Pytes

Creating Undertaking & Sharing

Shanghai PYTES Energy Co., LTD

HYBRID INVERTERS PRODUCT CATALOG

CONTENTS

V3PL15K TWIN

Features

- IP65 waterproof and dustproof makes the inverter available for variousworking conditions
- 150% unbalaned load support
- Buit-in AC coupled function
- Reserved communication port for BMS (RS485)
- Built-in WiFi for mobile monitoring (App is available)
- Optional dual outputs for smart load management (check sales)
- User-adjustable charging current and voltage
- Parallel operation up to 6 units

V3PL15K TWIN

Model	
Maximum PV Input Power	22500 W
Rated Output Power	15000 W
Maximum Charging Power	15000 W
Grid-tie Operation	
PV Input (DC)	
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 1000 VDC
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC
MPP Voltage Range	350 – 950 VDC
Number of MPP Trackers / Maximum Input Current	2 / A: 26A, B: 26A
Number of Strings Per MPP Tracker	A: 2, B: 2
Grid Output (AC)	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	184 – 265 VAC per phase
Nominal Output Current	21.7 A per phase
Power Factor Range	0.9 lag – 0.9 lead
Efficiency	
Maximum Conversion Efficiency (DC/AC)	>96%
European Efficiency @Vnorminal	>95%
OFF-Grid Operation	
AC Input	
AC Start-up Voltage / Auto Restart Voltage	120 – 140 VAC / 180 VAC
Acceptable Input Voltage Range	170 – 290 VAC per phase
Maximum AC Input Current	40 A
PV Input (DC)	
Maximum DC Power	22500 W
Maximum DC Voltage	1000 VDC
MPP Voltage Range	350 – 950 VDC
Number of MPP Trackers / Maximum Input Current	2 / A: 26A, B: 26A
Number of Strings Per MPP Tracker	A: 2, B: 2
Battery Mode Output (AC)	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Waveform	Pure sine wave
Efficiency (DC to AC)	91%
Hybrid Operation	
PV Input (DC)	
Max DC Voltage	1000 VDC
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC
MPP Voltage Range	350 – 950 VDC
Number of MPP Trackers / Maximum Input Current	2 /A: 26A, B: 26A
Number of Strings per MPP Tracker	A: 2, B: 2
Grid Output (AC)	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	184 – 265 VAC per phase
Nominal Output Current	21.7 A per phase
AC Input	
AC Start-up Voltage / Auto Restart Voltage	120 – 140 VAC / 180 VAC
Acceptable Input Voltage Range	170 –290 VAC per phase
Maximum AC Input Current	40A
Battery Mode Output (AC)	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Efficiency (DC to AC)	91%
Battery & Charger	
Battery Voltage Range	40 – 62 VDC
Maximum Charging Current	300 A
General	
Physical	
Dimension D x W x H (mm)	255 X 660 X 750
Net Weight (kgs)	78
Interface	
Communication Port	RS-232, RS-485, USB, CAN and Wi-Fi
Intelligent Slot	Optional for SNMP and Modbus cards
Environment	
Humidity	0 ~ 100% RH (Non-condensing)
Operation Temperature	-25 to 60°C, > 45°C power derating
Altitude	0 – 1000m**
Protection & Certificate	
Safety	IEC 62109, IEC 62116, IEC 61727, IEC 61683
Grid Connection Standard	NRS097-2-1:2017, VDE-AR-N4105

*These figures are based on VDE-4105 standard. All figures may vary depending on different AC voltage and country requirements.
** Power derating 1% every 100 m when altitude is over 1000m.
Product specifications are subject to change without further notice.

V3PL12K TWIN

Features

- IP65 waterproof and dustproof makes the inverter available for variousworking conditions
- 150% unbalaned load support
- Buit-in AC coupled function
- Reserved communication port for BMS (RS485)
- Built-in WiFi for mobile monitoring (App is available)
- Optional dual outputs for smart load management (check sales)
- User-adjustable charging current and voltage
- Parallel operation up to 6 units

V3PL12K TWIN

Model	
Maximum PV Input Power	18000 W
Rated Output Power	12000 W
Maximum Charging Power	12000 W
Grid-tie Operation	
PV Input (DC)	
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 900 VDC
Start-up Voltage / Initial Feeding Voltage	150 VDC / 150 VDC
MPP Voltage Range	150 – 850 VDC
Full MPP Voltage Range	400 VDC – 850 VDC
Number of MPP Trackers / Maximum Input Current	2 / A: 27A, B: 18A
Grid Output (AC)	
Nominal Output Voltage	230 VAC (P–N) / 400 VAC (P–P)
Output Voltage Range	184 – 265 VAC* per phase
Nominal Output Current	17.4 A per phase
Power Factor Range	0.9 lag – 0.9 lead
Efficiency	
Maximum Conversion Efficiency (DC/AC)	>96%
European Efficiency @Vnorminal	>95%
OFF-Grid Operation	
AC Input	
AC Start-up Voltage / Auto Restart Voltage	120 – 140 VAC per phase / 180 VAC per phase
Acceptable Input Voltage Range	170 – 290 VAC per phase
Maximum AC Input Current	40 A
PV Input (DC)	
Maximum DC Power	900 VDC
MPP Voltage Range	150 VDC – 850 VDC
Full MPP Voltage Range	400 VDC – 850 VDC
Number of MPP Trackers / Maximum Input Current	2 / A: 18A, B: 18A
Battery Mode Output (AC)	
Nominal Output Voltage	230 VAC (P–N) / 400 VAC (P–P)
Output Waveform	Pure sine wave
Efficiency (DC to AC)	>93%
Hybrid Operation	
PV Input (DC)	
Maximum DC Voltage	900 VDC
Start-up Voltage / Initial Feeding Voltage	150 VDC / 150 VDC
MPP Voltage Range	150 VDC – 850 VDC
Full MPP Voltage Range	400 VDC – 850 VDC
Number of MPP Trackers / Maximum Input Current	2 / A: 18A, B: 18A
Grid Output (AC)	
Nominal Output Voltage	230 VAC (P–N) / 400 VAC (P–P)
Output Voltage Range	184 – 265 VAC* per phase
Nominal Output Current	17.4 A per phase
AC Input	
AC Start-up Voltage / Auto Restart Voltage	120 – 140 VAC per phase / 180 VAC per phase
Acceptable Input Voltage Range	170 –290 VAC per phase
Maximum AC Input Current	40A
Battery Mode Output (AC)	
Nominal Output Voltage	230 VAC (P–N) / 400 VAC (P–P)
Efficiency (DC to AC)	>93%
Battery & Charger	
Battery Voltage Range	40 – 60 VDC
Maximum Discharging Current	250 A
Maximum Charging Current	240 A
General	
Physical	
Dimension D x W x H (mm)	247 x 500 x 650
Net Weight (kgs)	54
Interface	
Communication Port	RS–232, RS–485, USB, CAN and Wi–Fi
Intelligent Slot	Optional for SNMP and Modbus cards
Environment	
Humidity	0 – 100% RH (Non–condensing)
Operation Temperature	–25 to 60°C, > 45°C power derating
Altitude	0 – 1000 m**
Protection & Certificate	
Safety	IEC 62116, IEC 62727, IEC 61683, IEC 62109, IEC 61000–6–2:2019, IEC 61000–6–4:2019, IEC 61000–3–11:2019, EN 61000–3–12: 2011
Grid Connection Standard	NRS097–2–1:2017, VDE–AR–N4105

*These figures are based on VDE–4105 standard. All figures may vary depending on different AC voltage and country requirements.
** Power derating 1% every 100 m when altitude is over 1000m.
Product specifications are subject to change without further notice.

V3PL10K TWIN

Features

- IP65 waterproof and dustproof makes the inverter available for variousworking conditions
- 150% unbalaned load support
- Buit-in AC coupled function
- Reserved communication port for BMS (RS485)
- Built-in WiFi for mobile monitoring (App is available)
- Optional dual outputs for smart load management (check sales)
- User-adjustable charging current and voltage
- Parallel operation up to 6 units

V3PL10K TWIN

Model	
Maximum PV Input Power	15000 W
Rated Output Power	10000 W
Maximum Charging Power	10000 W
Grid-tie Operation	
PV Input (DC)	
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 900 VDC
Start-up Voltage / Initial Feeding Voltage	150 VDC / 150 VDC
MPP Voltage Range	150 VDC – 850 VDC
Full MPP Voltage Range	420 VDC – 850 VDC
Number of MPP Trackers / Maximum Input Current	2 / A: 18A, B: 18A
Grid Output (AC)	
Nominal Output Voltage	230 VAC (P–N) / 400 VAC (P–P)
Output Voltage Range	184 – 265 VAC* per phase
Nominal Output Current	14.5 A per phase
Power Factor Range	0.9 lag – 0.9 lead
Efficiency	
Maximum Conversion Efficiency (DC/AC)	>96%
European Efficiency @Vnorminal	>95%
OFF-Grid Operation	
AC Input	
AC Start-up Voltage / Auto Restart Voltage	120 – 140 VAC per phase / 180 VAC per phase
Acceptable Input Voltage Range	170 – 290 VAC per phase
Maximum AC Input Current	40 A
PV Input (DC)	
Maximum DC Power	900 VDC
MPP Voltage Range	150 VDC – 850 VDC
Full MPP Voltage Range	420 VDC – 850 VDC
Number of MPP Trackers / Maximum Input Current	2 / A: 18A, B: 18A
Battery Mode Output (AC)	
Nominal Output Voltage	230 VAC (P–N) / 400 VAC (P–P)
Output Waveform	Pure sine wave
Efficiency (DC to AC)	>93%
Hybrid Operation	
PV Input (DC)	
Maximum DC Voltage	900 VDC
Start-up Voltage / Initial Feeding Voltage	150 VDC / 150 VDC
MPP Voltage Range	150 VDC – 850 VDC
Full MPP Voltage Range	420 VDC – 850 VDC
Number of MPP Trackers / Maximum Input Current	2 / A: 18A, B: 18A
Grid Output (AC)	
Nominal Output Voltage	230 VAC (P–N) / 400 VAC (P–P)
Output Voltage Range	184 – 265 VAC* per phase
Nominal Output Current	14.5 A per phase
AC Input	
AC Start-up Voltage / Auto Restart Voltage	120 – 140 VAC per phase / 180 VAC per phase
Acceptable Input Voltage Range	170 –290 VAC per phase
Maximum AC Input Current	40A
Battery Mode Output (AC)	
Nominal Output Voltage	230 VAC (P–N) / 400 VAC (P–P)
Efficiency (DC to AC)	>93%
Battery & Charger	
Battery Voltage Range	40 – 60 VDC
Maximum Discharging Current	220 A
Maximum Charging Current	200 A
General	
Physical	
Dimension D x W x H (mm)	247 x 500 x 650
Net Weight (kgs)	50
Interface	
Communication Port	RS–232, RS–485, USB, CAN and Wi–Fi
Intelligent Slot	Optional for SNMP and Modbus cards
Environment	
Humidity	0 – 100% RH (Non–condensing)
Operation Temperature	–25 to 60°C, > 45°C power derating
Altitude	0 – 1000m**
Protection & Certificate	
Safety	IEC 62116, IEC 62727, IEC 61683, IEC 62109, IEC 61000–6–2:2019, IEC 61000–6–4:2019, IEC 61000–3–11:2019, EN 61000–3–12: 2011
Grid Connection Standard	NRS097–2–1:2017, VDE–AR–N4105

*These figures are based on VDE–4105 standard. All figures may vary depending on different AC voltage and country requirements.
** Power derating 1% every 100 m when altitude is over 1000m.
Product specifications are subject to change without further notice.

V3PL8K TWIN

Features

- IP65 waterproof and dustproof makes the inverter available for variousworking conditions
- 150% unbalaned load support
- Buit-in AC coupled function
- Reserved communication port for BMS (RS485)
- Built-in WiFi for mobile monitoring (App is available)
- Optional dual outputs for smart load management (check sales)
- User-adjustable charging current and voltage
- Parallel operation up to 6 units

V3PL8K TWIN

Model	
Maximum PV Input Power	12000W
Rated Output Power	8000 W
Maximum Charging Power	8000 W
Grid-tie Operation	
PV Input (DC)	
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 900 VDC
Start-up Voltage / Initial Feeding Voltage	150 VDC / 150 VDC
MPP Voltage Range	150 VDC – 850 VDC
Full MPP Voltage Range	400 VDC – 850 VDC
Number of MPP Trackers / Maximum Input Current	2 / A: 15A, B: 15A
Grid Output (AC)	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	184 – 265 VAC* per phase
Nominal Output Current	11.6 A per phase
Power Factor Range	0.9 lag – 0.9 lead
Efficiency	
Maximum Conversion Efficiency (DC/AC)	>96%
European Efficiency @Vnorminal	>95%
OFF-Grid Operation	
AC Input	
AC Start-up Voltage / Auto Restart Voltage	120 – 140 VAC per phase / 180 VAC per phase
Acceptable Input Voltage Range	170 – 290 VAC per phase
Maximum AC Input Current	40 A
PV Input (DC)	
Maximum DC Power	900 VDC
MPP Voltage Range	150 VDC – 850 VDC
Full MPP Voltage Range	400 VDC – 850 VDC
Number of MPP Trackers / Maximum Input Current	2 / A: 15A, B: 15A
Battery Mode Output (AC)	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Waveform	Pure sine wave
Efficiency (DC to AC)	>93%
Hybrid Operation	
PV Input (DC)	
Maximum DC Voltage	900 VDC
Start-up Voltage / Initial Feeding Voltage	150 VDC / 150 VDC
MPP Voltage Range	150 VDC – 850 VDC
Full MPP Voltage Range	400 VDC – 850 VDC
Number of MPP Trackers / Maximum Input Current	2 / A: 15A, B: 15A
Grid Output (AC)	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	184 – 265 VAC* per phase
Nominal Output Current	11.6 A per phase
AC Input	
AC Start-up Voltage / Auto Restart Voltage	120 – 140 VAC per phase / 180 VAC per phase
Acceptable Input Voltage Range	170 –290 VAC per phase
Maximum AC Input Current	40A
Battery Mode Output (AC)	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Efficiency (DC to AC)	>93%
Battery & Charger	
Battery Voltage Range	40 – 60 VDC
Maximum Discharging Current	200 A
Maximum Charging Current	160 A
General	
Physical	
Dimension D x W x H (mm)	247 x 500 x 650
Net Weight (kgs)	50
Interface	
Communication Port	RS-232, RS-485, USB, CAN and Wi-Fi
Intelligent Slot	Optional for SNMP and Modbus cards
Environment	
Humidity	0 – 100% RH (Non-condensing)
Operation Temperature	-25 to 60°C, > 45°C power derating
Altitude	0 – 1000m**
Protection & Certificate	
Safety	IEC 62116, IEC 62727, IEC 61683, IEC 62109, IEC 61000-6-2:2019, IEC 61000-6-4:2019, IEC 61000-3-11:2019, EN 61000-3-12: 2011
Grid Connection Standard	NRS097-2-1:2017, VDE-AR-N4105

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** Power derating 1% every 100 m when altitude is over 1000m.
Product specifications are subject to change without further notice.

V1PL6K

Features

- Pure sine wave output
- Self-consumption and Feed-in to the grid
- Built-in communication port for BMS (RS485), Wi-Fi
- Programmable multiple operation modes: Grid-tie, off-grid and grid-tiewith backup
- IP65 waterproof and dustproof makes the inverter available for variousworking conditions
- Programmable supply priority for PV, Battery or Grid
- User-adjustable charging current and voltage
- Parallel operation up to 9 units

V1PL6K

Model	
Rated Output Power	6000W
PV Input (DC)	
Maximum PV Power	7000W
Maximum PV Array Open Circuit Voltage	500 VDC
MPPT Range @ Operating Voltage	120 VDC – 400 VDC
Maximum PV Array Short Circuit Current	30 A
Number of MPP Tracker	1
Grid-tie Operation	
Grid Output (AC)	
Nominal Output Voltage	220 / 230 / 240 VAC
Feed-in Grid Voltage Range	195.5 – 253 VAC @India regulation 184 – 264.5 VAC @Germany regulation 184 – 264.5 VAC @South America regulation
Feed-in Grid Frequency Range	49 – 51Hz @India regulation 47.5 – 51.5Hz @Germany regulation 57 – 62Hz @South America
Nominal Output Current	26A
Power Factor Range	>0.99
Maximum Conversion Efficiency (DC/AC)	95%
OFF-Grid, Hybrid Operation	
Grid Input	
Acceptable Input Voltage Range	90 – 280 VAC or 170 – 280 VAC
Frequency Range	50 Hz / 60 Hz (Auto sensing)
Transfer Time	< 10ms (for UPS) < 20ms (for home appliances) < 50ms (for parallel system operation)
Rating of AC Transfer Relay	40 A
Battery Mode Output (AC)	
Nominal Output Voltage	220 / 230 / 240 VAC
Output Waveform	Pure sine wave
Efficiency (DC to AC)	93%
Battery & Charger	
Nominal DC Voltage	48 VDC
Maximum Charging Current (from Grid)	120 A
Maximum Charging Current (from PV)	120 A
Maximum Charging Current	120 A
Automatic Generator Start	Integrated
General	
Dimension, D x W x H (mm)	192 x 360 x 665
Net Weight (kgs)	27
Interface	
Parallel-able	Yes, 9 Units
External Safety Box (Optional)	Yes
Communication	USB or RS232 / Dry Contact / RS485 / Wi-Fi
Environment	
Humidity	0 – 95% RH (No condensing)
Operating Temperature	-25°C to 50°C

Product specifications are subject to change without further notice.

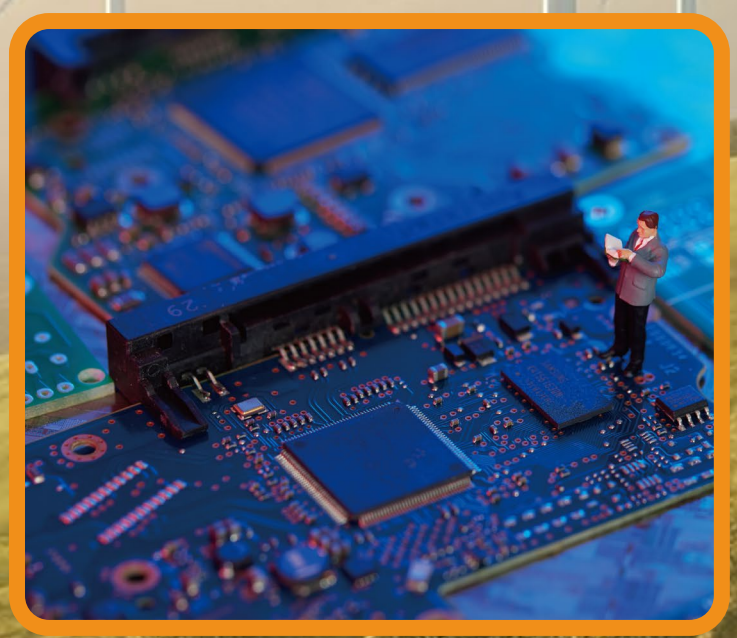
Train

Staff	Product Manager, Quality Manager	Sales Market
Place	Guangdong Factory	Online
Content	After Sales	Selling Point

After Sales Support

5-year machine warranty

- Machine replacement
- Certified Engineer Change Board



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