

## Headquarters

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### Shenzhen Factory (Pingshan)

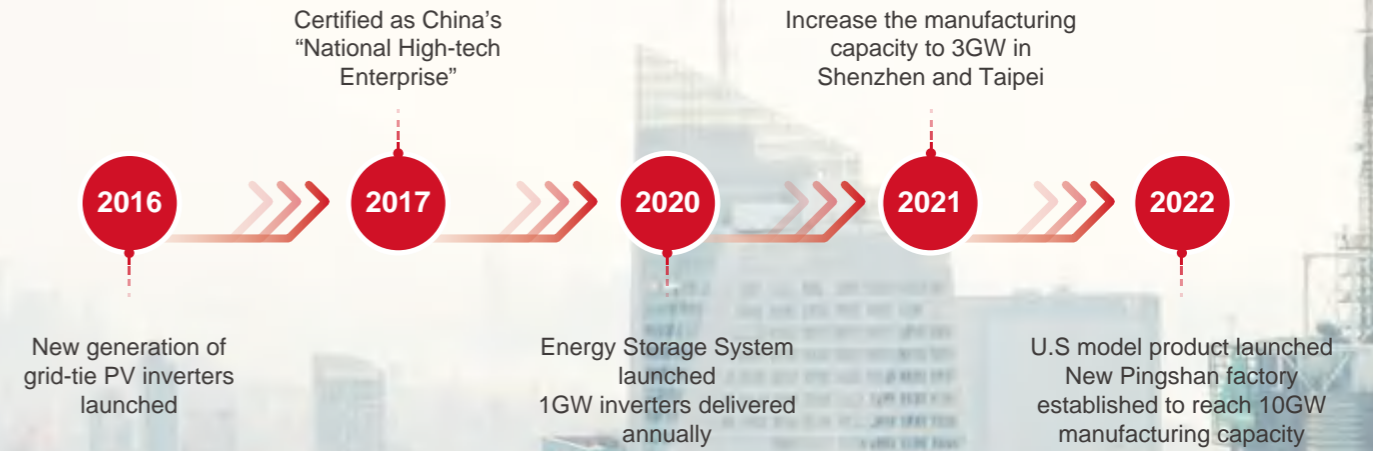
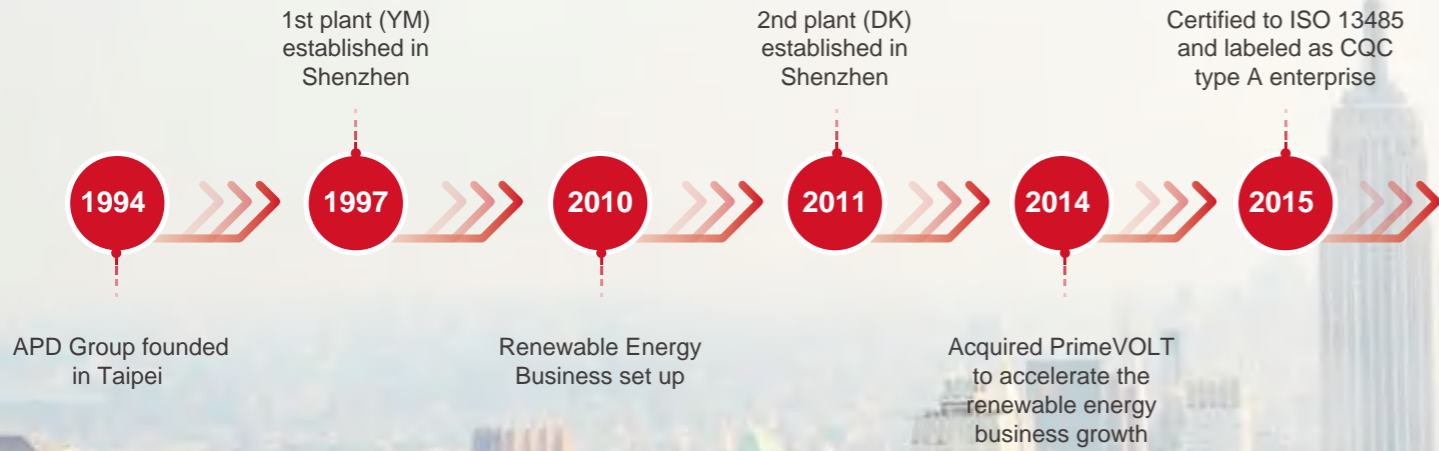
101-501, Building D, BC Park, No.18 Xiusha Rd,  
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**FOCUS ON  
RENEWABLE ENERGY  
TO A GREENER FUTURE**





# COMPANY MILESTONES



## About PrimeVOLT

Headquartered in Taiwan, PrimeVOLT is the renewable energy business division of the Asian Power Device Group, specialized in PV inverter design and manufacturing. It benefits from its strong R&D capabilities. By cultivating Taiwan's market over the years, PrimeVOLT has become the local inverter manufacturer who provides the most reliable products with high quality and performance, as well as offers professional services through localized support. PrimeVOLT aims to create a sustainable green future with you by offering competitive inverter solutions.

### RESIDENTIAL STORAGE SOLUTION

PrimeVOLT debuted the new AC Coupled inverter, Hybrid inverter as well as other new models. The new energy storage household products feature powerful charge controlling capabilities up to 100A, and the maximum input power up to 9,000W, which can greatly increase the amount of self-generation electricity and smartly prioritize the self-consumption of stored energy.



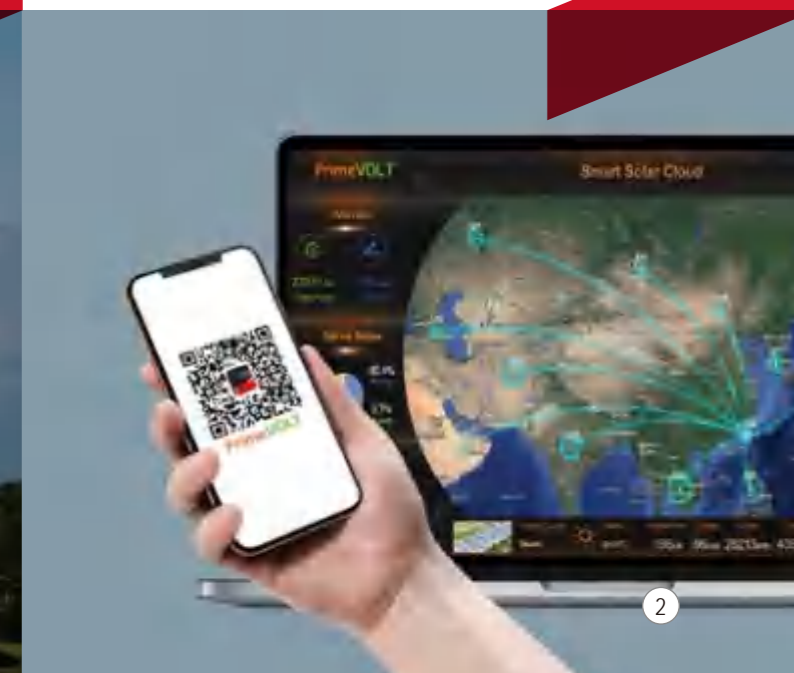
### ON-GRID PV INVERTER

PrimeVOLT's on-grid PV inverter products include 2~125KW series. They can be applied to household, commercial and industrial power stations, suburban and large ground power stations. In response to the demand of increasing PV module current, PrimeVOLT upgraded the string current of all inverters to make sure the products can flawlessly adapt to 500W+ high power module applications.



### SMART CLOUD MONITORING SYSTEM

PrimeVOLT smart cloud monitoring system provides a variety of wired or wireless access methods, as well as two kinds of clients-smart phone APP (PVTouch) and PC Internet browser, suitable for residential/commercial/storage applications. Based on cloud services in Europe, America, Singapore and China, customers can monitor the operation of photovoltaic power plant systems anytime and anywhere.



# OUR COMPETITIVE ADVANTAGES



## APD Group - The leader in power electronics and renewable energy technologies

With around thirty years of cultivating its business in the power industry, APD Group has become a technological leader in specific fields of applications thanks to its capabilities in high-quality and flexible production and designs.

APD Group is committed to continual innovation and sustainable operations as it further cements its place as a leader in the global power electronics and renewable energy markets and gives people the high-efficiency, energy-saving technology they need to achieve a greener future.



## Strong R&D strength

- The pioneers and practitioners of the string inverter
- Dual research centers in both Taipei and Shenzhen
- Integrated Product Development (IPD) process
- DFMEA & PFMEA-guaranteed product reliability



## Comprehensive Quality Management

- ISO13485 for medical equipment level quality system
- Comprehensive QC and GP system throughout product development and production processes
- Endorsed by the leading industry players



## Advanced Manufacturing Capabilities

- Dual manufacturing bases in both Taipei and Shenzhen
- Full industry process ranging from PCBA manufacturing to burn-in tests
- Highly-automated production equipment and flexible production line

## FOOTPRINT

Manufacturing Capacity

DK factory: **3.6GW**  
Per Year

Pingshan factory: **10GW**  
Per Year

\* After moving to Pingshan factory in 2022

Innovation Center &  
2 factories in Taiwan

R&D Center &  
2 factories in Shenzhen

## ON-GRID INVERTER RESIDENTIAL USE

SINGLE PHASE

THREE PHASE



- ▶ PV 2/3/3.6KTL-S1/G2P
- ▶ PV 4/5/6KTL-D1/G2P



- ▶ PV 7/8/10KTL-D1P



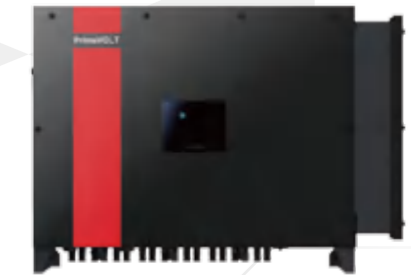
- ▶ PV 5/6/8/10/12/15KTL-D3/G2
- ▶ PV 10/15KTL-D3/G2P
- ▶ PV 17/20/22/25KTL-D3/G2

## ON-GRID INVERTER I & C USE

THREE PHASE



- ▶ PV 50/60KTL



- ▶ PV 110KTL-M3/125KTL-MH3

## ENERGY STORAGE SYSTEM

SINGLE PHASE

THREE PHASE



- ▶ PV 4.6/5/6KAC
- ▶ PV 4.6/5/6KHB-60
- ▶ PV 4.6/5/6KHB-120



- ▶ PV 5/6/8/10KHB-D3

## SINGLE PHASE & SINGLE MPPT

### PV 2/3/3.6KTL-S1/G2P

Application: Family Use



#### SUPERIOR EFFICIENCY

- Maximum efficiency 97.8%
- String current 15A, compatible with high power modules
- 150% PV configuration, 110% output overload



#### HIGH RELIABILITY

- IP65 waterproof and dustproof, C5 anti-corrosion
- Compatible with wide power grid voltage and high harmonic power grid environment
- DC /AC SPD optional, AFCI detection optional



#### INTELLIGENT MAINTENANCE

- Remote configuration and upgrade
- Supports export power control

Model	PV 2KTL-S1/G2P	PV 3KTL-S1/G2P	PV 3K6TL-S1/G2P
<b>Efficiency</b>			
Max. Efficiency	97.5%	97.8%	97.8%
European Efficiency	96.5%	96.8%	96.8%
<b>Input (PV)</b>			
Max. Input Voltage	500V		
Max. PV configuration (STC)	150%		
Rated Input Voltage	360V		
Max. Input Current	15A		
Max.Short Circuit Current	20A		
Start Input Voltage	70V		
MPPT Operating Voltage Range	50V-490V		
Max. Number of PV Strings	1		
No. of MPPTs	1		
<b>Output (Grid)</b>			
Rated AC Active Power	2,000W	3,000W	3,600W
Rated Apparent Power	2,000VA	3,000VA	3,600VA
Max. AC Apparent Power	2,200VA	3,300VA	3,600VA
Max. AC Active Power (PF=1)	2,200W	3,300W	3,600W
Max. AC Output Current	10A	15A	16A
Rated AC Voltage	220V/230V, L+N+PE		
AC Voltage Range <sup>①</sup>	160V-300V (Adjustable)		
Rated Grid Frequency	50Hz / 60Hz		
Grid Frequency Range <sup>②</sup>	45Hz-55Hz / 55Hz-65Hz (Adjustable)		
THDI	<3% (Rated Power)		
DC Current Injection	<0.5%In		
Power Factor	>0.99 Rated power (Adjustable 0.8 LD-0.8 LG)		
<b>Protection</b>			
DC switch	Support		
Anti-islanding protection	Support		
AC overcurrent protection	Support		
AC short circuit protection	Support		
DC reverse connection	Support		
Surge Arrester	DC Type III (Optional) / AC Type III		
Insulation detection	Support		
Leakage current protection	Support		
<b>General</b>			
Topology	Transformerless		
IP Rating	IP65		
Night Self Consumption	<1W		
Cooling	Natural cooling		
Operating Temperature Range	-25°C-60°C		
Relative Humidity Range	0-100%		
Max. Operating Altitude	4000m		
Noise (typical)	30dB		
Dimensions (W*H*D)	320mm*344mm*137mm		
Weight	6.5Kg		
<b>HMI &amp; COM</b>			
Display	Wireless & APP+LED, LCD (Optional)		
Communication	Optional: WiFi / GPRS / RS485		
<b>Certification</b>			
Safety	IEC62109-1, IEC62109-2		
Grid Code	DE-AR-N 4105, EN 50549-1, CEI 0-21, UNE 206001/206002-1, IEC 61727/62116, ORDINANCE n°140 2022, IEEE 1547, AS 4777, VDE 0126-1		
Warranty	10 Years		

Remarks: • <sup>①②</sup>The range of output voltage and frequency may vary depending upon different grid codes.  
• Specifications are subject to change without advance notice.



# SINGLE PHASE & DUAL MPPT

## PV 4/5/6KTL-D1/G2P

Application: Family Use



### SUPERIOR EFFICIENCY

- Maximum efficiency 98.2%
- String current 15A, compatible with high power modules
- 150% PV configuration, 110% output overload



### HIGH RELIABILITY

- IP65 waterproof and dustproof, C5 anti-corrosion
- Compatible with wide power grid voltage and high harmonic power grid environment
- DC /AC SPD optional, AFCI detection optional



### INTELLIGENT MAINTENANCE

- Remote configuration and upgrade
- Supports export power control

Model	PV 4KTL-D1/G2P	PV 5KTL-D1/G2P	PV 6KTL-D1/G2P
<b>Efficiency</b>			
Max. Efficiency	98.0%	98.2%	98.2%
European Efficiency	97.0%	97.3%	97.4%
<b>Input (PV)</b>			
Max. Input Voltage	550V		
Max. PV configuration (STC)	150%		
Rated Input Voltage	360V		
Max. Input Current	30A (2*15A)		
Max.Short Circuit Current	40A (2*20A)		
Start Input Voltage	90V		
MPPT Operating Voltage Range	70V-540V		
Max. Number of PV Strings	2 (1/1)		
No. of MPPTs	2		
<b>Output (Grid)</b>			
Rated AC Active Power	4,000W	5,000W	6,000W
Rated Apparent Power	4,000VA	5,000VA	6,000VA
Max. AC Apparent Power	4,400VA	5,500VA	6,000VA
Max. AC Active Power (PF=1)	4,400W	5,500W	6,000W
Max. AC Output Current	20A	25A	27.3A
Rated AC Voltage	220V/230V, L+N+PE		
AC Voltage Range <sup>①</sup>	160V-300V (Adjustable)		
Rated Grid Frequency	50Hz / 60Hz		
Grid Frequency Range <sup>②</sup>	45Hz-55Hz / 55Hz-65Hz (Adjustable)		
THDI	<3% (Rated Power)		
DC Current Injection	<0.5%In		
Power Factor	>0.99 Rated power (Adjustable 0.8 LD-0.8 LG)		
<b>Protection</b>			
DC switch	Support		
Anti-islanding protection	Support		
AC overcurrent protection	Support		
AC short circuit protection	Support		
DC reverse connection	Support		
Surge Arrester	DC Type III (Optional) / AC Type III		
Insulation detection	Support		
Leakage current protection	Support		
<b>General</b>			
Topology	Transformerless		
IP Rating	IP65		
Night Self Consumption	<1W		
Cooling	Natural cooling		
Operating Temperature Range	-25°C-60°C		
Relative Humidity Range	0-100%		
Max. Operating Altitude	4000m		
Noise (typical)	30dB		
Dimensions (W*H*D)	350mm*347mm*137mm		
Weight	8.5Kg		
<b>HMI &amp; COM</b>			
Display	Wireless & APP+LED, LCD (Optional)		
Communication	Optional: WiFi / GPRS / RS485		
<b>Certification</b>			
Safety	IEC62109-1, IEC62109-2		
Grid Code	DE-AR-N 4105, EN 50549-1, CEI 0-21, UNE 206001/206002-1, IEC 61727/62116, ORDINANCE n°140 2022, IEEE 1547, AS 4777, VDE 0126-1		
Warranty	10 Years		

Remarks : • <sup>①②</sup>The range of output voltage and frequency may vary depending upon different grid codes.  
• Specifications are subject to change without advance notice.

# SINGLE PHASE & DUAL MPPT

## PV 7/8/10KTL-D1P

Application: Family Use



### SUPERIOR EFFICIENCY

- Maximum efficiency 98.2%
- String current 18A, compatible with high power modules
- 150% PV configuration, 110% output overload



### HIGH RELIABILITY

- IP65 waterproof and dustproof, C5 anti-corrosion
- Compatible with wide power grid voltage and high harmonic power grid environment
- DC /AC SPD optional, AFCI detection optional



### INTELLIGENT MAINTENANCE

- Remote configuration and upgrade
- Supports export power control

Model	PV 7KTL-D1P	PV 8KTL-D1P	PV 10KTL-D1P
<b>Efficiency</b>			
Max. Efficiency	98.2%	98.2%	98.2%
European Efficiency	97.4%	97.5%	97.6%
<b>Input (PV)</b>			
Max. Input Voltage	550V / 600V		
Max. PV configuration (STC)	150%		
Rated Input Voltage	360V		
Max. Input Current	36A (2*18A)	50A (2*15A+20A)	
Max.Short Circuit Current	52A (2*26A)	66A (2*20A+26A)	
Start Input Voltage	90V		
MPPT Operating Voltage Range	60V-550V		
Max. Number of PV Strings	2 (1/1)	3 (2/1)	
No. of MPPTs	2		
<b>Output (Grid)</b>			
Rated AC Active Power	7,000W	8,000W	10,000W
Rated Apparent Power	7,000VA	8,000VA	10,000VA
Max. AC Apparent Power	7,700VA	8,800VA	10,000VA
Max. AC Active Power (PF=1)	7,700W	8,800W	10,000W
Max. AC Output Current	35A	40A	45.5A
Rated AC Voltage	220V/230V, L+N+PE		
AC Voltage Range <sup>①</sup>	160V-300V (Adjustable)		
Rated Grid Frequency	50Hz / 60Hz		
Grid Frequency Range <sup>②</sup>	45Hz-55Hz / 55Hz-65Hz (Adjustable)		
THDI	<3% (Rated Power)		
DC Current Injection	<0.5%In		
Power Factor	>0.99 Rated power (Adjustable 0.8 LD-0.8 LG)		
<b>Protection</b>			
DC switch	Support		
Anti-islanding protection	Support		
AC overcurrent protection	Support		
AC short circuit protection	Support		
DC reverse connection	Support		
Surge Arrester	DC Type III (Optional) / AC Type III		
Insulation detection	Support		
Leakage current protection	Support		
<b>General</b>			
Topology	Transformerless		
IP Rating	IP65		
Night Self Consumption	<1W		
Cooling	Natural cooling		
Operating Temperature Range	-25°C-60°C		
Relative Humidity Range	0-100%		
Max. Operating Altitude	4000m		
Noise (typical)	30dB		
Dimensions (W*H*D)	400mm*450mm*170mm		
Weight	16Kg		
<b>HMI &amp; COM</b>			
Display	Wireless & APP+LED, LCD (Optional)		
Communication	Optional: WiFi / GPRS / RS485		
<b>Certification</b>			
Safety	IEC62109-1, IEC62109-2		
Grid Code	DE-AR-N 4105, EN 50549-1, CEI 0-21, UNE 206001/206002-1, IEC 61727/62116, ORDINANCE n°140 2022, IEEE 1547, AS 4777, VDE 0126-1		
Warranty	10 Years		

Remarks : • <sup>①②</sup>The range of output voltage and frequency may vary depending upon different grid codes.  
• Specifications are subject to change without advance notice.

# THREE PHASE & DUAL MPPT

## PV 5/6/8/10/12/15KTL-D3/G2

Application: Small-sized Industrial and Residential Use



### SUPERIOR EFFICIENCY

- Maximum efficiency 98.3%
- Max String Current 20A, compatible with 600W+ modules
- 150% PV configuration, 110% output overload



### HIGH RELIABILITY

- Die-cast aluminum case, IP66 waterproof and dustproof, C5 anti-corrosion
- DC /AC SPD, AFCI detection optional
- Compatible with wide power grid voltage and high harmonic power grid environment



### INTELLIGENT MAINTENANCE

- App quick commissioning
- Remote configuration and upgrade
- Supports export control

Model	PV 5KTL-D3/G2	PV 6KTL-D3/G2	PV 8KTL-D3/G2	PV 10KTL-D3/G2	PV 12KTL-D3/G2	PV 15KTL-D3/G2
<b>Efficiency</b>						
Max. Efficiency	98.2%	98.2%	98.2%	98.2%	98.3%	98.3%
European Efficiency	97.8%	97.8%	97.8%	97.8%	97.8%	97.8%
<b>Input (PV)</b>						
Max. Input Voltage	1100V					
Max. PV configuration	150%					
Rated Input Voltage	620V					
Max. Input Current	2*15A			2*15A+15A		
Max.Short Circuit Current	2*20A			2*20A+20A		
Start Input Voltage	180V					
MPPT Operating Voltage Range	160V-1000V					
Max. Number of PV Strings	2 (1/1)			3 (2/1)		
No. of MPPTs	2					
<b>Output (Grid)</b>						
Rated AC Active Power	5,000W	6,000W	8,000W	10,000W	12,000W	15,000W
Rated Apparent Power	5,000VA	6,000VA	8,000VA	10,000VA	12,000VA	15,000VA
Max. AC Apparent Power	5,500VA	6,600VA	8,800VA	11,000VA	13,200VA	16,500VA
Max. AC Active Power (PF=1)	5,500W	6,600W	8,800W	11,000W	13,200W	16,500W
Max. AC Output Current	3*8.4A	3*10.1A	3*13.4A	3*16.8A	3*20.2A	3*25.3A
Rated AC Voltage	380V / 400V / 415V, 3W+N+PE					
AC Voltage Range <sup>①</sup>	260V-510V (Adjustable)					
Rated Grid Frequency	50Hz / 60Hz					
Grid Frequency Range <sup>②</sup>	45Hz-55Hz / 55Hz-65Hz (Adjustable)					
THDI	<3%@Rated Power					
DC Current Injection	<0.5%@Rated Current					
Power Factor	> 0.99 Rated power (Adjustable 0.8 LD - 0.8 LG)					
<b>Protection</b>						
DC switch	Support					
Anti-islanding protection	Support					
AC overcurrent protection	Support					
AC short circuit protection	Support					
DC reverse connection	Support					
Surge Arrester	AC Type III (Type II optional) / DC Type III (Type II optional)					
Insulation detection	Support					
String current detection	Support					
Leakage current protection	Support					
<b>General</b>						
Topology	Transformerless					
IP Rating	IP66					
Night Self Consumption	<1W					
Cooling	Natural cooling					
Operating Temperature Range	-25°C-60°C					
Relative Humidity Range	0-100%					
Max. Operating Altitude	4000m					
Noise	<30dB					
Dimensions (W*H*D)	398mm*460mm*190mm					
Weight	23Kg					
<b>HMI &amp; COM</b>						
Display	Wireless & APP + LED, LCD (Optional)					
Communication	RS485, Optional: WiFi / GPRS / 4G					
<b>Certification</b>						
Safety	IEC62109-1, IEC62109-2					
Grid Code	VDE-AR-N 4105, EN 50549-1, CEI 0-21, UNE 206006/206007-1, UNE 217001, IEC 61727/62116, AS 4777					
Warranty	10 Years					

Remarks : • <sup>①②</sup>The range of output voltage and frequency may vary depending upon different grid codes.  
• Specifications are subject to change without advance notice.

## THREE PHASE & DUAL MPPT

PV 10/15KTL-D3/G2P, PV 17/20/22/25KTL-D3/G2

Application: Small-sized Industrial and Residential Use



### SUPERIOR EFFICIENCY

- Maximum efficiency 98.4%
- Max String Current 20A, compatible with 600W+ modules
- 150% PV configuration, 110% output overload



### HIGH RELIABILITY

- Die-cast aluminum case, IP66 waterproof and dustproof, C5 anti-corrosion
- DC /AC SPD, AFCI detection optional
- Compatible with wide power grid voltage and high harmonic power grid environment



### INTELLIGENT MAINTENANCE

- App quick commissioning
- Remote configuration and upgrade
- Supports export control

Model	PV 10KTL-D3/G2P	PV 15KTL-D3/G2P	PV 17KTL-D3/G2	PV 20KTL-D3/G2	PV 22KTL-D3/G2	PV 25KTL-D3/G2
<b>Efficiency</b>						
Max. Efficiency	98.3%	98.4%	98.4%	98.4%	98.4%	98.4%
European Efficiency	97.8%	98.0%	98.0%	98.0%	98.0%	98.0%
<b>Input (PV)</b>						
Max. Input Voltage	1100V					
Max. PV configuration	150%					
Rated Input Voltage	620V					
Max. Input Current	30A+15A					2*30A
Max.Short Circuit Current	40A+20A					2*40A
Start Input Voltage	180V					
MPPT Operating Voltage Range	160V-1000V					
Max. Number of PV Strings	3 (2/1)					4 (2/2)
No. of MPPTs	2					
<b>Output (Grid)</b>						
Rated AC Active Power	10,000W	15,000W	17,000W	20,000W	22,000W	25,000W
Rated Apparent Power	10,000VA	15,000VA	17,000VA	20,000VA	22,000VA	25,000VA
Max. AC Apparent Power	11,000VA	16,500VA	18,700VA	22,000VA	24,200VA	25,000VA
Max. AC Active Power (PF=1)	11,000W	16,500W	18,700W	22,000W	24,200W	25,000W
Max. AC Output Current	3*16.8A	3*25.3A	3*28.6A	3*33.7A	3*37A	3*39.8A
Rated AC Voltage	380V / 400V / 415V, 3W+N+PE					
AC Voltage Range <sup>①</sup>	260V-510V (Adjustable)					
Rated Grid Frequency	50Hz / 60Hz					
Grid Frequency Range <sup>②</sup>	45Hz-55Hz / 55Hz-65Hz (Adjustable)					
THDI	<3%@Rated Power					
DC Current Injection	<0.5%@Rated Current					
Power Factor	> 0.99 Rated power (Adjustable 0.8 LD - 0.8 LG)					
<b>Protection</b>						
DC switch	Support					
Anti-islanding protection	Support					
AC overcurrent protection	Support					
AC short circuit protection	Support					
DC reverse connection	Support					
Surge Arrester	AC Type III (Type II optional) / DC Type III (Type II optional)					
Insulation detection	Support					
String current detection	Optional					
Leakage current protection	Support					
<b>General</b>						
Topology	Transformerless					
IP Rating	IP66					
Night Self Consumption	<1W					
Cooling	Natural cooling					Fan cooling
Operating Temperature Range	-25°C-60°C					
Relative Humidity Range	0-100%					
Max. Operating Altitude	4000m					
Noise	<45dB					
Dimensions (W*H*D)	398mm*460mm*190mm					
Weight	23Kg					
<b>HMI &amp; COM</b>						
Display	Wireless & APP +LED, LCD (Optional)					
Communication	RS485, Optional: WiFi / GPRS / 4G					
<b>Certification</b>						
Safety	IEC62109-1, IEC62109-2					
Grid Code	VDE-AR-N 4105, EN 50549-1, CEI 0-21, UNE 206006/206007-1, UNE 217001, IEC 61727/62116, AS 4777					
Warranty	10 Years					

Remarks : • <sup>①②</sup>The range of output voltage and frequency may vary depending upon different grid codes.  
• Specifications are subject to change without advance notice.



# THREE PHASE & QUAD MPPT

## PV 50/60KTL

Application: Large-scale Industrial and Commercial Sites



### SUPERIOR EFFICIENCY

- Maximum efficiency 99.0%
- String current 13A, compatible with high power modules
- 150% PV configuration, 110% output overload



### HIGH RELIABILITY

- Integrated type II DC/AC SPD
- APP for local settings & display
- High quality components use



### INTELLIGENT MAINTENANCE

- String level I/V detect (Optional)
- Remote configuration and upgrade
- Supports export control

Model	PV 50KTL	PV 60KTL
<b>Efficiency</b>		
Max. Efficiency	99.0%	
European Efficiency	98.5%	
<b>Input (PV)</b>		
Max. Input Voltage	1100V	
Max. PV configuration (STC)	150%	
Rated Input Voltage	620V	
Max. Input Current	130A (39A/39A/26A/26A)	156A (39A/39A/39A/39A)
Max. Short Circuit Current	150A (45A/45A/30A/30A)	180A (45A/45A/45A/45A)
Start Input Voltage	250V	
MPPT Operating Voltage Range	200V-1000V	
Max. Number of PV Strings	10 (3/3/2/2)	12 (3/3/3/3)
No. of MPPTs	4	
<b>Output (Grid)</b>		
Rated AC Active Power	50,000W	60,000W
Rated Apparent Power	50,000VA	60,000VA
Max. AC Apparent Power	55,000VA	66,000VA
Max. AC Active Power (PF=1)	55,000W	66,000W
Max. AC Output Current	3*76A	3*92A
Rated AC Voltage	380V/400V, 3W+N+PE	
AC Voltage Range <sup>①</sup>	277V-520V (Adjustable)	
Rated Grid Frequency	50Hz / 60Hz	
Grid Frequency Range <sup>②</sup>	45Hz-55Hz / 55Hz-65Hz (Adjustable)	
THDI	<3% (Rated Power)	
DC Current Injection	<0.5In	
Power Factor	>0.99 Rated power (Adjustable 0.8 LD - 0.8 LG)	
<b>Protection</b>		
DC switch	Support	
Anti-islanding protection	Support	
AC overcurrent protection	Support	
AC short circuit protection	Support	
DC reverse connection	Support	
Surge Arrester	DC Type II / AC Type II	
Insulation detection	Support	
Leakage current protection	Support	
<b>General</b>		
Topology	Transformerless	
IP Rating	IP65	
Night Self Consumption	<1W	
Cooling	Fan cooling	
Operating Temperature Range	-25°C-60°C	
Relative Humidity Range	0-100%	
Max. Operating Altitude	4000m	
Noise	<62dB	
Dimensions (W*H*D)	855mm*555mm*275mm	
Weight	73Kg	74Kg
<b>HMI &amp; COM</b>		
Display	Wireless & APP+LED, LCD (Optional)	
Communication	RS485, Optional: WiFi / GPRS / 4G / LAN	
<b>Certification</b>		
Safety	IEC62109-1, IEC62109-2	
Grid Code	VDE-AR-N 4105, EN 50549-1, CEI 0-21, UNE 206006/206007-1, UNE 217001, IEC 61727/62116, AS 4777	
Warranty	10 Years	

Remarks : • <sup>①②</sup>The range of output voltage and frequency may vary depending upon different grid codes.  
• Specifications are subject to change without advance notice.

# THREE PHASE & MULTIPLE MPPT

## PV 110KTL-M3/125KTL-MH3

Application: Large-scale Industrial and Commercial Sites



### SUPERIOR EFFICIENCY

- Maximum efficiency 98.8%
- Compatible with high power modules (500W/600W+)
- 150% PV configuration, 110% output overload



### HIGH RELIABILITY

- Integrated type II DC/AC SPD, AFCI detection optional
- IP66 waterproof and dustproof, C5 anti-corrosion
- High quality components use



### INTELLIGENT MAINTENANCE

- String level I/V detect (Optional)
- Remote configuration and upgrade
- Supports export control

Model	PV 110KTL-M3	PV 125KTL-MH3
<b>Efficiency</b>		
Max. Efficiency	98.6%	98.8%
European Efficiency	98.2%	98.4%
<b>Input (PV)</b>		
Max. Input Voltage	1100V	
Max. PV configuration	150%	
Rated Input Voltage	620V	
Max. Input Current	3*40A+6*32A	
Max. Short Circuit Current	3*50A+6*45A	
Start Input Voltage/ Min. Operating Voltage	250V / 200V	
MPPT Operating Voltage Range	200V-1000V	
Max. Number of PV Strings	18 (9*2)	
No. of MPPTs	9	
<b>Output (Grid)</b>		
Rated AC Active Power	110,000W	125,000W
Rated Apparent Power	110,000VA	125,000VA
Max. AC Apparent Power	121,000VA	137,500VA
Max. AC Active Power (PF=1)	121,000W	137,500W
Max. AC Output Current	3*185.9A	3*165.5A
Rated AC Voltage	400V, 3W+N+PE	480V, 3W+PE
AC Voltage Range*	277V-520V (Adjustable)	300V-550V (Adjustable)
Rated Grid Frequency	50Hz / 60Hz	
Grid Frequency Range**	45Hz-55Hz / 55Hz-65Hz (Adjustable)	
THDI	<3% (Rated Power)	
DC Current Injection	<0.5%In	
Power Factor	> 0.99 Rated power (Adjustable 0.8 LD - 0.8 LG)	
<b>Protection</b>		
DC switch	Support	
Anti-islanding protection	Support	
AC overcurrent protection	Support	
AC short circuit protection	Support	
DC reverse connection	Support	
Surge Arrester	DC Type II / AC Type II	
Insulation detection	Support	
Leakage current protection	Support	
AFCI	Optional	
PID Recovery	Optional	
PV String monitoring	Optional	
Night load consumption monitoring	Optional	
<b>General</b>		
Topology	Transformerless	
IP Rating	IP66	
Night Self Consumption	< 10W	
Cooling	Fan cooling	
Operating Temperature Range	-25°C-60°C	
Relative Humidity Range	0-100%	
Max. Operating Altitude	4000m	
Noise	<75dB	
Dimensions (W*H*D)	850mm*670mm*356mm	
Weight	85Kg	
<b>HMI &amp; COM</b>		
Display	Wireless & APP +LED, LCD (Optional)	
Communication	RS 485, Optional: WiFi / GPRS / 4G / LAN	
<b>Certification</b>		
Safety	IEC62109-1, IEC62109-2	
Grid Code	VDE-AR-N 4105, VDE-AR-N 4110, EN 50549-1/-2, CEI 0-21, UNE 206006/206007-1, UNE 217001, AS 4777	
Warranty	10 Years	

Remarks: • The range of output voltage and frequency may vary depending upon different grid codes.  
 • Specifications are subject to change without advance notice.

# SINGLE PHASE AC COUPLED INVERTER

## PV 4.6/5/6KAC

Energy Storage Inverter



### HIGH YIELD

- Max Charge/Discharge efficiency 94%
- Convenient to retrofit existing grid-connected systems increase the proportion of spontaneous use



### HIGH RELIABILITY

- With BMS system to ensure high battery life
- Natural cooling design



### INTELLIGENT MAINTENANCE

- Compatible with lead-acid batteries and lithium battery energy storage systems
- Remote configuration and upgrade

Model	PV 4K6AC	PV 5KAC	PV 6KAC
<b>Efficiency</b>			
Max. efficiency (Max. charge/discharge)	94.0%		
<b>Input (BAT)</b>			
Compatible battery type	Lithium-ion / Lead-acid		
Nominal battery voltage	48V		
Battery voltage range	40V-60V		
Max. charge/discharge current	100A / 100A	100A / 100A	120A / 120A
Max. charge/discharge power	5000W / 5000W	5000W / 5000W	6000W / 6000W
Lithium battery charge curve	Self-adaption to BMS		
<b>Output (Grid)</b>			
Nominal AC output power	4600W	5000W	6000W
Rated Apparent Power	4600VA	5000VA	6000VA
Max. AC output apparent power	4600VA	5500VA	6000VA
Max. AC output power (PF=1)	4600W	5500W	6000W
Max. AC output current	22A	25A	27.2A
Rated AC voltage	220V / 230V		
AC voltage range	150V-300V (Adjustable)		
Rated grid frequency	50Hz / 60Hz		
AC frequency range	45Hz-55Hz/55Hz-65Hz (Adjustable)		
Grid connection	Single phase		
Power factor	> 0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)		
THDI	<3% (Rated Power)		
<b>Output (Back up)</b>			
Nominal output voltage	230V		
Nominal output frequency	50Hz / 60Hz		
Nominal output power	4600W	5000W	5000W
Nominal output current	20A	21.7A	21.7A
Transfer time	10ms (typ), 20ms (max)		
THDV	<3% @100% R Load		
<b>Protection</b>			
Protection category	Class I		
Anti-islanding protection	Support		
AC overcurrent protection	Support		
AC short circuit protection	Support		
Surge Arrester	AC Type III		
Leakage current protection	Support		
AC overvoltage category	III		
<b>General</b>			
Max. operation altitude	4000m		
Noise emission	<35dB		
Ingress protection degree	IP65		
Operating temperature range	-25°C~60°C		
Relative humidity	0~100%		
Cooling concept	Natural Cooling		
Mounting	Wall bracket		
Dimensions (W*H*D)	515mm*485mm*175mm		
Weight	20Kg		
Battery connection way	Dedicated DC connector		
AC connection way (grid & back up)	Dedicated AC connector		
<b>HMI &amp; COM</b>			
Display	LED+APP		
Communication interface	RS485/CAN (for BMS), RS485, USB, DRM/RS485 (for Meter), Optional: WiFi/GPRS/LAN		
<b>Certification</b>			
Grid	VDE-AR-N4105, IEC 61727/62116, AS 4777, EN 50549-1, G99, CEI 0-21, NRS 097-2-1		
Safety	IEC62040-1, IEC62477-1		
Warranty	10 Years		

Remarks : • The range of output voltage and frequency may vary depending upon different grid codes.  
• Specifications are subject to change without advance notice.



# SINGLE PHASE HYBRID INVERTER

## PV 4.6/5/6KHB-60, PV 4.6/5/6KHB-120



Energy Storage Inverter



### HIGH YIELD

- Max efficiency 97.3%, Battery efficiency 94%
- Max. Charge/Discharge Current 120A
- Reasonable energy control to increase the proportion of spontaneous use



### HIGH RELIABILITY

- With BMS system to ensure high battery life
- Natural cooling design



### INTELLIGENT MAINTENANCE

- Compatible with lead-acid batteries and lithium battery energy storage systems
- Remote configuration and upgrade

Model	PV 4K6HB-60	PV 4K6HB-120	PV 5KHB-60	PV 5KHB-120	PV 6KHB-60	PV 6KHB-120
<b>Efficiency</b>						
Max. efficiency (PV to AC)	97.3%					
Max. efficiency (BAT to AC)	94.0%					
<b>Input (PV)</b>						
MAX PV Power	9000W					
Max PV voltage	550V					
Max input current (input A/input B)	15A/15A					
Max short current (input A/input B)	20A/20A					
Start operating voltage	90V					
MPPT voltage range	70V-520V					
No. of MPPT trackers	2					
String per MPP tracker	1					
<b>Input (BAT)</b>						
Compatible battery type	Lithium-ion / Lead-acid					
Nominal battery voltage	48V					
Battery voltage range	40V-60V					
Max. charge/discharge current	60A/60A	120A/120A	60A/60A	120A/120A	60A/60A	120A/120A
Max. charge/discharge power	3000W/3000W	5000W/5000W	3000W/3000W	5000W/5000W	3000W/3000W	6000W/6000W
Lithium battery charge curve	Self-adaption to BMS					
<b>Output (Grid)</b>						
Nominal AC output power	4600W	4600W	5000W	5000W	6000W	6000W
Rated Apparent Power	4600VA	4600VA	5000VA	5000VA	6000VA	6000VA
Max. AC output apparent power	4600VA	4600VA	5500VA	5500VA	6000VA	6000VA
Max. AC output power (PF=1)	4600W	4600W	5500W	5500W	6000W	6000W
Max. AC output current	22A	22A	25A	25A	27.2A	27.2A
Rated AC voltage	220V / 230V					
AC voltage range	150V-300V (Adjustable)					
Rated grid frequency	50Hz / 60Hz					
AC frequency range	45Hz-55Hz/55Hz-65Hz (Adjustable)					
Grid connection	Single phase					
Power factor	> 0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)					
THDI	<3% (Rated Power)					
<b>Output (Back up)</b>						
Nominal output voltage	230V					
Nominal output frequency	50Hz / 60Hz					
Nominal output power	3000W	4600W	3000W	5000W	3000W	6000W
Nominal output current	13A	20A	13A	21.7A	13A	26A
Transfer time	10ms (typ) / 20ms (max)					
THDV	<3% @100% R Load					
<b>Protection</b>						
Protection category	Class I					
DC switch	Support					
Anti-islanding protection	Support					
AC overcurrent protection	Support					
AC short circuit protection	Support					
DC reverse connection	Support					
Surge Arrester	DC Type III, AC Type III					
Insulation detection	Support					
Leakage current protection	Support					
PV overvoltage category	II					
AC overvoltage category	III					
<b>General</b>						
Max. operation altitude	4000m					
Noise emission	<35dB					
Ingress protection degree	IP65					
Operating temperature range	-25°C ~ 60°C					
Relative humidity	0 ~ 100%					
Cooling concept	Natural Cooling					
Mounting	Wall bracket					
Dimensions (W*H*D)	515mm*485mm*175mm					
Weight	20Kg	25Kg	20Kg	25Kg	20Kg	25Kg
PV connection way	MC4/H4					
Battery connection way	Dedicated DC connector					
AC connection way (grid & back up)	Dedicated AC connector					
<b>HMI &amp; COM</b>						
Display	LED+APP					
Communication interface	RS485/CAN (for BMS), RS485, USB, DRM/RS485 (for Meter), Optional: WiFi/GPRS/LAN					
<b>Certification</b>						
Grid	VDE-AR-N4105, IEC 61727/62116, AS 4777, EN 50549-1, G99, CEI 0-21, NRS 097-2-1					
Safety	IEC62109-1&2, IEC62040-1, IEC62477-1					
Warranty	10 Years					

Remarks: • The range of output voltage and frequency may vary depending upon different grid codes.  
• Specifications are subject to change without advance notice.

# THREE PHASE HYBRID INVERTER

## PV 5/6/8/10KHB-D3



Energy Storage Inverter



### HIGH YIELD

- Max efficiency 98.4%, Battery efficiency 98%
- Max. Charge/Discharge Current 50A
- Reasonable energy control to increase the proportion of spontaneous use



### HIGH RELIABILITY

- With BMS system to ensure high battery life
- Natural cooling design



### INTELLIGENT MAINTENANCE

- Compatible with lead-acid batteries and lithium battery energy storage systems
- Remote configuration and upgrade

Model	PV 5KHB-D3	PV 6KHB-D3	PV 8KHB-D3	PV 10KHB-D3
<b>Efficiency</b>				
Max. efficiency (PV to AC)	98.2%	98.2%	98.4%	98.4%
Eur. efficiency (PV to AC)	97.2%	97.2%	97.9%	97.9%
Max. efficiency (BAT)	98.0%			
<b>Input (PV)</b>				
MAX PV Power	8000W	9000W	12000W	15000W
Max PV voltage	1000V			
Max input current (input A/input B)	15A/15A	15A/15A	20A/30A	20A/30A
Max short current (input A/input B)	20A/20A		30A/40A	
MPPT voltage range	160V-950V			
No. of MPPT trackers	2			
String per MPP tracker	1+1		1+2	
<b>Input (BAT)</b>				
Compatible battery type	Lithium-ion / Lead-acid			
Nominal battery voltage	200V-600V			
Battery voltage range	150V-600V			
Max. charge/discharge current	25A/25A	25A/25A	50A/50A	50A/50A
Max. charge/discharge power	8000W/5200W	9000W/6300W	12000W/10500W	15000W/10500W
Lithium battery charge curve	Self-adaption to BMS			
<b>Output (Grid)</b>				
Nominal AC output power	5000W	6000W	8000W	10000W
Rated Apparent Power	5000VA	6000VA	8000VA	10000VA
Max. AC output apparent power	5500VA	6600VA	8800VA	10000VA
Max. AC output power (PF=1)	5500W	6600W	8800W	10000W
Max. AC output current	3*8.3A	3*10A	3*13.3A	3*15.2A
Rated AC voltage	380V / 400V			
AC voltage range	277V-520V (Adjustable)			
Rated grid frequency	50Hz / 60Hz			
AC frequency range	45Hz-55Hz/55Hz-65Hz (Adjustable)			
Grid connection	Three phase			
Power factor	>0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)			
THDI	<3% (Rated Power)			
<b>Output (Back up)</b>				
Nominal output voltage	380V / 400V			
Nominal output frequency	50Hz / 60Hz			
Nominal output power	5000W	6000W	8000W	10000W
Nominal output current	3*7.6A	3*9.1A	3*12.2A	3*15.2A
Transfer time	10ms (typ) / 20ms (max)			
THDV	<3% (R Load), 5% (RCD Load)			
<b>Protection</b>				
Anti-islanding protection	Support			
AC overcurrent protection	Support			
AC short circuit protection	Support			
AC over-voltage protection	Support			
Surge Arrester	DC Type II, AC Type II			
Insulation detection	Support			
GFCI	Support			
AFCI	Optional			
RSD	Optional			
<b>General</b>				
Max. operation altitude	4000m			
Noise emission	30dB			
Ingress protection degree	IP65			
Operating temperature range	-25°C - 45°C			
Relative humidity	0 - 100%			
Cooling concept	Natural Cooling			
Mounting	Wall bracket			
Dimensions (W*H*D)	530mm*550mm*212mm			
Weight	26Kg			29Kg
PV connection way	MC4 / H4			
Battery connection way	Dedicated DC connector			
<b>HMI &amp; COM</b>				
Display	LED+APP (Bluetooth)			
Communication interface	BMS (CAN/RS485), Optional: WiFi/GPRS/4G/Ethernet, DI (DRM/RCR) / Meter (RS485), 1*DO, USB (Firmware upgrade)			
<b>Certification</b>				
Grid	IEC 61727, IEC 62116, EN 50549-1, VDE 4105, AS 4777, CEI 0-21, G98			
Safety	IEC62109-1&2, IEC62040-1, IEC62477-1			
Warranty	10 Years			

Remarks : • The range of output voltage and frequency may vary depending upon different grid codes.  
• Specifications are subject to change without advance notice.

# DATA LOGGER V1000+



- Built-in Web Server, supporting LAN monitoring
- 12 Months data storage
- Automatic network-clock synchronization
- RS485 Interface for the Connection of Inverters
- Standard RJ45 Path Cable
- Supports export control

Model	V1000+
Connection	Inverter: RS485 Router: RJ45
Access Number	40pcs
Transmission maximum distance	1200m
Display	LED
<b>Input</b>	
Input Voltage	Input: AC 90V-250V 50/60Hz Output: DC 5V
Static Current Consumption	1A
<b>General</b>	
Operating temperature	-25°C~55°C
Humidity	10%~95% relative humidity, no condensation
IP Rating	IP20
Dimension (L*W*H)	118mm*78mm*29mm
<b>Certification</b>	
Safety	FCC, CE, ROHS

## WIFI Communication Module PV WIFI-R



- Plug and play, quick and convenient
- Preferred monitoring solution for residential us

Model	PV WIFI-R
Connection	TTL
Standards	802.11 b/g/n
Transmission maximum distance	100m Unobstructed environment
Setting	APP/WEB
<b>Input</b>	
Input Voltage	DC 5V
Static Power Consumption	<1.6W
<b>General</b>	
Operating temperature	-25°C~60°C
Humidity	0%~100% relative humidity, no condensation
IP Rating	IP65
Dimension (L*W*H)	71.4mm*71mm*38mm
<b>Certification</b>	
Safety	FCC, CE, ROHS

## GPRS Communication Module PV GPRS-R



- Plug and play, quick and convenient
- Mobile internet monitoring, best suited for rural and remote areas

Model	PV GPRS-R
Connection	TTL
Standards	GSM/GPRS
Transmission maximum distance	---
Setting	Plug and Play
<b>Input</b>	
Input Voltage	DC 5V
Static Power Consumption	<2W
<b>General</b>	
Operating temperature	-25°C~60°C
Humidity	0%~100% relative humidity, no condensation
IP Rating	IP65
Dimension (L*W*H)	71.4mm*71mm*38mm
<b>Certification</b>	
Safety	FCC, CE, ROHS

## 4G Communication Module PV 4G-R



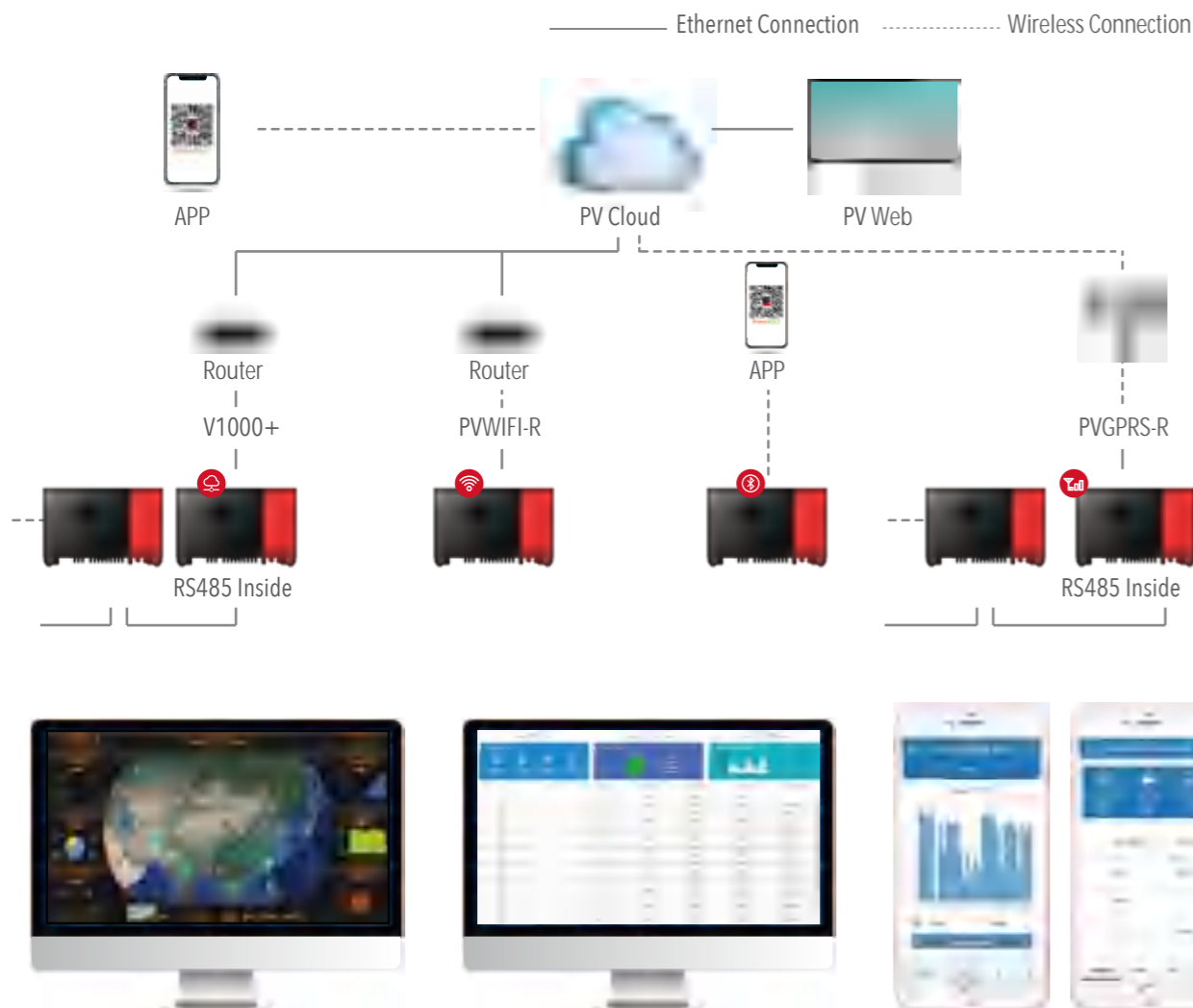
- Plug and play, quick and convenient
- Mobile internet monitoring, best suited for rural and remote areas

Model	PV 4G-R
Connection	TTL
Standards	FDD/TDD - LTE
Transmission maximum distance	---
Setting	Plug and Play
<b>Input</b>	
Input Voltage	DC 5V
Static Power Consumption	<3.5W
<b>General</b>	
Operating temperature	-25°C~60°C
Humidity	0%~90% relative humidity, no condensation
IP Rating	IP65
Dimension (L*W*H)	122.8mm*79mm*34mm
<b>Certification</b>	
Safety	FCC, CE, ROHS



# SMART SOLAR CLOUD

- For Residential/Commercial/Storage application
- Android/iOS APP comply with latest Android/iOS OS system
- Cloud service based in Europe, America, Singapore and China
- String Monitoring
- Intelligent data analysis



# PRESALES SUPPORT



SPECIALIZED  
PRODUCT CONSULTING



ONE-ON-ONE  
APPLICATION COACHING



SYSTEMATIC  
PRODUCT TRAINING

# AFTER SALE SERVICE



**SUFFICIENT  
WARRANTY**

- 63 months standard warranty for inverters  
Up to \$10M Product Liability
- Insurance for inverters shipped



**REPLACEMENT  
SERVICE**

- Spare units provided for quick replacement of the failure unit
- Remaining warranty period of defective unit transferred automatically



**RESPONSIVENESS**

- Quick response to any quality issues and service request from partners
- Expertise on various field applications to help problem solving

## GLOBAL NETWORK



## VISION & MISSION

Benefiting from its strong R&D capabilities, PrimeVOLT provides products with stable high performance, as well as offers professional services through localized support. We are committed to being the most reliable inverter manufacturer and leading the trend of global market.

## MARKETING PROMOTION



## APPLICATION REFERENCES



YUNLIN COUNTY, TAIWAN  
475.2MW



CHIAYI COUNTY, TAIWAN  
4MW



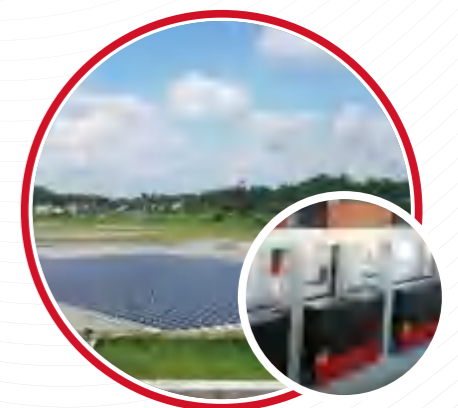
TAOYUAN CITY, TAIWAN  
5MW



SUAO, YILAN COUNTY, TAIWAN  
1MW



RUISUI TOWN,  
HUALIEN COUNTY, TAIWAN  
1.1KW



AGONG-DIAN RESERVOIR,  
KAOHSIUNG CITY, TAIWAN  
2.3MW