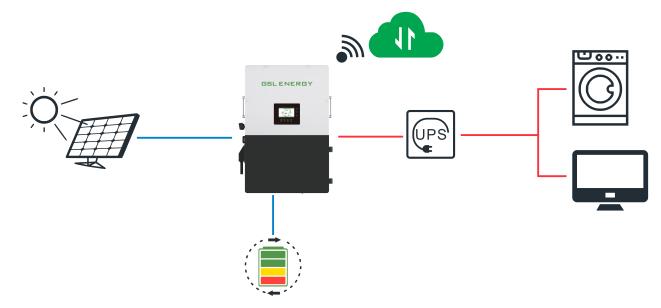
#### 2. AC Coupling with existed solar system



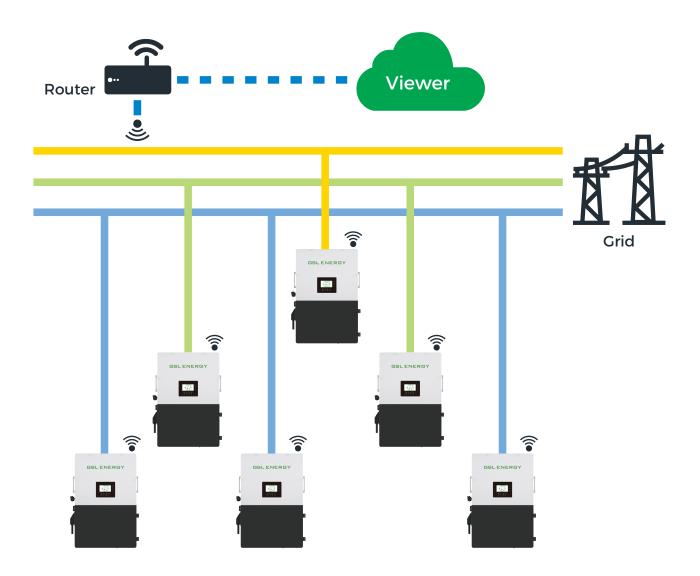
#### 3. On-grid solar system without battery (Support EPS even without battery)



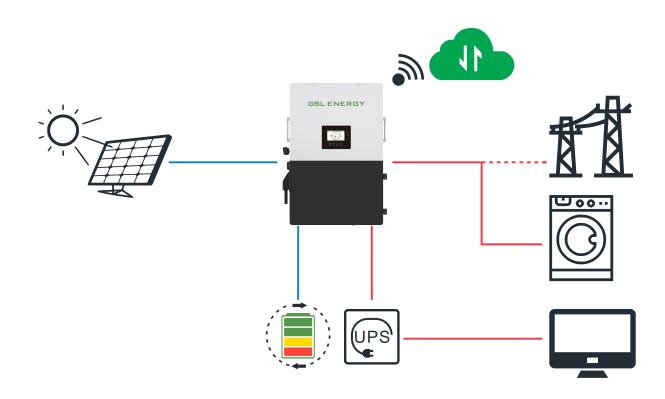
#### 4. Off-grid and back-up applications



5. Single and three phase paralleling system



#### 6. Energy storage system with peak shaving Function



### Specification

Battery Parameters     CSL-H12KLV-US       Compatible Battery Yopiage     484       Normal Battery Yopiage     487       Battery Vulage Range     487       Battery Vulage Range     250/250.4       Maximu Charging/Dicharging Current     250/250.4       Input DC (PV Side)     250/250.4       Max. DC Tingut Rower for Single MPPT     1000/000/7000W       Max. DC Tingut Rower for Single MPPT     1000/000       Of Tingut Rower for Single MPPT     230-500 V       Max. DC Tingut Nulsge Range     230-500 V       Mominal DC Tingut Vulsge Range     230-500 V       Mominal DC Tingut Nulsge Range     230-500 V       Mominal AC Tingut Romer for Nulsge Range     230-500 V       Mominal AC Tingut Rome for Nulsge Range     230-500 V       Mominal AC Tingut Rome for Nulsge Range     230-500 V       Mominal AC Tingut Rome for Nulsge Range     230-500 V       Normal AC Tongut Rome for Nulsge Range     230-500 V       Mominal AC Tingut Rome for Nulsge Range     230/200 V Spill Places,       Diff Provency     230/200 V Spill Places,       UPS Output With Battery     230/200 V Spill Places,       UPS Normal Oxiput Frequency </th <th>speenreation</th> <th></th>	speenreation	
Name48VBattery Voltage Range48VBattery Voltage Range Curent2000/2000/Maxmun Charging/Discharging Power2000/2000/Input DC (PV Side)2000/2000/Max DC Input Rover for Single RMPT1000-000/Do Input Rover for Single RMPT1000-000/Do Input Rover for Single RMPT2000/2000/Comput Rover for Single RMPT2000/2000/Nom DC Input Voltage Range200-000/Nom DC Input Voltage Range200-000/Nom DC Input Voltage Range200-000/Rover RMPT Voltage Range2000/Nom DC Input Voltage2000/VE Max. Output Draver2000/VE Max. Output Draver200/VE Max. Output Draver200/	Battery Parameters	CSL-H-12KLV-US
Bettery Voltage Range44V-60VMaximu Charging/Obscharging Surents250V/250AMaximu Charging/Obscharging Sweret12000W/700W/70W/7	Compatible Battery Type	Lead-acid/Lithium
Nation Charging/Discharging Corrent250A/250AMaximu Charging/Discharging Pover12000W/7000W/7000WName Charging/Discharging Pover12000W/7000W/7000WName Di Lingut Edwar for Single MMPT12000W/7000W/7000WName Di Lingut Votage Range100×-007VNormial DC Input Votage Range320×50WNormial DC Input Votage Range320×50WOutput/Discharge MPMT)320/15A/15AOutput/Discharge MPMT)320/17NOutput/Discharge MPMT)320/17NOutput/Discharge MPMT)320/27WOutput/Discharge MPMT)320/27WNormial AC Votage Range120/07WNormial AC Votage Range120/07WNormial AC Votage300×-27WVir Show Control AC Corrent300/27WNormial AC Prequency120/07WUPS Output/Discharge120/27W Split Phase,UPS Normial Output Forquency50h/26HzUPS Normial Output Forquency50h/26HzUPS Normial Output Forquency50h/26HzUPS Normial Output Forquency50h/26HzPask Power IS Switching Time50h/26HzUPS Normial Output Forquency50h/26HzPask Power IS Switching Time50h/26HzPask Power IS Switching Time99.9%Name IS Switching Time50h/26HzPortection45hzPortection99.9%Name IS Switching Time50h/26HzPortection99.9%Portection99.9%Portection99.9%Portection95%Portection95% <td< td=""><td>Nominal Battery Voltage</td><td>48V</td></td<>	Nominal Battery Voltage	48V
Namue Charging/Discharging Power12000WImput DC (PV Side)12000W/7000WNax, DC Inch Power for Single MPT18000WDC Input Voltage Range000V-000WNax, DC Inch Lower for Single MPT380VDC Input Voltage Range380VNax, DC Input Coverat230-500VNax, DC Input Coverat2000WNominal AC Fordal21000WNominal AC Fordal21000WNominal AC Fordal21000WNominal AC Fordal21000WOperating Voltage Range1800-270VOperating Voltage Range1800-270VOperating Voltage Range1800-270VNax, Continuous AC Corrent500-920WNominal AC Fordal21000WVers Woninal Output Voltage500-920WUPS Nominal Output Voltage500-920WUPS Nominal Output Voltage500-920WUPS Nominal Output Voltage500-920WNomer & Switching Time500-920WUPS Nominal Output Voltage500-920WNomer & Switching Time500-920WNomer & Switching Time <t< td=""><td>Battery Voltage Range</td><td>40V~60V</td></t<>	Battery Voltage Range	40V~60V
Input DC (PV Side)       Max. DC Input Power for Single MPPT       Max. PV Input Power       Nam. PV Input Power       Dinput Voltage Range       1000600V       Norminal DC Input Voltage Range       110 Power MPC Voltage Range       230-500V       Nam. DC Input Voltage Range       110 Power MPC Voltage Range       25X/15X/15A       MPPT Number/(Strings per MPPT)       Output/Inout AC (CrId)       Norminal Power       Norminal Power       Norminal AC Voltage Range       120/200V Three Phase       120/200V Th	Maximun Charging/Discharging Current	250A/250A
Max. Co. Liquit Power for Single MPPT     12000W/7000W/7000W       Max. PV Input Power     18000W       DC Input Voltage Range     100600V       Nominal DC Input Voltage Range     220500V       Max. DC Input Current     250/15A/15A       MPPT Inviber/(Strings per MPPT)     3(7/1/1)       Output/Input AC (Crid)     7       Nominal AC Voltage     12000W       VBS AC Current     504/240V, 504/240V       VBS Autor AC Prever     120/200W       UPS Nominal Output Voltage     120/200W       UPS Nominal Output Voltage     120/200W       UPS Nominal Output Prequency     501/2601/2       UPS Nominal Output Frequency     501/2601/2       UPS Nominal Output Current     504/240V, 57.74/208V       Power & Switching Time     -2000W       UPS Nominal Output Current     504/240V, 57.74/208V       Power & Switching Time     16W/ Strings End Power       UPS Nominal Output Current     90.9%	Maximun Charging/Discharging Power	12000W
Max. PV Input Power18000WDC Input Voltage Range100V-600VFull Power MPVT Voltage Range230-500VNax. DC Input Current230/15A/15AMPT Number (Kinnig per MPT)21/1/1)Output/Inout AC (Grid)10000WNominal D Power20000WNominal AC Voltage200-200VOperating Voltage Range200/200VOperating Voltage Range200/200VUPS Output/In Battery200/200VUPS Nax. Output Power200/200VUPS Nax. Output Power200/200VUPS Nax. Output Current504/240V, 50/42/200VUPS Nax. Output Current504/240V, 50/42/200VUPS Nax. Output Current504/240V, 50/42/200VPake Power & Switching Time20/240V, 50/42/200VUPS Nax. Output Current504/240V, 50/42/200VPake Power & Switching Time95%Editioncy95%U Efficiency95%PotectionYESPotectionYESPotectionYESPotectionYESPotectionYESPotectionYESPotectionYESPotectionYESPotectionYESPotectionYESPotection	Input DC (PV Side)	
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Neminal DC Input Voltage360VFull Rever MPT Voltage Range220-500VNexz. DC Input Current220-500VNember (Strings per NPPT)3(2/1/1)Output/Inout AC Colid)12000WNominal AC VoltageAC 2700 Vising' Phase, 120/240V Split Phase, 120/200V Three PhaseOperating Voltage Range600-270VOperating Voltage Range50A82-240V, 50A82200VOperating Voltage Range50A82-40V, 50A82200VOperating Voltage Range12000WMax. Coltput-with Battery12000WUPS Nominal Output Voltage120/240V Split Phase, 120/240V Split Phase, 120/260V Three PhaseUPS Nominal Output Voltage120/200V Split Phase, 120/260V	Max. PV Input Power	18000W
Full Power MPT Voltage Range230-500VMax. DC Irput Current254/15/15/AMax DC Irput Current254/15/15/ANominal Power12000WNominal AC Voltage12000WNominal AC Voltage120/208V Three PhaseDerating Voltage Range180V-270VNasc. Continuous AC Current50Ag240V, 50Ag208VNominal AC Prequency50Ht/60HtUPS Max. Dight Power120/00WUPS Nominal Output Frequency120/00WUPS Nominal Output Frequency120/00WUPS Nominal Output Frequency120/200V Three PhaseUPS Nominal Output Frequency90.9%Next. Efficiency90.9%Next. Efficiency90.9%Next. Efficiency95.%Potection12000WPotection95.%Or Soutput Efficiency95.%Derating Efficiency95.%Statery Dicknaping Efficiency95.%Soutput Efficiency95.%Derating Efficiency	DC Input Voltage Range	100V~600V
Nax. DC Input Current25/(15//15ANDPT Mumber/(Strings per MPPT)3(2/1/1)Output/Inout AC (Orid)12000WNormal Power12000WNormal AC Voltage120/200W Three Phase, 120/200W Three Phase, 120/200W Three PhaseOperating Voltage Range180V~270VMax. Continuous AC Current50A@240V, 50A@208VNorminal AC Voltage12000WUPS Output-with Battery12000WUPS Norminal Output Voltage120/240V Split Phase, 120/240V Split Phase, 120/240V Split Phase, 120/240V Split Phase, 120/240V Split Phase, 220/200V Three PhaseUPS Norminal Output Voltage120/240V Split Phase, 120/240V Split Phase, 220/200V Three PhaseUPS Norminal Output Voltage120/240V Split Phase, 120/240V Split Phase, 220/200V Three PhaseUPS Norminal Output Current50A@240V, 57.7A@208VPeak Power & Switching Time50A@240V, 57.7A@208VPeak Power & Switching Time144W 10minutes / 26kW 500ms ~20msUPS Infeiency99.9%Max. Efficiency99.9%Potection120ProtectionYESProtectionYESCollege1265Arthisinding ProtectionYESCollege1265Split Phase, 120/20070Split Phase, 120/20070DS NotectionYESConcel Data0PTDimension(mm)6/0*490*255Weight24840Displation6/0*490*255Weight25%0Colling6/0*40*045Weight <td>Nominal DC Input Voltage</td> <td>360V</td>	Nominal DC Input Voltage	360V
MPPT Number/(Strings per MPPT) 3(2/1/1)   Output/Inout AC (Crid) 12000W   Nominal Power 120/00W   Nominal AC Voltage 10/200 Urner Phase, 120/240V Split Phase, 12	Full Power MPPT Voltage Range	230~500V
Output/Inout AC (Crid)       Nominal Power       Nominal AC Voltage       Nominal AC Voltage       AC 220V Single Phase, 120/240V Split Phase, 120/208V Three Phase       Operating Voltage Range       Max. Continuous AC Current       Son@azdw, SoA@azdw,	Max. DC Input Current	25A/15A/15A
Nominal Power     12000W       Nominal AC Voltage     AC 2200 Single Phase, 120/240V Split Phase, 20/240V, Split Phase, 20/200V       UPS Output with Battery     UPS Nominal Cutput Voltage       UPS Nominal Cutput Voltage     120/240V Split Phase, 20/240V, Split Phase, 20/24	MPPT Number/(Strings per MPPT)	3(2/1/1)
Nominal AC VoltageAC 220V Single Phase, 120/240V Split Phase, 120/280V Three Phase 120/280V Three Phase 120/280V Three PhaseOperating Voltage RangeS0A@240V, 50A@268VNamia AC FrequencyS0H#/60HzUPS Max. Undt Rover120/200V With Phase, 	Output/Inout AC (Grid)	
120/2080 Three Phase       Operating Voltage Range     180V~270V       Nax. Continuous AC Current     50A/9.240V, 50A/9.208V       Nominal AC Frequency     50H/2/60H2       UPS Output-with Battery     12000W       UPS Nominal Output Frequency     120/208V Three Phase, 120/208V Three Phase       UPS Nominal Output Frequency     50H/2/60H2       UPS Nominal Output Current     50A/9/20K7, 57.7A/9/208V       Peak Power & Switching Time     14kW 10minutes / 16kW 50mms - 20kW 500ms - 20kW	Nominal Power	12000W
Max: Continuous AC Current:S0A@240V, 50A@208VNominal AC FrequencyS0Hz/60HzUPS Output-vith Battery12000WUPS Moxinal Output Voltage120/240V Split Phase, 120/208V Three PhaseUPS Nominal Output FrequencyS0Hz/60HzUPS Nominal Output FrequencyS0Hz/60HzUPS Nominal Output CurrentS0A@240V, 57.7A@208VPeak Power & Switching Time14kW 10minutes / 16kW Sminutes / 20kW 500msEfficiency99.9%MMPT Efficiency99.9%Battery Charging Efficiency97.5%EU Efficiency95.%OctotetionYESActivising Ifficiency95.%Discharging Efficiency95.%Discharging EfficiencyYESDischarging Efficiency96.5%Discharging Efficiency96.5%Discharging EfficiencyYESDischarging Effi	Nominal AC Voltage	
Nominal AC Frequency Solt2/60Hz   UPS Output-with Battery 2000W   UPS Max. Output Power 120/240V Split Phase, 120/208V Three Phase   UPS Nominal Output Voltage 120/240V Split Phase, 120/208V Three Phase   UPS Nominal Output Frequency Solt2/60Hz   UPS Nominal Output Cortent Sold2/240V, S7.7A208V   Peak Power & Switching Time 16kW Sminutes / 20kW 500ms   Efficiency 99.9%   MAx. Efficiency 99.9%   Max. Efficiency 97.5%   EU Efficiency 96.5%   Battery Charging Efficiency 95%   Battery Discharging Efficiency 95%   Battery Discharging Efficiency 95%   Battery Discharging Efficiency 95%   Battery Discharging Efficiency 95%   Discasting Protection YES   DC Switch YES   Discasting Protection YES   Diff Concel OPT   SD OPT   Dimension(mm) 670*490*265   Weight 42kg   Display Color LCD   Toenfordy FAN   Cooling<	Operating Voltage Range	180V~270V
Nominal AC Frequency     SDH2/60H2       UPS Output-with Battery     I2000W       UPS Naminal Output Voltage     120/240V Split Phase, 120/208V Three Phase       UPS Nominal Output Voltage     SDH2/60H2       UPS Nominal Output Current     SOA@240V, S7.7A@208V       Peak Power & Switching Time     SOA@240V, S7.7A@208V       Efficiency     99.9%       Max. Efficiency     99.9%       Port Statege S	Max. Continuous AC Current	50A@240V, 50A@208V
UPS Max. Output Power 12000W   UPS Nominal Output Voltage 120/240V Split Phase, 120/240V Split Phase, 120/240V Split Phase   UPS Nominal Output Frequency 50H2/60H2   UPS Nominal Output Current 50A@240V, 57.7A@208V   Peak Power & Switching Time 14kW 10minutes / 16kW 5minutes / 20kW 500ms Efficiency 99.9%   MPPT Efficiency 99.9%   Max. Efficiency 97.5%   EU Efficiency 96.5%   Battery Charging Efficiency 96.5%   Battery Charging Efficiency 95%   Battery Discharging Efficiency 95%   DC Switch YES   Ingress Protect Ongree 1965   SPD Protection YES   Arti-Islanding Protection YES   Arti-Islanding Protection YES   Sp De rotection YES   Arti-Islanding Protection YES   Arti-Islanding Protection YES   DC Switch YES   Ingress Protect Degree IP65   SPD Protection YES   ArCI OPT   RSD OPT   Dimension(rum) 670*490*265   Weight 42kg   Display Color LCD   Topology Transformer-less   Ambient Tempera	Nominal AC Frequency	
UPS Nominal Output Yoltage120/240Y Split Phase, 120/208V Three PhaseUPS Nominal Output Fequency50Hz/60HzUPS Nominal Output Current50A@240V, 57.7A@208VPeak Power & Switching Time14kW 10minutes / 16kW 5minutes / 20kW 500ms <20ms	UPS Output-with Battery	
120/208V Three Phase   UPS Nominal Output Frequency 50H2/60H2   UPS Nominal Output Current 50A@240V, 57.A@208V   Peak Power & Switching Time 50A@240V, 57.A@208V   Peak Power & Switching Time 50A@240V, 57.A@208V   Efficiency 14kW Iominutes / 20kW 500ms   Peak Fower & Switching Time 99.9%   MPPT Efficiency 99.9%   Max. Efficiency 95.5%   Battery Charging Efficiency 95.5%   Battery Discharging Efficiency 95.5%   Battery Discharging Efficiency 94.5%   Portection YES   Anti-Islanding Protection YES   OC Switch YES   Ingress Protect Degree 1965   SPD Protection YES   Display OPT   Display 670°490°265   Weight 42kg   Display Color LCD   Oppology Gander Less   Ambient Temperature Range 25~60°C   Cooling FAN   Conduct & Certification FEE1547, FCC, SDOC   Safety Standard UL 1741   Grid Standards UL 1741	UPS Max. Output Power	12000W
UPS Nominal Output FrequencyS0Hź/60HzUPS Nominal Output CurrentS0A@240V, 57.7A@208VPeak Power & Switching Time14kW 10minutes / 16kW Sminutes / 20kW 500ms comparing Symmetry 20kW 500ms comparing Symmetry 20kW 500msEfficiency99.9%MPT Efficiency99.9%Max. Efficiency99.5%Battery Charging Efficiency96.5%Battery Discharging Efficiency95%Battery Discharging Efficiency95%Anti-Islanding ProtectionYESCostectionYESAnti-Islanding ProtectionYESSPD protectionYESSPD protectionYESRog0PTRog0PTRog0PTSplay0PTSplay0PTSplay0PTCeneral Data1Disension(mm)670*490*265Weight42kgDisplay1CoolingFANConlingFANConlingFANConlingEEE1547, FCC, SDOCSafety StandardUL 1741Grid StandardsUL 1741	UPS Nominal Output Voltage	120/240V Split Phase,
UPS Nominal Output Current   50A@240V, 57.7A@208V     Peak Power & Switching Time   14kW 10minutes / 16kW 5minutes / 20kW 500ms <20ms		120/208V Three Phase
Peak Power & Switching Time   14kW 10minutes / 16kW 50minutes / 20kW 500ms <20ms	UPS Nominal Output Frequency	50Hz/60Hz
<20ms	UPS Nominal Output Current	50A@240V, 57.7A@208V
MPPT Efficiency99.9%Max. Efficiency97.5%EU Efficiency96.5%Battery Charging Efficiency95%Battery Discharging Efficiency94.5%ProtectionYESAnti-Islanding ProtectionYESDC SwitchYESIngress Protect DegreeIP65SPD ProtectionYESAFCIOPTRSDOPTDimension(mm)670*490*265Weight42kgDisplayColor LCDTopologyTransformer-lessAmbient Temperature Range25% 60 CCoolingFANCommunicationR5485/Wi-Fi/CANEMCIEEE1547, FCC, SDOCSafety StandardUL 1741Grid StandardsIEEE1547	Peak Power & Switching Time	
MPPT Efficiency99.9%Max. Efficiency97.5%EU Efficiency96.5%Battery Charging Efficiency95%Battery Discharging Efficiency94.5%ProtectionYESAnti-Islanding ProtectionYESDC SwitchYESIngress Protect DegreeIP65SPD ProtectionYESAFCIOPTRSDOPTDimension(mm)670*490*265Weight42kgDisplayColor LCDTopologyTransformer-lessAmbient Temperature Range25% 60 CCoolingFANCommunicationR5485/Wi-Fi/CANEMCIEEE1547, FCC, SDOCSafety StandardUL 1741Grid StandardsIEEE1547	Efficiency	
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EU Efficiency96.5%Battery Charging Efficiency95%Battery Discharging Efficiency94.5%ProtectionYESAnti-Islanding ProtectionYESDC SwitchYESIngress Protect DegreeIP65SPD ProtectionYESAFCIOPTRSDOPTDC SwitchSPProtectionYESAFCIOPTRSDOPTDimesion(mm)670*490*265Weight42kgDisplayColor LCDTopologyTransformer-lessAmbient Temperature Range-25~60 °CColingFANCommunicationR5485/Wi-FI/CANEMCIEEE1547, FCC, SDOCSafety StandardUL 741Grid StandardsIEEE1547		
Battery Discharging Efficiency94.5%ProtectionYESAnti-islanding ProtectionYESDC SwitchYESIngress Protect DegreeIP65SPD ProtectionYESAFCIOPTRSDOPTDimension(mm)670*490*255WeightAtlandingDisplayColor LCDTopologyTransformer-lessAmbient Temperature Range-25~60 °CColoringFANCommunicationS485/Wi-Fi/CANEMECEEE1547, FCC, SDOCSafety StandardLU 1741Grid StandardsEEE1547	EU Efficiency	96.5%
ProtectionYESAnti-islanding ProtectionYESDC SwitchYESIngress Protect DegreeIP65SPD ProtectionYESAFCIOPTRSDOPTCeneral DataDimension(mm)670*490*265Weight42kgDisplayColor LCDTopologyTransformer-lessAmbient Temperature Range-25~60 CConmunicationRS485/Wi-FI/CANEMCIEEE1547, FCC, SDOCSafety StandardUL 1741Grid StandardsIEEE1547	Battery Charging Efficiency	95%
Anti-islanding ProtectionYESDC SwitchYESIngress Protect DegreeIP65SPD ProtectionYESAFCIOPTRSDOPTDimension(mm)670*490*265Weight42kgDisplayColor LCDTopologyTransformer-lessAmbient Temperature Range-25~60 CConmunicationRS485/Wi-Fi/CANEMCIEEE1547, FCC, SDOCSafety StandardUL 1741Grid StandardsIEEE1547	Battery Discharging Efficiency	94.5%
Anti-islanding ProtectionYESDC SwitchYESIngress Protect DegreeIP65SPD ProtectionYESAFCIOPTRSDOPTDimension(mm)670*490*265Weight42kgDisplayColor LCDTopologyTransformer-lessAmbient Temperature Range-25~60 CConmunicationRS485/Wi-Fi/CANEMCIEEE1547, FCC, SDOCSafety StandardUL 1741Grid StandardsIEEE1547	Protection	
DC SwitchYESIngress Protect DegreeIP65SPD ProtectionYESAFCIOPTRSDOPTCeneral DataDimension(mm)670*490*265WeightColor LCDTopologyColor LCDAmbient Temperature Range-25~60°CCoolingRS485/Wi-Fi/CANExercal ActificationR5485/Wi-Fi/CANFMCSE1547, FCC, SDOCSafety StandardU1741Grid StandardsIEE1547, FCC, SDOC		YES
SPD ProtectionYESAFCIOPTRSDOPTRSDOPTCeneral Data	-	
SPD ProtectionYESAFCIOPTRSDOPTRSDOPTCeneral Data	Ingress Protect Degree	IP65
RSDOPTCeneral DataDimension(mm)670*490*265Weight42kgDisplayColor LCDTopologyTransformer-lessAmbient Temperature Range-25~60 CCoolingFANCommunicationR5485/Wi-Fi/CANStandard & CertificationIEEE1547, FCC, SDOCFMCIEEE1547, FCC, SDOCSafety StandardUL 1741Grid StandardsIEEE1547	SPD Protection	YES
Ceneral DataDimension(mm)670*490*265Weight42kgDisplayColor LCDTopologyTransformer-lessAmbient Temperature Range-25~60°CCoolingFANCommunicationRS485/Wi-Fi/CANStandard & CertificationIEEE1547, FCC, SDOCEMCIEEE1547, FCC, SDOCSafety StandardUL 1741Grid StandardsIEEE1547	AFCI	OPT
Dimension(mm)670*490*265Weight42kgDisplayColor LCDTopologyTransformer-lessAmbient Temperature Range-25~60 °CCoolingFANCommunicationRS485/Wi-Fi/CANEMCIEEE1547, FCC, SDOCSafety StandardUL 1741Grid StandardsIEEE1547	RSD	OPT
Dimension(mm)670*490*265Weight42kgDisplayColor LCDTopologyTransformer-lessAmbient Temperature Range-25~60 °CCoolingFANCommunicationRS485/Wi-Fi/CANEMCIEEE1547, FCC, SDOCSafety StandardUL 1741Grid StandardsIEEE1547	General Data	
Weight42kgDisplayColor LCDTopologyTransformer-lessAmbient Temperature Range-25~60 °CCodingFANCommunicationR5485/Wi-Fi/CANEMCEEE1547, FCC, SDOCSafety StandardUL 1741Grid StandardsIEEE1547		670*490*265
TopologyTransformer-lessAmbient Temperature Range-25~60°CCoolingFANCommunicationRS485/Wi-Fi/CANEMCIEEE1547, FCC, SDOCSafety StandardUL 1741Grid StandardsIEEE1547		42kg
TopologyTransformer-lessAmbient Temperature Range-25~60°CCoolingFANCommunicationR5485/Wi-Fi/CANEMCEEE1547, FCC, SDOCSafety StandardUL 1741Grid StandardsIEEE1547	-	-
Ambient Temperature Range-25~60 °CCoolingFANCommunicationRS485/Wi-Fi/CANStandard & CertificationIEEE1547, FCC, SDOCEMCIEEE1547, FCC, SDOCSafety StandardUL 1741Grid StandardsIEEE1547, FCC, SDOC		Transformer-less
CommunicationRS485/Wi-Fi/CANStandard & CertificationIEEE1547, FCC, SDOCEMCIEEE1547, FCC, SDOCSafety StandardUL 1741Grid StandardsIEEE1547		-25~60 °C
Standard & CertificationEMCIEEE1547, FCC, SDOCSafety StandardUL 1741Grid StandardsIEEE1547	Cooling	FAN
EMCIEEE1547, FCC, SDOCSafety StandardUL 1741Grid StandardsIEEE1547	Communication	RS485/Wi-Fi/CAN
Safety Standard UL 1741   Grid Standards IEEE1547	Standard & Certification	
Grid Standards IEEE1547		IEEE1547, FCC, SDOC
	Safety Standard	UL 1741
Warranty 10 years	Grid Standards	IEEE1547
	Warranty	10 years



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