PrimeVOLT

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2023 V3-AU

ASIAN POWER DEVICES

PrimeVOLT

FOCUS ON RENEWABLE ENERGY TO A GREENER FUTURE

www.primevolt.com.au

COMPANY MILESTONES

1994 — APD Group founded in Taipei

1997 — 1st plant (YM) established in Shenzhen

2010 — **PrimeVOLT founded in Taipei**

2011 — 2nd plant (DK) established in Shenzhen

2014 — Acquired PrimeVOLT to accelerate the renewable energy business growth

2015 — Labeled as CQC type A enterprise

2016 — New generation of grid-tie PV inverters launched

2017 — Certified as China's "National High-tech Enterprise"

2020 — • Energy Storage System launched
• 1GW of inverters delivered annually

2021 — Expanded manufacturing capacity to 3GW in Shenzhen and Taipei

2022 — • U.S. model product launched
• New Pingshan factory established to reach 10GW manufacturing capacity

2023 — **PrimeVOLT New Energy Australia Pty Ltd founded**

About PrimeVOLT

Asian Power Devices (APD) was founded in Taiwan in 1994, mainly focusing on power-electronics and renewable energy technologies. It has earned an important position in the global market thanks to its world-class technologies, competitive products and outstanding service.

PrimeVOLT, established in 2010, has become one of the leading manufacturers of PV inverters in Taiwan and merged into APD Group as its renewable energy business division in August, 2014.

PrimeVOLT is specialized in the design and manufacturing of PV inverters by benefiting from its strong R&D capabilities. By cultivating Taiwan's market for many years, PrimeVOLT has become a global inverter manufacturer who provides the most reliable high quality products with excellent performance, as well as professional services through localized support.

With design and manufacturing experiences accumulated over the years, PrimeVOLT inverters, which feature "extraordinarily stable and ultimately perfect performance", were awarded the "Taiwan Excellent PV Award" of Ministry of Economic Affairs, ROC in 2021 and 2022.

It is worth mentioning that PrimeVOLT has ranked top 1 shipment for inverters in 2022. With the goal of developing more markets for branding, PrimeVOLT debuts in Australia in 2023 with local team, company and HQ in Sydney, aiming at creating a sustainable green future by offering more competitive inverter solutions and reliable services to the market for a long-term run.

1000
Employees

300+
R&D Engineers

2010
PrimeVOLT founded in Taipei

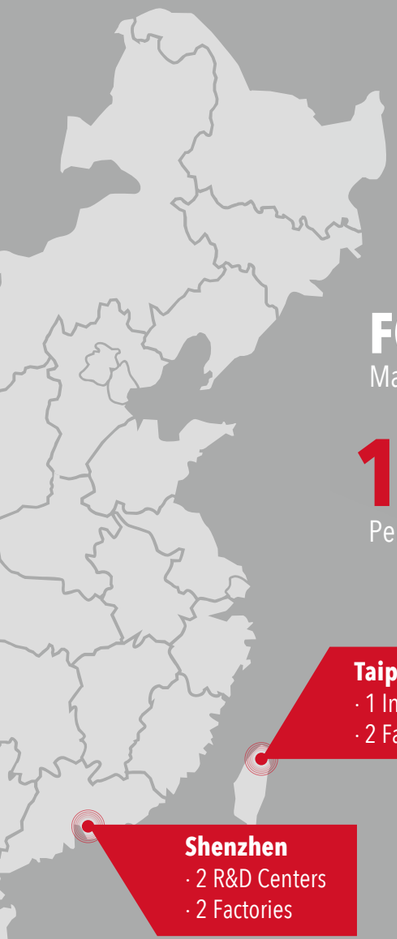
TOP 1
Market share of solar inverters in Taiwan in 2022

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 emerged as a technological leader in specific fields of applications thanks to its capabilities in high-quality and flexible production and designs.

Committed to continuous innovation and sustainable operations, APD Group further cements its position as a global leader in power electronics and renewable energy markets. We strive to provide people with high-efficiency, energy-saving technologies, empowering them to build a greener future.



FOOTPRINT
Manufacturing Capacity

10GW
Per Year

Robust R&D Expertise

- **3** R&D centers in both Taipei and Shenzhen
- **300+** R&D engineers with proven capabilities in research and development
- Senior engineers account for **30%** of all R&D engineers
- In-house testing center approved by SGS, ITS, BV, and TÜV Rheinland

Comprehensive Quality Management

- Comprehensive QC and GP systems throughout product development and production processes
- Endorsed by leading industry players

Advanced Manufacturing Capabilities

- **14** high automation production lines
- **3** manufacturing bases in Taipei and Shenzhen
- Complete industry process ranging from PCBA manufacturing to burn-in tests

ON-GRID INVERTER RESIDENTIAL USE

PV L1 SERIES SINGLE PHASE		PV H3 SERIES 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 17/20/22/25/30KTL-D3/G2

ON-GRID INVERTER C&I USE

PV H3 SERIES THREE PHASE	
▶ PV 30/40KTL-T3/G2, PV 50KTL-Q3/G2	▶ PV 100/110KTL-M3, PV 125KTL-MH3

ENERGY STORAGE SYSTEM

HB L1 SERIES SINGLE PHASE		HB L3 SERIES THREE PHASE
▶ PV 4.6/5/6KHB-120	▶ PV 8KHB-180, PV 9K99HB-210	▶ PV 5/6/8/10KHB-D3

PV Inverter

PV L1 SERIES | SINGLE PHASE & SINGLE MPPT

PV 2/3/3.6KTL-S1/G2P

Application: Residential Use

Wide MPPT voltage range

Fanless and noiseless

Shade smart

IP65 Protection

Remote control

Quick commissioning

Model	PV 2KTL-S1/G2P	PV 3KTL-S1/G2P	PV 3K6TL-S1/G2P
Efficiency			
Max. Efficiency		97.8%	
European Efficiency	96.5%	96.8%	96.8%
Input(PV)			
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	
Output(Grid)			
Rated AC Active Power	2,000W	3,000W	3,600W
Max. AC Apparent Power	2,200VA	3,300VA	3,600VA
Max. AC Output Current	10A	15A	16A
Rated AC Voltage		220V/230V, L+N+PE	
AC Voltage Range①		160V-300V (Adjustable)	
Rated Grid Frequency		50Hz / 60Hz	
Grid Frequency Range②		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)	
Protection			
DC Switch		Yes	
Anti-Islanding Protection		Yes	
AC Overcurrent Protection		Yes	
AC Short Circuit Protection		Yes	
DC Reverse Protection		Yes	
Surge Arrester		DC Type III(Type II optional) / AC Type III(Type II optional)	
Insulation Detection		Yes	
Leakage Current Protection		Yes	
General			
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	
Dimensions (W*H*D)		320mm*344mm*137mm	
Weight		6.5Kg	
HMI & COM			
Display		Wireless & APP+LED, LCD (Optional)	
Communication		Optional: WiFi / GPRS / RS485 / LAN	
Certification			
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, UL 1741, AS 4777, VDE 0126-1	
Warranty		10 Years	
Country of Manufacture		China	

Remarks:
- ①②The range of output voltage and frequency may vary depending on different grid codes.
- Specifications are subject to change without advanced notice.

PV L1 SERIES | SINGLE PHASE & DUAL MPPT

PV 4/5/6KTL-D1/G2P

Application: Residential Use

- 150% DC input oversizing
- Fanless and noiseless
- Shade smart
- Remote control
- Easy installation

Model	PV 4KTL-D1/G2P	PV 5KTL-D1/G2P	PV 6KTL-D1/G2P
Efficiency			
Max. Efficiency		98.2%	
European Efficiency	97.0%	97.3%	97.4%
Input(PV)			
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	
Output(Grid)			
Rated AC Active Power	4,000W	5,000W	6,000W
Max. AC Apparent Power	4,400VA	5,500VA	6,000VA
Max. AC Output Current	20A	25A	27.3A
Rated AC Voltage		220V/230V, L+N+PE	
AC Voltage Range①		160V-300V (Adjustable)	
Rated Grid Frequency		50Hz / 60Hz	
Grid Frequency Range②		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)	
Protection			
DC Switch		Yes	
Anti-Islanding Protection		Yes	
AC Overcurrent Protection		Yes	
AC Short Circuit Protection		Yes	
DC Reverse Protection		Yes	
Surge Arrester		DC Type III(Type II optional) / AC Type III(Type II optional)	
Insulation Detection		Yes	
Leakage Current Protection		Yes	
General			
Topology		Transformerless	
IP Rating		IP65	
Night Self Consumption		＜1W (Standard)	
Cooling		Natural cooling	
Operating Temperature Range		-25°C-60°C	
Relative Humidity Range		0-100%	
Max. Operating Altitude		4000m	
Dimensions (W*H*D)		350mm*347mm*137mm	
Weight		8.5Kg	
HMI & COM			
Display		Wireless & APP+LED, LCD (Optional)	
Communication		Optional: WiFi / GPRS / RS485 / LAN	
Certification			
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, UL 1741, AS 4777, VDE 0126-1	
Warranty		10 Years	
Country of Manufacture		China	

Remarks:
- ①②The range of output voltage and frequency may vary depending on different grid codes.
- Specifications are subject to change without advanced notice.

PV L1 SERIES | SINGLE PHASE & DUAL MPPT

PV 7/8/10KTL-D1P

Application: Residential Use

150% DC input oversizing

Compatible large PV panels

AFCI Arc-fault circuit interrupter Optional

Shade smart

Model	PV 7KTL-D1P	PV 8KTL-D1P	PV 10KTL-D1P
Efficiency			
Max. Efficiency	98.2%		
European Efficiency	97.5%		
Input (PV)			
Max. Input Voltage	600V		
Max. PV Configuration (STC)	150%		
Rated Input Voltage	360V		
Max. Input Current	40A (2*20A)	50A (2*15A+20A)	
Max.Short Circuit Current	52A (2*26A)	66A (2*20A+26A)	
Start Input Voltage	90V		
MPPT Operating Voltage Range	60V-540V		
Max. Number of PV Strings	2 (1/1)	3 (2/1)	
No. of MPPTs	2		
Output (Grid)			
Rated AC Active Power	7,000W	8,000W	10,000W
Max. AC Apparent Power	7,700VA	8,800VA	10,000VA
Max. AC Output Current	35A	40A	45.5A
Rated AC Voltage	220V/230V, L+N+PE		
AC Voltage Range①	160V-300V (Adjustable)		
Rated Grid Frequency	50Hz / 60Hz		
Grid Frequency Range②	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)		
Protection			
DC Switch	Yes		
Anti-Islanding Protection	Yes		
AC Overcurrent Protection	Yes		
AC Short Circuit Protection	Yes		
DC Reverse Protection	Yes		
Surge Arrester	DC Type III(Type II optional) / AC Type III(Type II optional)		
Insulation Detection	Yes		
Leakage Current Protection	Yes		
General			
Topology	Transformerless		
IP Rating	IP65		
Night Self Consumption	< 1W (Standard)		
Cooling	Natural cooling		
Operating Temperature Range	-25°C-60°C		
Relative Humidity Range	0-100%		
Max. Operating Altitude	4000m		
Dimensions (W*H*D)	400mm*450mm*170mm		
Weight	16Kg		
HMI & COM			
Display	Wireless & APP+LED, LCD (Optional)		
Communication	Optional: WiFi / GPRS / RS485 / LAN		
Certification			
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, UL 1741, AS 4777, VDE 0126-1		
Warranty	10 Years		
Country of Manufacture	China		

Remarks:
- ①②The range of output voltage and frequency may vary depending on different grid codes.
- Specifications are subject to change without advanced notice.

PV H3 SERIES | THREE PHASE & DUAL MPPT

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

Application: Residential & Small C&I use

- 110% AC Output overloading
- Light weight & easy to install
- Shade smart
- More energy output & shorter payback
- Multiple I/O connect
- AFCI Arc-fault circuit interrupter Optional

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
Efficiency						
Max. Efficiency	98.2%				98.3%	
European Efficiency	97.8%					
Input (PV)						
Max. Input Voltage	1100V					
Max. PV Configuration (STC)	150%					
Rated Input Voltage	620V					
Max. Input Current	2*15A				15A+2*15A	
Max.Short Circuit Current	2*20A				20A+2*20A	
Start Input Voltage	180V					
MPPT Operating Voltage Range	160V-1000V					
Max. Number of PV Strings	2 (1/1)				3 (1/2)	
No. of MPPTs	2					
Output (Grid)						
Rated AC Active Power	5000W	6,000W	8,000W	10,000W	12,000W	15,000W
Max. AC Apparent Power	5500VA	6,600VA	8,800VA	11,200VA	13,200VA	16,700VA
Max. AC Output Current	3*8.4A	3*10.1A	3*13.4A	3*17A	3*20.2A	3*25.3A
Rated AC Voltage	380V / 400V / 415V, 3W+N+PE					
AC Voltage Range①	260V-510V (Adjustable)					
Rated Grid Frequency	50Hz / 60Hz					
Grid Frequency Range②	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)					
Protection						
DC Switch	Yes					
Anti-Islanding Protection	Yes					
AC Overcurrent Protection	Yes					
AC Short Circuit Protection	Yes					
DC Reverse Protection	Yes					
Surge Arrester	DC Type III(Type II optional) / AC Type III(Type II optional)					
Insulation Detection	Yes					
Leakage Current Protection	Yes					
General						
Topology	Transformerless					
IP Rating	IP66					
Night Self Consumption	< 1W (Standard)					
Cooling	Natural cooling					
Operating Temperature Range	-25°C-60°C					
Relative Humidity Range	0-100%					
Max. Operating Altitude	4000m					
Dimensions (W*H*D)	398mm*460mm*190mm					
Weight	16.8Kg				18.7Kg	
HMI & COM						
Display	Wireless & APP +LED, LCD (Optional)					
Communication	RS485, Optional: WiFi / GPRS / LAN					
Certification						
Safety	IEC62109-1, IEC62109-2					
Grid Code	VDE-AR-N 4105, EN 50549-1, CEI 0-21, UNE 206006/206007-1, RD 1699/661&413, IEC 61727/62116, AS4777.2					
Warranty	10 Years					
Country of Manufacture	China					

Remarks:
- ①②The range of output voltage and frequency may vary depending on different grid codes.
- Specifications are subject to change without advanced notice.

PV H3 SERIES | THREE PHASE & DUAL MPPT

PV 10/15KTL-D3/G2P, PV 17/20/22/25/30KTL-D3/G2

Application: Residential & Small and Medium C&I use

- IP66 Protection
- Shade smart
- 150% DC input oversizing and 110% AC Output overloading
- Multiple I/O connect
- Compatible large PV panels
- Arc-fault circuit interrupter Optional

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	PV 30KTL-D3/G2
Efficiency							
Max. Efficiency	98.4%						
European Efficiency	97.8%	98.0%					
Input (PV)							
Max. Input Voltage	1100V						
Max. PV Configuration (STC)	150%						
Rated Input Voltage	620V						
Max. Input Current	15A+30A	2*30A					40A/30A
Max.Short Circuit Current	20A+40A	2*40A					50A/37.5A
Start Input Voltage	180V						
MPPT Operating Voltage Range	160V-1000V						
Max. Number of PV Strings	3 (1/2)	4 (2/2)					
No. of MPPTs	2						
Output (Grid)							
Rated AC Active Power	10,000W	15,000W	17,000W	20,000W	22,000W	25,000W	30,000W
Max. AC Apparent Power	11,000VA	16,500VA	18,700VA	22,000VA	24,200VA	27,500VA	33,000VA
Max. AC Output Current	3*16.8A	3*25.3A	3*28.6A	3*33.7A	3*37A	3*39.8A	3*50.2A
Rated AC Voltage	380V / 400V / 415V, 3W+N+PE						
AC Voltage Range①	260V-510V (Adjustable)						
Rated Grid Frequency	50Hz / 60Hz						
Grid Frequency Range②	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)						
Protection							
DC Switch	Yes						
Anti-Islanding Protection	Yes						
AC Overcurrent Protection	Yes						
AC Short Circuit Protection	Yes						
DC Reverse Protection	Yes						
Surge Arrester	DC Type III(Type II optional) / AC Type III(Type II optional)						
Insulation Detection	Yes						
Leakage Current Protection	Yes						
General							
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						
Dimensions (W*H*D)	398mm*460mm*190mm						
Weight	18.7Kg	20.1Kg			20.3Kg		
HMI & COM							
Display	Wireless & APP +LED, LCD (Optional)						
Communication	RS485, Optional: WiFi / GPRS / LAN						
Certification							
Safety	IEC62109-1, IEC62109-2						
Grid Code	VDE-AR-N 4105, EN 50549-1, CEI 0-21, UNE 206006/206007-1, RD 1699/661&413, IEC 61727/62116, AS4777.2						
Warranty	10 Years						
Country of Manufacture	China						

Remarks:
- ①②The range of output voltage and frequency may vary depending on different grid codes.
- Specifications are subject to change without advanced notice.

PV H3 SERIES | THREE PHASE & MULTIPLE MPPT

PV 30/40KTL-T3/G2, PV 50KTL-Q3/G2

Application: Commercial & Industrial Sites

- DC/AC SPD Type II
- Shade smart
- 30KW natural cooling and noiseless
- IP66 Protection
- MPPT current detection
- Night SVG optional, I/V detection optional, Integrated PID optional

Model	PV 30KTL-T3/G2	PV 40KTL-T3/G2	PV 50KTL-Q3/G2
Efficiency			
Max. Efficiency		98.5%	
European Efficiency	98.0%	98.0%	97.9%
Input (PV)			
Max. Input Voltage		1100V	
Max. PV Configuration (STC)		150%	
Rated Input Voltage		620V	
Max. Input Current	40A+2*32A	40A+2*32A	40A+3*32A
Max.Short Circuit Current	50A+2*45A	50A+2*45A	50A+3*45A
Start Input Voltage		200V	
MPPT Operating Voltage Range		180V-1000V	
Max. Number of PV Strings	2/2/2	2/2/2	2/2/2/2
No. of MPPTs	3	3	4
Output (Grid)			
Rated AC Active Power	30000W	40000W	50000W
Max. AC Apparent Power	33400VA	44500VA	55600VA
Max. AC Output Current	51A	67.4A	84.2A
Rated AC Voltage		380V/400V/415V, 3W+N+PE or 3W+PE	
AC Voltage Range①		320V-520V (Adjustable)	
Rated Grid Frequency		50Hz / 60Hz	
Grid Frequency Range②		45-55Hz / 55-65Hz (Adjustable)	
THDI		<3% (Rated Power)	
DC Current Injection		<0.5%In	
Power Factor		>0.99 Rated power (Adjustable 0.8 LD - 0.8LG)	
Protection			
DC Switch		Yes	
Anti-Islanding Protection		Yes	
AC Overcurrent Protection		Yes	
AC Short Circuit Protection		Yes	
DC Reverse Protection		Yes	
Surge Arrester		DC Type II / AC Type II	
Insulation Detection		Yes	
Leakage Current Protection		Yes	
PV String Monitoring		Optional	
Consumption Monitoring		Optional	
General			
Topology		Transformerless	
IP Rating		IP66	
Night Self Consumption		<5W (Standard)	
Cooling	Natural cooling	Fan cooling	
Operating Temperature Range		-25°C-60°C	
Relative Humidity Range		0-100%	
Max. Operating Altitude		4000m	
Dimensions (W*H*D)		635mm*530mm*224mm	
Weight	36Kg	40Kg	42Kg
HMI & COM			
Display		Wireless & APP+LED, LCD (Optional)	
Communication		RS485, Optional: WiFi / GPRS / LAN	
Certification			
Safety		IEC62109-1, IEC62109-2	
Grid Code		VDE-AR-N 4105, EN 50549-1, CEI 0-21, UNE 206006/206007-1, RD 1699/661&413, IEC 61727/62116, AS4777.2	
Warranty		10 Years	
Country of Manufacture		China	

Remarks:
- ①②The range of output voltage and frequency may vary depending on different grid codes.
- Specifications are subject to change without advanced notice.

PV H3 SERIES | THREE PHASE & MULTIPLE MPPT

PV 100/110KTL-M3, PV 125KTL-MH3

Application: Commercial & Industrial Sites

- 9 MPPT, fuse-free design
- Replaceable DC/AC SPD Type II
- Internal temperature humidity monitoring
- IP66 Protection
- MPPT current detection
- Night SVG optional, I/V detection optional, Integrated PID optional
- Shade smart

Model	PV 100KTL-M3	PV 110KTL-M3	PV 125KTL-MH3
Efficiency			
Max. Efficiency	98.5%	98.6%	98.8%
European Efficiency	98.0%	98.2%	98.4%
Input (PV)			
Max. Input Voltage	1100V		
Max. PV Configuration (STC)	150%		
Rated Input Voltage	620V		
Max. Input Current	3*40A+5*32A	3*40A+6*32A	
Max. Short Circuit Current	3*50A+5*45A	3*50A+6*45A	
Start Input Voltage/ Min. Operating Voltage	250V / 200V		
MPPT Operating Voltage Range	200V-1000V		
Max. Number of PV Strings	16 (8*2)	18 (9*2)	
No. of MPPTs	8	9	
Output (Grid)			
Rated AC Active Power	100,000W	110,000W	125,000W
Max. AC Apparent Power	111,000VA	123,000VA	139,000VA
Max. AC Output Current	3*168.8A	3*187A	3*167.3A
Rated AC Voltage	400V, 3W+N+PE or 3W+PE		480V, 3W+N+PE or 3W+PE
AC Voltage Range*	320V-520V (Adjustable)		408V-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)		
Protection			
DC Switch	Yes		
Anti-Islanding Protection	Yes		
AC Overcurrent Protection	Yes		
AC Short Circuit Protection	Yes		
DC Reverse Protection	Yes		
Surge Arrester	DC Type II / AC Type II		
Insulation Detection	Yes		
Leakage Current Protection	Yes		
AFCI	Optional		
PID Recovery	Optional		
PV String Monitoring	Optional		
Consumption Monitoring	Optional		
General			
Topology	Transformerless		
IP Rating	IP66		
Night Self Consumption	＜10W (Standard)		
Cooling	Fan cooling		
Operating Temperature Range	-25°C-60°C		
Relative Humidity Range	0-100%		
Max. Operating Altitude	4000m		
Dimensions (W*H*D)	936mm*678mm*365mm		
Weight	91.5Kg	92Kg	
HMI & COM			
Display	Wireless & APP +LED, LCD (Optional)		
Communication	RS485, Optional: WiFi / GPRS / LAN		
Certification			
Safety	IEC62109-1, IEC62109-2		
Grid Code	EN 50549-1/-2, IEC 61727/62116, VDE-AR-N 4105, CEI 0-21/16, UNE 206006/206007-1, UNE 217001, AS 4777		
Warranty	10 Years		
Country of Manufacture	China		

Remarks:
- The range of output voltage and frequency may vary depending on different grid codes.
- Specifications are subject to change without advanced notice.

Energy Storage Inverter

HB L1 SERIES | SINGLE PHASE HYBRID INVERTER

PV 4.6/5/6KHB-120

- 200% PV overload
- Fanless design, long lifespan
- Export control (zero export)
- <10 ms UPS-level switching
- Up to 120A max. charging/ discharging current
- 100% load backup

Model	PV 4K6HB-120	PV 5KHB-120	PV 6KHB-120
Efficiency			
Max. Efficiency (PV to AC)		97.3%	
Max. Efficiency (BAT to AC)		94.3%	
PV String Input Data			
Max. Input Power		9,000W	
Max. PV Configuration (STC)		200%	
Max. Input Voltage		550V	
Start-up Voltage		90V	
MPPT Operating Voltage Range		70V-540V	
Max. Input Current per MPPT		15A/15A	
Max. Short Circuit Current per MPPT		20A/20A	
Number of MPP Trackers		2	
Number of String per MPPT		1/1	
Battery Input/output Data			
Battery Type		Lithium-ion, Lead-acid	
Nominal Battery Voltage		48V	
Battery Voltage Range		40V-65V	
Max. Continuous charging/Discharging Current		120A/120A	
Max. Charging/Discharging Power		6,000W/6,000W	
AC Output Data (On-grid)			
Nominal AC Output Power	4,600W	5,000W	6,000W
Rated Output Apparent Power	4,600VA	5,000VA	6,000VA
Max. AC Apparent Power	4,600VA	5,500VA	6,000VA
Max.AC Output Power (PF=1)	4,600W	5,500W	6,000W
Max. AC Output Current	22A	25A	27.2A
Nominal Output Voltage		220V/230V/240V, L+N+PE	
Output Voltage Range		150V-300V (Adjustable)	
Nominal AC Grid Frequency		50Hz/60Hz	
Grid Frequency Range		45Hz-55Hz/55Hz-65Hz (Adjustable)	
Power Factor		> 0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)	
Max. Total Harmonic Distortion		<3% (Rated Power)	
AC Output Data (Back up)			
Nominal Output Power	4,600W	5,000W	6,000W
Nominal Output Current	20A	21.7A	26A
Peak Output Apparent Power (>1s)	6,900VA	7,500VA	9,000VA
Nominal Output Voltage		220V/230V/240V, L+N+PE	
Nominal Output Frequency		50Hz/60Hz	
Transfer Time		<10ms	
Output THDV		<3% @100% R Load	
Protection			
Protection Category		Class I	
DC Switch		Yes	
Anti-Islanding Protection		Yes	
AC Over Current Protection		Yes	
AC Over Voltage Protection		Yes	
AC Short Circuit Protection		Yes	
DC Reverse Protection		Yes	
Surge Protection		DC Type III, AC Type III	
PV Insulation Resistance Detection		Yes	
Leakage Current Protection		Yes	
GEN		Optional	
General Data			
Max. Operating Altitude		4000m (>2000m derating)	
Ingress Protection Rating		IP65	
Operating Temperature Range		-25°C~60°C (>45°C derating)	
Relative Humidity		0~100%	
Cooling Method		Natural Cooling	
Mounting Method		Wall bracket	
Advanced Parallel		Up to 9 Pcs	
Dimension (W*H*D)		570mm*495mm*175mm	
Weight		25Kg	
PV Connection		MC4/H4	
Battery Connection		Dedicated DC connector	
AC Connection		Dedicated AC connector	
HMI & COM			
Display		LED+APP	
Communication Interface		RS485/CAN (for BMS), RS485, USB, DRM/RS485 (for Meter), Optional: Wi-Fi/GPRS/LAN	
Certification			
Grid		VDE-AR-N4105, IEC 61727/62116, AS 4777.2, EN 50549-1, C10/11, G99/G100, CEI 0-21, NRS 097-2-1, RD 1699/661/413	
Safety		IEC 62109-1&2, IEC 62477-1	
Warranty		10 Years	
Country of Manufacture		China	

Remarks:
- The range of output voltage and frequency may vary depending on different grid codes.
- Specifications are subject to change without advanced notice.

Energy Storage Inverter

HB L1 SERIES | SINGLE PHASE HYBRID INVERTER

PV 8KHB-180, PV 9K99HB-210

200% PV overload

Max. 22A DC input current per string

Up to 210A max. charging/ discharging current

Support smart load/ generator

<10 ms UPS-level switching

100% load backup

Model	PV 8KHB-180	PV 9K99HB-210
Efficiency		
Max. Efficiency (PV to AC)	98.0%	
Max. Efficiency (BAT to AC)	94.5%	
PV String Input Data		
Max. Input Power	12,000W	15,000W
Max. PV Configuration（STC）	200%	
Max. Input Voltage	600V	
Start-up Voltage	90V	
MPPT Operating Voltage Range	70V-540V	
Max. Input Current per MPPT	30A/22A/22A	
Max. Short Circuit Current per MPPT	40A/30A/30A	
Number of MPP Trackers	3	
Number of String per MPPT	2/2/2	
Battery Input/output Data		
Battery Type	Lithium-ion,Lead-acid	
Nominal Battery Voltage	48V	
Battery Voltage Range	40V-64V	
Max. Charging/Discharging Current	210A/180A	210A/210A
Max. Charging/Discharging Power	10,000W/8,000W	10,000W/10,000W
AC Output Data (On-grid)		
Nominal AC Output Power	8,000W	9,990W
Rated Output Apparent Power	8,000VA	9,990VA
Max. AC Apparent Power	8,800VA	10,990VA
Max. AC Output Power (PF=1)	8,800W	10,990W
Max. AC Output Current	40A	50A
Nominal Output Voltage	220V/230/240V, L+N+PE	
Output Voltage Range	150V-300V (Adjustable)	
Nominal AC Grid Frequency	50Hz/60Hz	
Grid Frequency Range	45Hz-55Hz/55Hz-65Hz (Adjustable)	
Power factor	> 0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)	
Max. Total Harmonic Distortion	<3% (Rated Power)	
AC Output Data (Back up)		
Nominal Output Power	8,000W	9,990W
Nominal Output Current	34.8A	43.5A
Peak Output Apparent Power (>1s)	16,000VA	20,000VA
Nominal Output Voltage	220V/230/240V, L+N+PE	
Nominal Output Frequency	50Hz/60Hz	
Transfer Time	<10ms	
Output THDV	<3% @100% R Load	
Protection		
Protection Category	Class I	
DC Switch	Yes	
Anti-Islanding Protection	Yes	
AC Over Current Protection	Yes	
AC Over Voltage Protection	Yes	
AC Short Circuit Protection	Yes	
DC Reverse Protection	Yes	
Surge Protection	DC Type II, AC Type II	
PV Insulation Resistance Detection	Yes	
Leakage Current Protection	Yes	
AFCI	Optional	
GEN	Yes	
General Data		
Max. Operating Altitude	4000m (>2000m derating)	
Ingress Protection Rating	IP65	
Operating Temperature Range	-25°C~60°C (>45°C derating)	
Relative Humidity	0~100%	
Cooling Method	Fan Cooling	
Mounting Method	Wall bracket	
Advanced Parallel	Up to 9 Pcs	
Dimension (W*H*D)	420mm*800mm*240mm	
Weight	39Kg	
PV Connection	Terminals	
HMI & COM		
Display	LED+APP, LCD (Optional)	
Communication Interface	RS485/CAN (for BMS), DRM/RS485 (for Meter), RS485 Optional: Wi-Fi/GPRS/LAN	
Certification		
Grid	IEC 61727/62116, AS 4777.2, NRS 097-2-1	
Safety	IEC 62109-1&2	
EMC	EN 61000	
Warranty	10 Years	
Country of Manufacture	China	

Remarks:
- The range of output voltage and frequency may vary depending on different grid codes.
- Specifications are subject to change without advanced notice.

Energy Storage Inverter

HB L3 SERIES | THREE PHASE HYBRID INVERTER

PV 5/6/8/10KHB-D3

200% PV overload

98.4% maximum system efficiency

<10 ms UPS-level switching

150% unbalanced load

Wide battery voltage from 150V to 600V

100% load backup

Model	PV 5KHB-D3	PV 6KHB-D3	PV 8KHB-D3	PV 10KHB-D3
Efficiency				
Max. Efficiency (PV to AC)	98.2%		98.4%	
Max. Efficiency (BAT to AC)	98.0%			
PV String Input Data				
Max. Input Power	9,000W		15,000W	
Max. PV Configuration （STC）	200%			
Max. Input Voltage	1000V			
Start-up Voltage	150V			
MPPT Operating Voltage Range	160V-950V			
Max. Input Current per MPPT	15A/15A		20A/30A	
Max. Short Circuit Current per MPPT	20A/20A		30A/40A	
Number of MPP Trackers	2			
Number of String per MPPT	1/1		1/2	
Battery Input/output Data				
Battery Type	Lithium-ion, Lead-acid			
Nominal Battery Voltage	250V-600V			
Battery Voltage Range	150V-600V			
Max. Charging/Discharging Current	25A/25A	25A/25A	50A/50A	50A/50A
Max. Charging/Discharging Power	9,000W/5,800W	9,000W/7,000W	15,000W/9,100W	15,000W/11,300W
AC Output Data (On-grid)				
Nominal AC Output Power	5,000W	6,000W	8,000W	10,000W
Rated Output Apparent Power	5,000VA	6,000VA	8,000VA	10,000VA
Max. AC Apparent Power	5,500VA	6,600VA	8,800VA	11,000VA
Max. AC Output Power (PF=1)	5,500W	6,600W	8,800W	11,000W
Max. AC Output Current	3*8.3A	3*10A	3*13.3A	3*16.7A
Max. Single Phase Output Power	2,500W	3,000W	4,000W	5,000W
Max. AC Input Power	15,000VA			
Max. Input Current	3*25A			
Nominal Output Voltage	380V/400V/415V, 3W+N+PE			
Output Voltage Range	260V-520V (Adjustable)			
Nominal AC Grid Frequency	50Hz/60Hz			
Grid Frequency Range	45Hz-55Hz/55Hz-65Hz (Adjustable)			
Power Factor	> 0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)			
Max. Total Harmonic Distortion	<5% (Rated Power)			
AC Output Data (Back up)				
Nominal Output Power	5,000W	6,000W	8,000W	10,000W
Nominal Output Current	3*7.6A	3*9.1A	3*12.2A	3*15.2A
Max. Single Phase Power	2,500W	3,000W	4,000W	5,000W
Peak Output Apparent Power (5min)	6,000VA	7,200VA	9,600VA	12,000VA
Peak Output Apparent Power (10s)	7,500VA	9,000VA	12,000VA	15,000VA
Nominal Output Voltage	380V/400V/415V, 3W+N+PE			
Nominal Output Frequency	50Hz/60Hz			
Transfer Time	10ms			
Output THDV	<3% (R Load)			
Protection				
Protection Category	Class I			
DC Switch	Yes			
Anti-Islanding Protection	Yes			
AC Over Current Protection	Yes			
AC Over Voltage Protection	Yes			
AC Short Circuit Protection	Yes			
DC Reverse Protection	Yes			
Surge Arrestion	DC Type II, AC Type II			
PV Insulation Resistance Detection	Yes			
Leakage Current Protection	Yes			
AFCI	Optional			
RSD	Optional			
General Data				
Max. Operating Altitude	4000m (>2000m derating)			
Ingress Protection Rating	IP65			
Operating Temperature Range	-25°C~60°C (>45°C derating)			
Relative Humidity	0~100%			
Cooling Method	Natural Cooling			
Mounting Method	Wall bracket			
Advanced Parallel	Up to 9 Pcs			
Dimension (W*H*D)	530mm*550mm*212mm			
Weight	30Kg		32Kg	
PV Connection	MC4/H4			
HMI & COM				
Display	LED+APP, LCD (Optional)			
Communication Interface	RS485/CAN (for BMS), RS485, RS485 (for Meter), DRMs, 2*DI (1 for RMO), 2*DO, Optional: Wi-Fi/GPRS/LAN			
Certification				
Grid	VDE-AR-N4105, IEC 61727/62116, AS 4777.2, EN 50549-1, C10/11, G99, CEI 0-21, NRS 097-2-1, RD 1699/661/413			
Safety	IEC 62109-1&2			
EMC	EN 61000			
Warranty	10 Years			
Country of Manufacture	China			

Remarks:
- The range of output voltage and frequency may vary depending on different grid codes.
- Specifications are subject to change without advanced notice.

PrimeX-LV

- CATL LFP Cells Inside
- Slim & Modern Design
- Supports Charging at -5°c
- Outdoor and Indoor Application (IP65)

Features

1. Easy Installation
2. Slim & Modern Design
3. Advanced BMS Control
4. Parallel Capacity up to 160 kWh
5. Black Out and Emergency Back-up
6. Self-heating for Low Ambient Temperatures (Optional)
7. Remote Monitoring with Over-the-air Updates (Optional)

Model	PV 5KBA-L	PV 10KBA-L
Rated Capacity	100 Ah	200 Ah
Rated Voltage	51.2 V	
Rated Energy	5.12 kWh	10.24 kWh
Max. Parallel Quantity	32 Sets in Parallel, 163.84 kWh	16 Sets in Parallel, 163.84 kWh
Rated Charging / Discharging Current	0.6 C, 60 A	0.6 C, 120 A
Max. Discharge Continuous Current	1 C, 100 A at >70% SOC	0.6 C, 120 A
Battery Max. Charge / Discharge Power	3.07 kW / 5.12 kW	6.14 kW / 6.14 kW
Peak Discharge Current / Power	105 A / 5.37 kW, 1 min.	160 A / 8.19 kW, 1 min.
Available SOC Range	0% ~ 100% 90%DOD is Recommended	
Dimensions	Width: 460 (±5) mm, Depth: 165 (±5) mm Height: 652 (±5) mm	Width: 550 (±5) mm, Depth: 165 (±5) mm Height: 869 (±5) mm
Weight	~50 kg (to be Confirmed)	~94 kg (to be Confirmed)
[1*] Operating Temperature	Charging Temperature: -5°C~ 55 °C Discharge Temperature: -15°C~ 55 °C	
[2*] Storage Temperature	- 15 °C ~ 55 °C	
Working Humidity	5 ~ 95% RH (Non-Condensing)	
Altitude	≤ 2000 m	
Communication	CAN / RS485 / Dry Contact / WiFi (WiFi Stick Optional)	
Certification	TÜV / IEC 62619 / IEC 62040 / IEC 61000 / UN38.3 / UL	
Cycle Life	6000	
Warranty	10 Years Limited Warranty	
IP Rating	IP65	

[1*] Recommended Operating Temperature: 10 °C ~ 30 °C [2*] Recommended Storage Temperature: 10 °C ~ 30 °C

SOLARMAN WIFI PLUG

- Easy plug-and-play installation for quick and convenient setup
- Preferred monitoring solution for residential use

Model	LSW-5
Connection	TTL
Standards	802.11b: +17 dBm±1.5dBm(@11Mbps) 802.11g: +15 dBm±1.5dBm (@54Mbps) 802.11n: +14 dBm±1.5dBm (@HT20, MCS7)
Transmission Maximum Distance	100m Unobstructed environment
Setting	APP / WEB
Input	
Input Voltage	DC 5V
Static Power Consumption	<1.6W
General	
Operating Temperature	-30°C~70°C
Humidity	0%~100% relative humidity, no condensation
IP Rating	IP65
Dimension (L*W*H)	79mm*34mm*122.8mm
Certification	
Safety	ANATEL/CSIP/CE/RCM

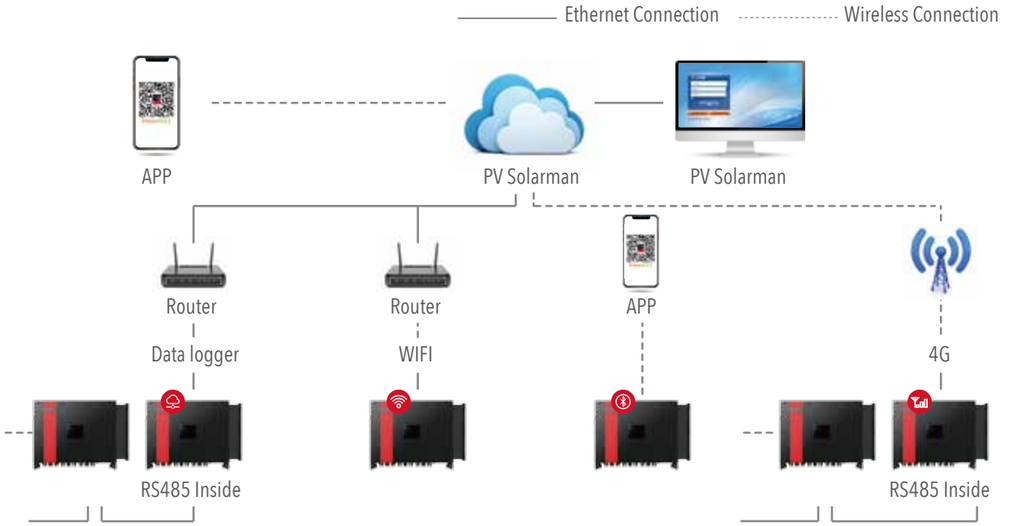
LAN COMMUNICATION MODULE PV LAN-R

- Easy plug-and-play installation for quick and convenient setup
- Mobile internet monitoring, ideal for rural and remote areas

Model	PV LAN-R
Connection	TTL
Standards	IEEE 802.3
Transmission Maximum Distance	100m CAT5
Setting	APP
Input	
Input Voltage	DC 5V
Static Power Consumption	<1.6W
General	
Operating Temperature	-25°C~60°C
Humidity	0%~100% relative humidity, no condensation
IP Rating	IP65
Dimension (L*W*H)	71mm*41mm*117mm
Certification	
Safety	FCC, CE-RED, SRRC

SMART SOLAR CLOUD

- For residential/commercial/storage applications
- Android/iOS app compliant with the latest Android/iOS OS systems
- Cloud services available globally
- String monitoring
- Intelligent data analysis



SUPPORT

SERVICE HOTLINE

Dial our service hotline to inquire about technical problems.

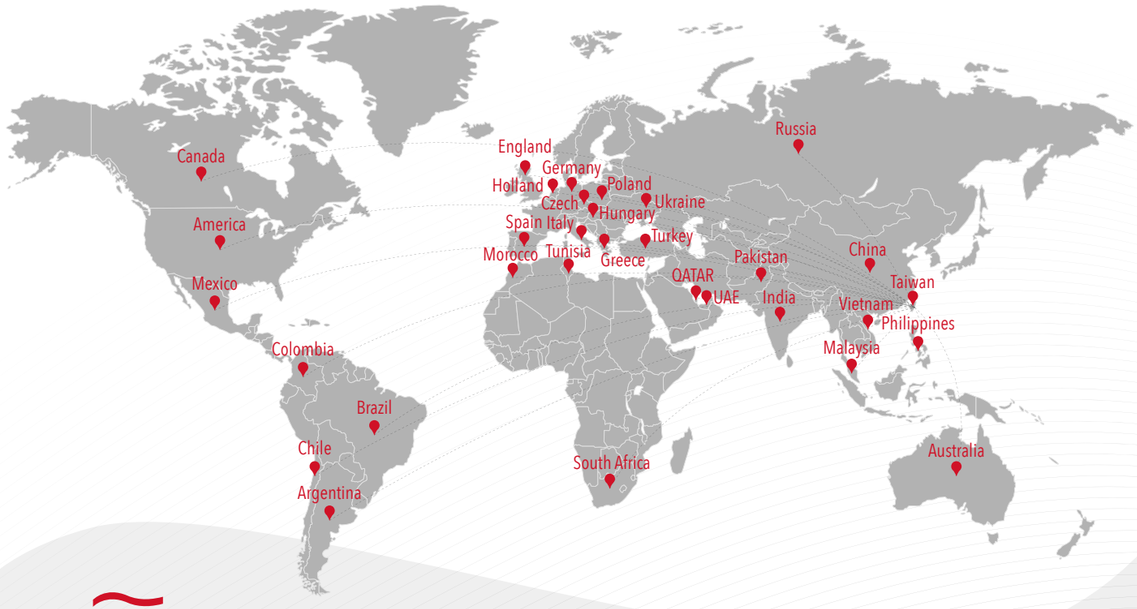
TECHNICAL SUPPORT

Professional casework experience and systematic solutions to client problems

CUSTOMER TRAINING

Provides localized service support and technical training with a combination of online and offline support

GLOBAL NETWORK



VISION & MISSION

With its robust R&D capabilities, PrimeVOLT delivers top-notch products that offer stable and high performance, as well as excellent service that caters to local demands. Our unwavering commitment to being the most reliable inverter manufacturer has led us to be at the forefront of the global market trends.

MARKETING PROMOTION

CASE STUDIES

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