

Powered by the **Sun** Proven by **You**

Presola[®] String Inverter

Photovoltaic Inverter 1.5-25KW Series



PurpleRubik New Energy Technology Co., Ltd.



◆COMPANY PROFILE

PurpleRubik, one of the leading inverter manufacturers in China and a provider of residential and commercial rooftop-distributed solutions, is continuously working on designing, manufacturing, and marketing of high-performance solar inverters with intelligent monitoring system.

◆OUR PRODUCTS

PurpleRubik provides on-grid and hybrid solar inverters, ranging from 1.5kW to 25kW and conforming to world's major voltage / frequency standards, applicable for residential, commercial roofs, and small storage systems all over the world.

Certificates: CE, VDE4105:2011, VDE0126, C10/11, AS4777, EN50438, IEC61000, IEC62116, IEC61683, IEC60068, IEC62109, EN62109, CQC, etc..



◆OUR SERVICE

We offer all kinds of solutions from the very beginning to the end. Our overall service includes concept, design, development, maintenance and implementation.

24/7 service line: 86 400 928 1628.

◆OUR MISSION

Being a high-quality product manufacturer, supplying stable and high-efficiency products.

Being a quality service provider, offering professional and customer-friendly service.



Mercury Series Single-phase String Inverters

PM-I 500 / 2000 / 2500 / 3000TL-SS

- ◇ Exquisite
- ◇ Trustworthy
- ◇ Intelligent
- ◇ Profitable



FEATURES

Components from world class suppliers

Automotive class PCB technology

Optimized thermal design

Silicone Rubber Gaskets & Seals

Integrated enclosure design

Integrated air valve

1000 hours of neutral salt spray testing

User friendly interface

Intelligent monitoring system

ADVANTAGES

Longer MTBF (Mean Time Between Failures)

Higher quality guaranteed

Lower heat generation
Faster heat dissipation

High performance sealing

High performance sealing possible
Less chance of moisture invasion

Reduction of condensation

Suitable for harsh environments

Easy to operate

Easy to manage and maintain

BENEFITS

More electricity output
Less down time

Reliable and stable under severe conditions

Lower internal operation temperature
Longer component life

Reliable and stable under severe conditions

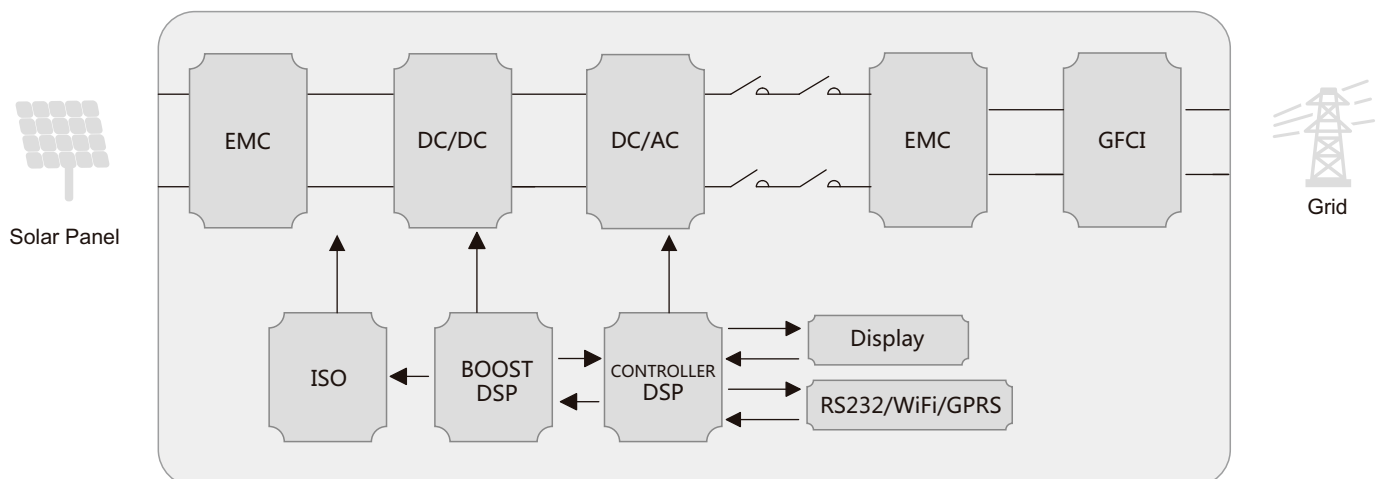
Suitable for humid operation environments

Operationable in more applications: fishing ponds, agricultural area, greenhouses, coastal areas

Easy installation and maintenance possible

Data analysis
Less maintenance

CIRCUIT DIAGRAM



Mercury Series Single-Phase String Inverters

PM-I 500 / 2000 / 2500 / 3000TL-SS

TECHNICAL DATA

MODEL	PM-1500TL-SS	PM-2000TL-SS	PM-2500TL-SS	PM-3000TL-SS
Input (DC)				
Max. DC Power	1650W	2200W	2750W	3300W
Max. Input Voltage	500V	500V	500V	500V
MPP Operation Voltage Range/Nominal Input Voltage	100V-450V/380V	100V-450V/380V	100V-450V/380V	100V-450V/380V
Startup Voltage	80V	80V	80V	80V
Max. Input Current per String	11.5A	11.5A	11.5A	11.5A
Short-circuit Current	13.5A	13.5A	13.5A	13.5A
Number of Independent MPP Inputs	1	1	1	1
Max. inverter Backfeed Current to Array	0A	0A	0A	0A
Output (AC)				
Rated Power	1500W	2000W	2500W	3000W
Max. Apparent AC Power	1500VA	2000VA	2500VA	3000VA
Nominal AC Voltage	220V/230V/240V	220V/230V/240V	220V/230V/240V	220V/230V/240V
Nominal AC Voltage Range	180V-277V	180V-277V	180V-277V	180V-277V
AC Power Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Max. Output Current	6.8A	9.1A	11.4A	13.6A
Power Factor	0.8 ind...0.8 cap	0.8 ind...0.8 cap	0.8 ind...0.8 cap	0.8 ind...0.8 cap
Total Harmonic Distortion (THD)	<3%	<3%	<3%	<3%
Feed-in Phases/Connection Phases	L+N+PE	L+N+PE	L+N+PE	L+N+PE
Inrush Current(peak and duration)	49.6A peak@6.72ms	51.2A peak@6.51ms	52.0A peak@6.84ms	59.2A peak@6.88ms
Max. Output Fault Current	7.8A	10.1A	12.4A	14.6A
Max. Output Over Current Protection	8.8A	11.8A	14.8A	17.7A
Efficiency				
Max. Efficiency	96.8%	97.1%	97.2%	97.2%
European Weighted Efficiency	96.0%	96.2%	96.4%	96.4%
Protective Devices				
DC Reverse Polarity Protection	Yes			
DC Switch	Optional			
AC Over Current Protection	Yes			
Ground Fault Monitoring	Yes			
Grid Monitoring	Yes			
Residual Current Monitoring Unit	Yes			
General Data				
Dimensions (W / H / D)	326*349*135mm			
Weight	10.5 kg			
Operating Temperature Range	-25°C...+60°C			
Noise Emission (typical)	<=25dB(A)			
Max. Operating Altitude	>2000m derating			
Standby Losses	<0.5W			
Topology	Transformerless			
Cooling Concept	Natural Convection			
Degree of Protection (according to IEC 60529)	IP 65			
Relative Humidity	0-95%, no condensation			
DC Connection Type	MC/Amphenol/Phoenix			
AC Connection Type	Plug-in connector			
Display	LCD Light			
Interface	RS 232 (WiFi/GPRS Optional)			
Warranty	5/10 years(Optional)			
Certificates and approvals	IEC62109-1/-2, EN61000-6-2, EN61000-6-3, CE, AS4777.2-2015, VDE4105, EN50438, CQC			

*The AC voltage and frequency range may vary due to local regulations.

Venus Series Single-phase String Inverters

PV-3000 / 3680 / 4000 / 4600 / 5000TL-DS

- ◇ Exquisite
- ◇ Trustworthy
- ◇ Intelligent
- ◇ Profitable



FEATURES

Components from world class suppliers

Automotive class PCB technology

Optimized thermal design

Silicone Rubber Gaskets & Seals

Integrated enclosure design

Integrated air valve

1000 hours of neutral salt spray testing

User friendly interface

Intelligent monitoring system

ADVANTAGES

Longer MTBF (Mean Time Between Failures)

Higher quality guaranteed

Lower heat generation
Faster heat dissipation

High performance sealing

High performance sealing possible
Less chance of moisture invasion

Reduction of condensation

Suitable for harsh environments

Easy to operate

Easy to manage and maintain

BENEFITS

More electricity output
Less down time

Reliable and stable under severe conditions

Lower internal operation temperature
Longer component life

Reliable and stable under severe conditions

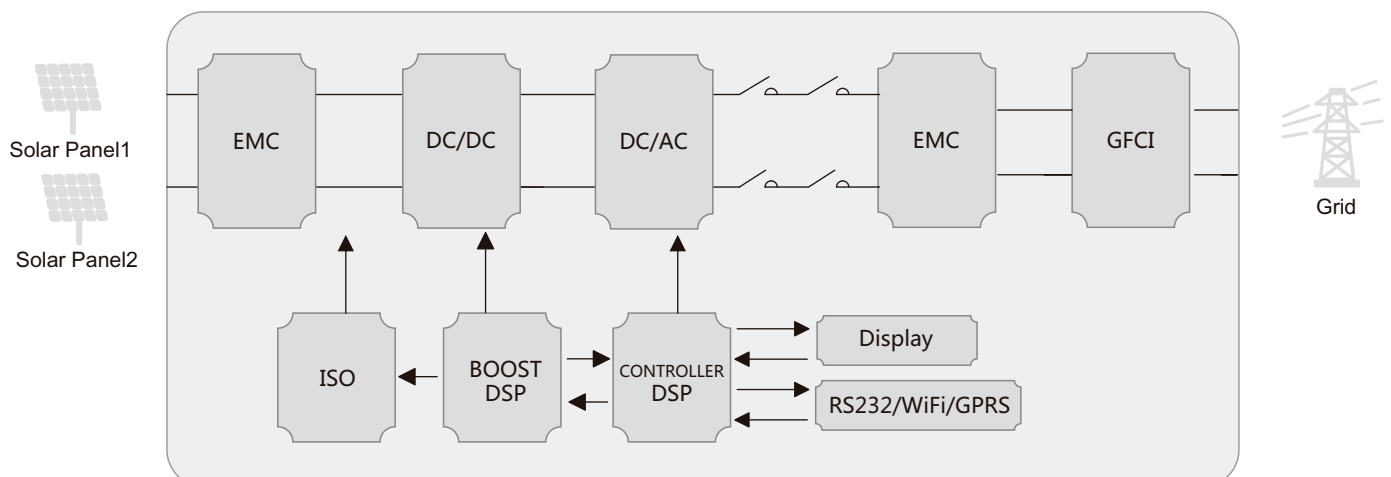
Suitable for humid operation environments

Operationable in more applications: fishing ponds, agricultural area, greenhouses, coastal areas

Easy installation and maintenance possible

Data analysis
Less maintenance

CIRCUIT DIAGRAM



Venus Series Single-phase String Inverters

PV-3000 / 3680 / 4000 / 4600 / 5000TL-DS

TECHNICAL DATA

MODEL	PV-3000TL-DS	PV-3680TL-DS	PV-4000TL-DS	PV-4600TL-DS	PV-5000TL-DS
Input (DC)					
Max. DC Power	3300W	4048W	4500W	5060W	5500W
Max. Input Voltage	600V	600V	600V	600V	600V
MPP Operation Voltage Range/Nominal Input Voltage	100V-550V/380V	100V-550V/380V	100V-550V/380V	100V-550V/380V	100V-550V/380V
Startup Voltage	80V	80V	80V	80V	80V
Max. Input Current per String	10A/10A	10A/10A	10A/10A	10A/10A	10A/10A
Short-circuit Current	12A/12A	12A/12A	12A/12A	12A/12A	12A/12A
Number of Independent MPP Inputs	2	2	2	2	2
Max. Inverter Backfeed Current to Array	0A	0A	0A	0A	0A
Output (AC)					
Rated Power	3000W	3680W	4000W	4600W	5000W
Max. Apparent AC Power	3000VA	3680VA	4000VA	4600VA	5000VA
Nominal AC Voltage	220V/230V/240V	220V/230V/240V	220V/230V/240V	220V/230V/240V	220V/230V/240V
Nominal AC Voltage Range	180V-277V	180V-277V	180V-277V	180V-277V	180V-277V
AC Power Frequency	50Hz/60Hz/±5Hz	50Hz/60Hz/±5Hz	50Hz/60Hz/±5Hz	50Hz/60Hz/±5Hz	50Hz/60Hz/±5Hz
Max. Output Current	13.6A	16.7A	18.2A	20.9A	22.7A
Power Factor	0.8 ind...0.8 cap				
Total Harmonic Distortion (THD)	<3%	<3%	<3%	<3%	<3%
Feed-in Phases/Connection Phases	L+N+PE	L+N+PE	L+N+PE	L+N+PE	L+N+PE
Inrush Current(peak and duration)	62.5A peak@7.12ms	63.1A peak@6.90ms	78.1A peak@7.06ms	78.8Apeak@7.12ms	84.4Apeak@6.86ms
Max. Output Fault Current	14.6A	17.7A	19.2A	21.9A	23.7A
Max. Output Over Current Protection	17.7A	21.7A	23.7A	27.2A	29.5A
Efficiency					
Max. Efficiency	97.3%	97.4%	97.5%	97.6%	97.6%
European Weighted Efficiency	96.8%	96.9%	97.0%	97.1%	97.1%
Protective Devices					
DC Reverse Polarity Protection	Yes				
DC Switch	Optional				
AC Over Current Protection	Yes				
Ground Fault Monitoring	Yes				
Grid Monitoring	Yes				
Residual Current Monitoring Unit	Yes				
General Data					
Dimensions (W / H / D)	368*403*150mm				
Weight	15.8 kg				
Operating Temperature Range	-25°C...+60°C				
Noise Emission (typical)	<=30dB(A)				
Max. Operating Altitude	>2000m derating				
Standby Losses	<3W				
Topology	Transformerless				
Cooling Concept	Natural Convection				
Degree of Protection (according to IEC 60529)	IP 65				
Relative Humidity	0-95%, no condensation				
DC Connection Type	MC/Amphenol/Phoenix				
AC Connection Type	Plug-in Connector				
Display	LCD Light				
Interface	RS 232 (WiFi/GPRS Optional)				
Warranty	5/10 years(Optional)				
Certificates and approvals	IEC62109-1/-2, EN61000-6-2, EN61000-6-3, CE, AS4777.2-2015, VDE4105, EN50438, VDE0126, C10/11, IEC61727, IEC62116, IEC61683, IEC60068, CQC				

*The AC voltage and frequency range may vary due to local regulations.

Jupiter Series Three-phase String Inverters

PJ-4K / 5K / 6K / 8K / 10K / 11K / 12KTL-DT

- ◇ Exquisite
- ◇ Trustworthy
- ◇ Intelligent
- ◇ Profitable



FEATURES

Components from world class suppliers

Automotive class PCB technology

Optimized thermal design

Optimized algorithm

Integrated enclosure & silicone rubber sealing

Integrated air valve

1000 hours of neutral salt spray testing

User friendly interface

Intelligent monitoring system

ADVANTAGES

Longer MTBF (Mean Time Between Failures)

Higher quality guaranteed

Lower heat generation
Faster heat dissipation

Accurate real-time tracking in wide voltage/frequency range

High performance sealing possible
Less chance of moisture invasion

Reduction of condensation

Suitable for harsh environments

Easy to operate

Easy to manage and maintain

BENEFITS

More electricity output
Less down time

Reliable and stable under severe conditions

Lower internal operation temperature
Longer component life

High efficiency and reliability

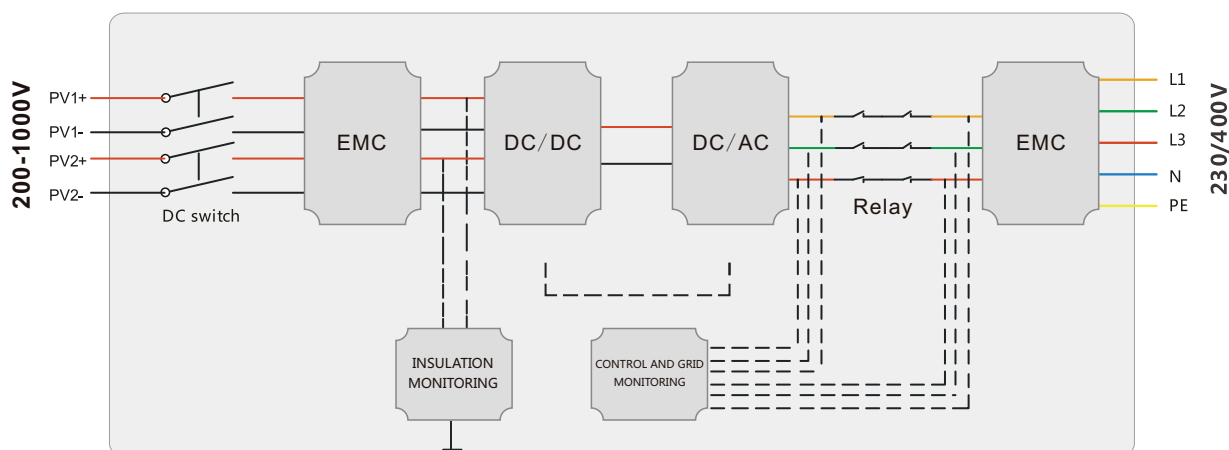
Reliable and stable under severe conditions

Operationable in more applications: fishing ponds, agricultural area, greenhouses, coastal areas

Easy installation and maintenance possible

Data analysis
Less maintenance

CIRCUIT DIAGRAM



Jupiter Series Three-phase String Inverters

PJ-4K / 5K / 6K / 8K / 10K / 11K / 12KTL-DT

TECHNICAL DATA

MODEL	PJ-4KTL-DT	PJ-5KTL-DT	PJ-6KTL-DT	PJ-8KTL-DT	PJ-10KTL-DT	PJ-11KTL-DT	PJ-12KTL-DT
Input (DC)							
Max. DC Power	4800W	6000W	7200W	9600W	12000W	13200W	14400W
Max. Input Voltage	1000Vdc						
MPP Operation Voltage Range/Nominal Input Voltage	200 - 950 Vdc / 600Vdc						
Startup Voltage	200Vdc						
Max. Input Current per String	11A/11A						
Short-circuit Current	13A/13A						
Number of Independent MPP Inputs	2						
Max. Inverter Backfeed Current to Array	0A						
Output(AC)							
Rated Power	4000W	5000W	6000W	8000W	10000W	11000W	12000W
Max. Apparent AC Power	4400VA	5500VA	6600VA	8800VA	11000VA	12100VA	13200VA
Nominal AC Voltage							
AC Power Frequency							
Max. Output Current	6.4Aac	8.0Aac	9.6 Aac	12.8 Aac	15.9 Aac	17.5 Aac	19.1 Aac
Power Factor Range							
Total Harmonic Distortion(THD)	< 3%	< 3%	< 3%	< 3%	< 3%	< 3%	< 3%
Feed-in Phases/Connection Phases	3W/N/PE	3W/N/PE	3W/N/PE	3W/N/PE	3W/N/PE	3W/N/PE	3W/N/PE
Inrush Current(Peak and Duration)	3.3Apeak@7.8ms	4.8Apeak@7.8ms	4.8Apeak@7.8ms	5.2Apeak@7.8ms	5.3Apeak@7.8ms	5.4Apeak@7.8ms	5.5Apeak@7.8ms
Max. Output Fault Current	Integrated						
Max. Output Overcurrent Protection	Integrated						
Efficiency							
Max. Efficiency	>98.0%	>98.0%	>98.0%	>98.1%	>98.1%	>98.1%	>98.2%
European Weighted Efficiency	>97.4%	>97.4%	>97.4%	>97.6%	>97.6%	>97.6%	>97.8%
Protective Devices							
DC Reverse Polarity Protection	Yes						
DC Switch	Optional						
AC Over Current Protection	Yes						
Ground Fault Monitoring	Yes						
Grid Monitoring	Yes						
Residual Current Monitoring Unit	Yes						
General Data							
Dimensions (W / H / D)	525x 410x190mm						
Weight	20.5 kg	20.5 kg	20.5 kg	20.5 kg	21kg	21kg	21kg
Operating Temperature Range	-25°C ...+60°C						
Noise Emission (typical)	< =35dB(A)						
Max. Operating Altitude	>2000m derating						
Standby Losses	<1W						
Topology	Transformerless						
Cooling Concept	Natural Convection						
Degree of Protection (according to IEC 60529)	IP 65						
Protective class	Class I						
DC overvoltage-category	II						
AC overvoltage-category	III						
Relative Humidity	0-100%, no condensation						
DC Connection Type	MC/Amphenol/Phoenix						
AC Connection Type	Plug-in Connector						
Display	3.5 Inch LCD						
Interface	RS 485 (WiFi/GPRS Optional)						
Warranty	5/10 years(Optional)						
Certificates and approvals	VDE AR-N-4105, VDE 0126-1-1+A1, CE, NB/T32004-2013						

*The AC voltage and frequency range may vary due to local regulations.

Jupiter Series Three-phase String Inverters

PJ-15K / 17K / 20K /25KTL-DT

- ◇ Exquisite
- ◇ Trustworthy
- ◇ Intelligent
- ◇ Profitable



FEATURES

Components from world class suppliers
Automotive class PCB technology
Optimized thermal design
Optimized algorithm
Integrated enclosure & silicone rubber sealing
Integrated air valve
1000 hours of neutral salt spray testing
User friendly interface
Intelligent monitoring system

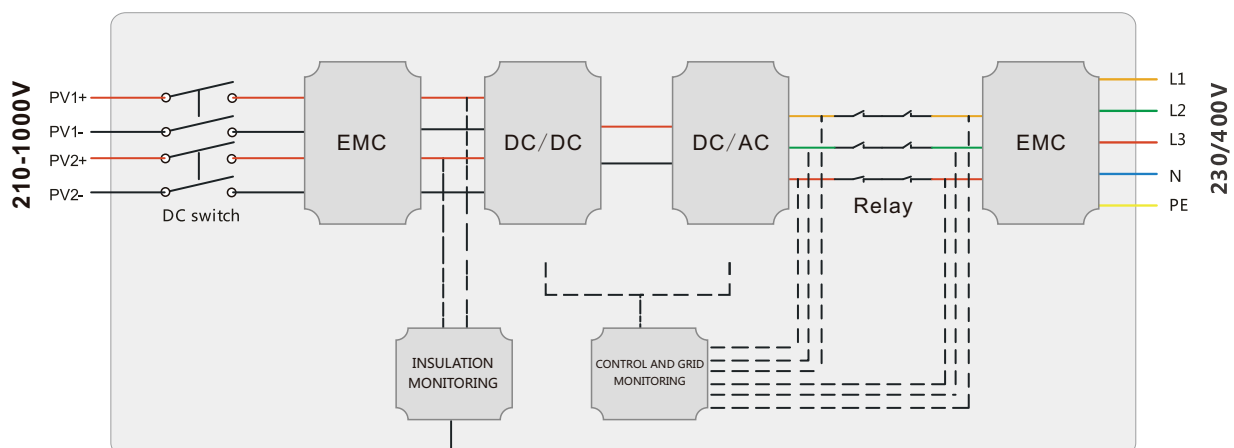
ADVANTAGES

Longer MTBF (Mean Time Between Failures)
Higher quality guaranteed
Lower heat generation Faster heat dissipation
Accurate real-time tracking in wide voltage/frequency range
High performance sealing possible Less chance of moisture invasion
Reduction of condensation
Suitable for harsh environments
Easy to operate
Easy to manage and maintain

BENEFITS

More electricity output Less down time
Reliable and stable under severe conditions
Lower internal operation temperature Longer component life
High efficiency and reliability
Reliable and stable under severe conditions
Operationable in more applications: fishing ponds, agricultural area, greenhouses, coastal areas
Easy installation and maintenance possible
Data analysis Less maintenance

CIRCUIT DIAGRAM



Jupiter Series Three-phase String Inverters

PJ-15K / 17K / 20K / 25KTL-DT

TECHNICAL DATA

MODEL	PJ-15KTL-DT	PJ-17KTL-DT	PJ-20KTL-DT	PJ-25KTL-DT
Input (DC)				
Max. DC Power	18000W	20400W	24000W	30000W
Max. Input Voltage	1000Vdc			
MPP Operation Voltage Range/Nominal Input Voltage	250 - 950 Vdc / 620Vdc			
Startup Voltage	200Vdc			
Max. Input Current per MPPT	22A/20A	22A/20A	22A/20A	22A/30A
Short-circuit Current	27.5A/37.5A			
Number of Independent MPP Inputs	2+2	2+2	2+2	2+3
Max. Inverter Backfeed Current to Array	0A			
Output(AC)				
Rated Power	15000W	17000W	20000W	25000W
Max. Apparent AC Power	16500VA	18700VA	22000VA	27500VA
Nominal AC Voltage	220V/230V/240V			
AC Power Frequency	50Hz/60Hz			
Max. Output Current	24Aac	27.2Aac	32Aac	40Aac
Power Factor Range	0.8 ind...0.8 cap			
Total Harmonic Distortion(THD)	< 3%	< 3%	< 3%	< 3%
Feed-in Phases/Connection Phases	3W/N/PE	3W/N/PE	3W/N/PE	3W/N/PE
Inrush Current(Peak and Duration)	3Apeak@7.0ms	3.2Apeak@7.0ms	3.5Apeak@6.5ms	3.5Apeak@7.05ms
Max. Output Fault Current	Integrated			
Max. Output Overcurrent Protection	Integrated			
Efficiency				
Max. Efficiency	>98.2%	>98.2%	>98.4%	>98.4%
European Weighted Efficiency	>97.5%	>97.6%	>97.6%	>98.1%
Protective Devices				
DC Reverse Polarity Protection	Yes			
DC Switch	Optional			
AC Over Current Protection	Yes			
Ground Fault Monitoring	Yes			
Grid Monitoring	Yes			
Residual Current Monitoring Unit	Yes			
General Data				
Dimensions (W / H / D)	508x640x203mm			
Weight	38 kg	38 kg	38 kg	38 kg
Operating Temperature Range	-25°C ...+60°C			
Noise Emission (typical)	< =35dB(A)			
Max. Operating Altitude	>2000m derating			
Standby Losses	<1W			
Topology	Transformerless			
Cooling Concept	Fan Cooling			
Degree of Protection (according to IEC 60529)	IP 65			
Relative Humidity	0-100%, no condensation			
DC Connection Type	MC/Amphenol/Phoenix			
AC Connection Type	Plug-in Connector			
Display	3.5 Inch LCD			
Interface	RS 485 (WiFi/GPRS Optional)			
Warranty	5/10 years(Optional)			
Certificates and approvals	VDE AR-N-4105, VDE 0126-1-1+A1, CE, G83/2, UTE C15-712, MEA, PEA, AS4777, NB/T32004-2013			

*The AC voltage and frequency range may vary due to local regulations.

Saturn Series Three-phase String Inverter

PS-30K / 33K / 36KTL-DT

- ◇ Exquisite
- ◇ Trustworthy
- ◇ Intelligent
- ◇ Profitable



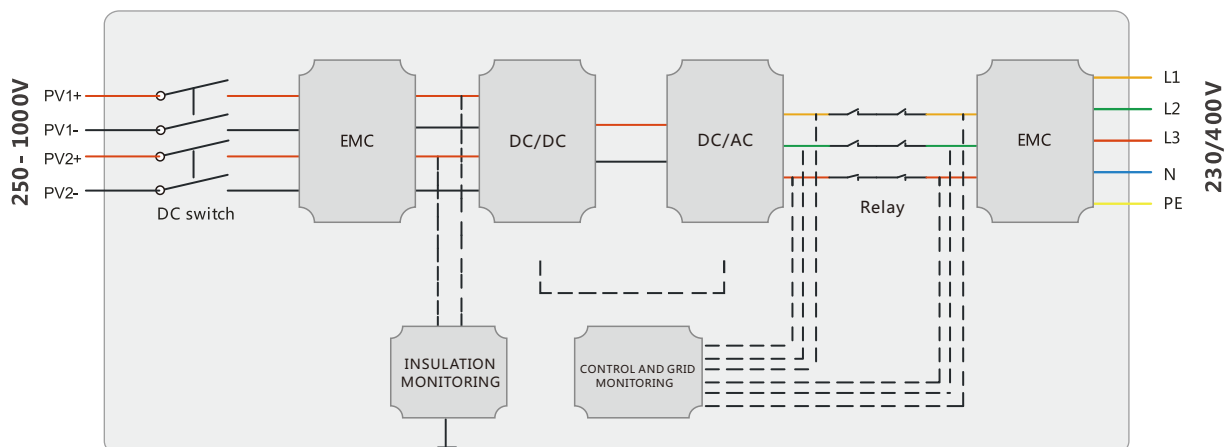
Feature

- ◆ Aluminum shell, removable cover, easy to install
- ◆ Super large 4-inch LCD
- ◆ Max efficiency up to 98.7%
- ◆ Max input voltage up to 1000V
- ◆ Support Modbus communication, external Wifi/ Ethernet/ GPRS (optional)
- ◆ Outdoor IP65 protection level

Advantage

- ◆ Reactive power adjustable function
- ◆ Automatic load reduction when grid over-frequency
- ◆ Remote active limit function
- ◆ DC reverse polarity protection; Anti reverse power controller (ARPC)

CIRCUIT DIAGRAM



Saturn Series Three-phase String Inverter

PS-30K / 33K / 36KTL-DT

【 Technical Data 】

Model	PS-30KTL-DT	PS-33KTL-DT	PS-36KTL-DT	PS-40KTL-DT
Input (DC)				
Max DC power	30720W	34000W	40800W	40800W
Max. input voltage	1000Vdc			
Start-up input voltage	250V			
Rated input voltage	600V	600V	600V	700V
Number for independent MPPT	2			
MPPT voltage range	250V-960V			
Full load DC voltage range	480V-800V	480V-800V	500-800V	570V-800V
Max. input current per string	12A			
Max. input MPPT current	32A/32A	35A/35A	38A/38A	35A/35A
Number for DC inputs	4+4	4+4	4+4	4+4
Output (AC)				
Rated power	30000W	33000W	36000W	40000W
Max. AC power	30000VA	33000VA	36000VA	40000VA
Max. Output current	43A	48A	54A	48A
Nominal grid voltage	3/N/PE, 220/380Vac, 230/400Vac, 240/415Vac			3/N/PE or 3/PE, 277/480Vac
Grid voltage range	310Vac-480Vac			422Vac-528Vac
Nominal frequency	50/60Hz, +/-5Hz			
Active power adjustable range	0~100%			
THDi	<3%			
Power factor	1 default (+/-0.8 adjustable)			
Performance				
Max efficiency	98.5%	98.5%	98.5%	98.7%
European weighted efficiency	98.2%	98.2%	98.2%	98.4%
Self-consumption at night	<1W			
MPPT efficiency	>99.9%			
Protection				
DC reverse polarity protection	Yes			
DC switch	Yes			
Protection class/overvoltage category	I/III			
Safety protection	Anti islanding RCMU Ground fault monitoring			
ARPC	Anti reverse power controller (optional)			
Input / output SPD (II)	Optional			
Communication				
Power management unit	According to certification and request			
Standard communication mode	Rs485, Wifi/Ethernet/GPRS (optional), SD card, Mul -futionction relay			
Operation data storage	25 years			
General Data				
Ambient temperature range	-25°C~ +60°C			
Topology	Transformerless			
Degree of protection	IP65			
Allowable relative humidity range	0~100%			
Max. operating altitude	2000m			
Noise	<30dB	<45dB	<45dB	<45dB
Weight	50kg			
Cooling	Natural	Fan	Fan	Fan
Dimension	774*564*298mm			
Display	LCD display			
Warranty	5 years/ 7 years/ 10 years			
Standard				
EMC	EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 61000-3-11, EN 61000-3-12			
Safety standards	IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)			
Grid standards	AS/NZS 4777, AS/NZS 61000, VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21/CEI 0-16, EN50438/EN50549, G59, Rd1699, UTE C15-712-1, EN50530			

*The AC voltage and frequency range may vary due to local regulations.

Saturn Series Three-phase String Inverter

PS-50K / 60K / 70KTL-DT

- ◇ Exquisite
- ◇ Trustworthy
- ◇ Intelligent
- ◇ Profitable



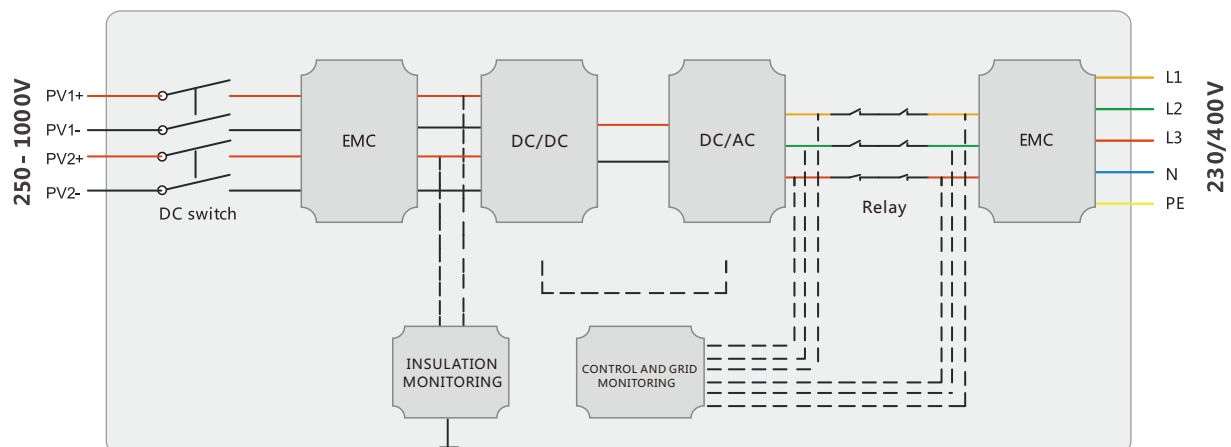
Feature

- ◆ Aluminum shell, removable cover, easy to install
- ◆ Super large 4-inch LCD
- ◆ Max efficiency up to 98.7%
- ◆ Max input voltage up to 1000V
- ◆ Support Modbus communication, external Wifi/ Ethernet/ GPRS (optional)
- ◆ Outdoor IP65 protection level

Advantage

- ◆ Reactive power adjustable function
- ◆ Automatic load reduction when grid over-frequency
- ◆ Remote active limit function
- ◆ DC reverse polarity protection; Anti reverse power controller (ARPC)

CIRCUIT DIAGRAM



Saturn Series Three-phase String Inverter

PS-50K / 60K / 70KTL-DT

【 Technical Data 】

Model	PS-50KTL-DT	PS-60KTL-DT	PS-70KTL-DT
Input (DC)			
Recommended PV input power	55000W	66000W	77000W
Max DC power for single MPPT	22000W	22000W	26000W
	16000W	22000W	26000W
	16000W	22000W	26000W
Number for independent MPPT	3		
Number for DC inputs	4/3/3	4/4/4	4/4/4
Max. input voltage	1000V		
Startup input voltage		250V	
Rated input voltage	600V	600V	700V
MPPT voltage range		250V-960V	
Full load DC voltage range	530V-800V	530V-800V	660V-800V
Max. input MPPT current	40A/30A/30A	40A/40A/40A	40A/40A/40A
Max. input current pet string	12A		
Maxnimun DC input short circuit current per MPPT	48A/36A/36A	48A	48A
Output (AC)			
Rated power	50000W	60000W	70000W
Max. AC power	50000VA	60000VA	70000VA
Max. Output current	80A	90A	90A
Nominal grid voltage	3/N/PE, 220/380Vac, 230/400Vac, 240/415Vac		3/N/PE or 3/PE, 277/480Vac
Grid voltage range	310Vac-480Vac (According to local standard)		422Vac-528Vac(According to local standard)
Nominal frequency	50 /60Hz		
Grid Frequency range	45Hz-55Hz/54Hz-66Hz (According to local standard)		
Active power adjustable range	0~100%		
THDi	<3%		
Power factor	1 default (+/-0.8 adjustable)		
Performance			
Max efficiency	98.5%	98.6%	98.6%
European weighted efficiency	98.3%	98.4%	98.4%
Self-consumption at night	<1W		
MPPT efficiency	>99.9%		
Protection			
DC reverse polarity protection	Yes		
DC switch	Yes		
Protection clas\$ovoltage category	I/III		
Input/ output SPD(III)	PV: type II standard, AC: type II optional		
Safety protection	Anti islanding,RCMU,Ground fault monitoring		
ARPC	Anti reverse power controller (optional)		
Communication			
Power management unit	According to certification and request		
Standard communication mode	Rs485, Wifi/Ethernet/GPRS (optional), SD card, Mul-tfunction relay		
Operation data storage	25 years		
General Data			
Ambient temperature range	-25°C~ +60°C		
Topology	Transformer-less		
Degree of protection	IP65		
Allowable relative humidity range	0~100%		
Max. operating altitude	4000m		
Noise	≤60dB		
Weight	68kg	70kg	70kg
Cooling	Fan		
Dimension	713*737*297mm		
Display	LCD display		
Warranty	5 years/ 7 years/ 10 years		
Standard			
EMC	EN 61000-6-2, EN 61000-6-4, EN 61000-3-11, EN 61000-3-12		
Safety standards	IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)		
Grid standards	AS/NZS 4777, VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, BDEW, CEI 0-21/CEI 0-16, UNE 206 007-1, EN50438/EN50549, G59, EN50530, NB/T32004		

Hybrid Inverter For Storage System

HY-4000 / HY-5000

 Maximum Efficiency : 97.6%

 European Efficiency : 97.0%

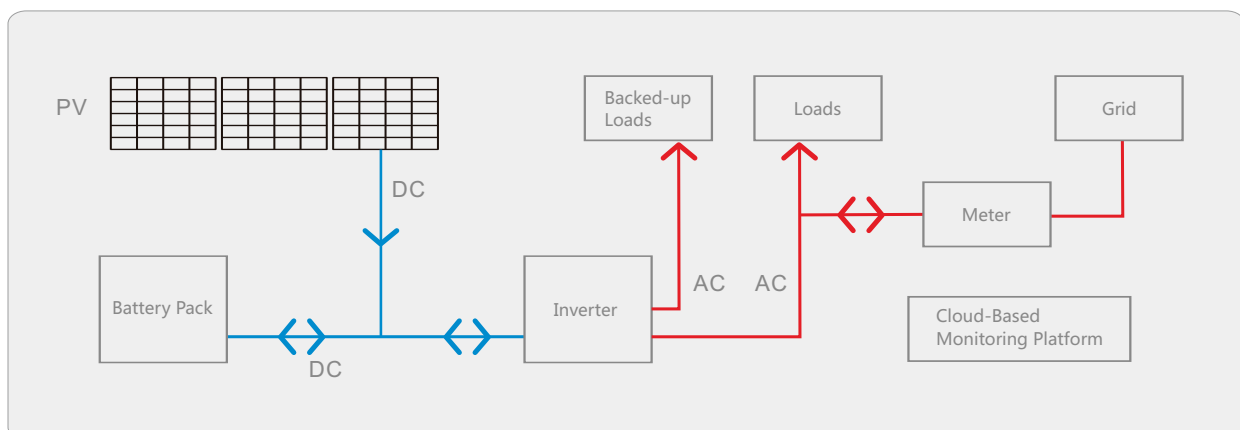
 Remote Upgrade Available



BATTERY MANAGER

Battery Type	Lead-acid Battery, Lithium Battery
Battery Nominal Voltage(V)	48
Battery Voltage Range (V)	40-60
Charging Curve	Three-stage Adaptive with Maintenance
Over Current Protection	Y
Over Temperature Protection	Y
Communication with Inverter & Battery	CAN/RS485
Maximum Charge/Discharge Current	100A
Electromagnetic Compatibility	EN61000-6-1,EN61000-6-2,EN61000-6-3, EN61000-6-4,EN61000-3-11,EN61000-3-12

CIRCUIT DIAGRAM



Hybrid Inverter For Storage System

HY-4000 / HY-5000

TECHNICAL DATA

MODEL	HY-4000		HY-5000	
Input(Solar)				
Max. Recommended DC Power [W]	4000		5000	
Max. DC Voltage[V]	580			
MPPT Voltage Range [V]	125-550			
Nominal DC Operating Voltage[V]	360			
Max. Short Circuit Current [A]	15/15			
Max. Input Current [A]	12/12			
DC Input Number	2			
Number of MPP Trackers	2			
Output(AC)				
Grid Connection	Single Phase			
AC Nominal Power [W]	3680		4600	
Power Factor (Rated Power)	1			
Nominal AC Voltage Range [V]	230Vac 50/60Hz; 180~270Vac			
AC Nominal Current [A]	16		20	
Max. AC Current [A]	17.7		22.1	
Power Factor	>0.99			
Total Harmonic Distortion (THD)	<3%			
Off-gridOutput	230Vac ±2%, 50Hz/60Hz±2%, THD<3%			
Overload	1.5×P. rated, 10s			
Safety & Protection				
Residual Current Protection	Integration			
Insulation Resistance Detection	Integration			
Over Current Protection	Integration			
Islanding Protection	Integration			
Others				
Weight [kg]	35			
Dimensions (W /H / D) [mm]	601*522*204			
Installation	Wall-mounted			
Operating Temperature Range [°C]	-25°C~+60°C(derating at 45°C)			
Humility [%]	0~95%			
Altitude [m]	<2000m			
Degree of Protection	IP 65			
Topology	Transformer-less			
Cooling Concept	Natural Convection			
Noise Emission (Typical) [dB]	<25			
Overvoltage Category	Ⅲ(Electric Supply Side), Ⅱ(PV Side)			
Warranty	Standard Five Years			
Grid-connected	VDE-AR-N 4105, AS4777.2/.3			
Safety Standard	IEC62109-1&-2, AS3100, IEC62040-1			

Monitoring Device

PurpleRubik Wi-Fi/GPRS Plug

PurpleRubik monitoring device supports WI-FI and GPRS communication. Its Bluetooth function enables local debugging upgrading to collect operation and power generation data of inverters. Pair with PurpleRubik profession platform to enable remote PV system monitoring and to realize distributed power station management with lower cost and higher efficiency.



Classification	Parameter	GPRS	WI-FI
Wireless Parameter	Operating Frequency	GSM850/EGSM900/DCS1800/DCS1900MHz	2.412GHz-2.48GHz
	Transmitting Frequency	Class 4(2W)GSM850,EGSM900 Class1(1W)DCS1800,PCS1900	802.11b:+16+/-2dBm(@11Mbps) 802.11g:+14+/-2dBm(@54Mbps) 802.11n:+13+/-2dBm(@HT20,MCS7)
	Near Field Communication	-	200m in outdoor open area without obstruction
	Data interface Operating voltage	RS232/RS485/TTL DC4.5V~DC18.0V	RS232/RS485/TTL
Hardware Parameter	SIM chip	Integrated patch SIM Chip(6mmX5mm)	-
	Operating temperature	-40°C~+85°C	-40°C~+85°C
Software Parameter	Firmware upgrade	Remote upgrade	Remote upgrade
		Local Serial port-update (BluetoothBT3.0+EDR upgrade)	Local Serial port-update
	Others	Real-time control,FTP	Real-time control,FTP



SOLARMAN APP



SOLARMAN PRO APP



Manage Your PV System Anywhere

For meeting different needs of equipment manufacturers, distributors, installers, operators and investors, our monitoring system will achieve the life cycle management of power station, including the unified operation and maintenance of global multi-station, the remote monitoring of equipment and assets.

SolarMan(Home)

Developed by PurpleRubik New Energy with SolarMan, is a professional monitoring system platform managing power plants. It supplies power generation and consumption for end-users. It's convenient to visit real time and historical data via web or IOS & Android APP anytime and anywhere. This easy-to-use platform makes monitoring of PV systems simple and convenient, far reducing time and costs as well.

SolarMan(Pro)

Developed by PurpleRubik New Energy with SolarMan, is a professional monitoring system platform managing power plants. It supplies power generation and consumption for distributors. It's convenient to visit real time and historical data via web or IOS & Android APP anytime and anywhere. This easy-to-use platform makes monitoring of PV systems simple and convenient, far reducing time and costs as well.

Meet more data needs

-  Monitoring global power stations/equipments
-  Managing lifecycle of power station
-  Analyzing health of assets