

# AC-COUPLING SOLAR STORAGE INVERTER



Peak-load Shifting



Support Diesel



BMS



Increase Self-consumption Rate



Lithium iron and Lead-acid



PV Output Smoothing



Three Stage Charging



**BD3KTL-PS**

# iMars BD-PS Introduction

## Efficient

- Professional BMS, three charging stage, lead-acid battery and lithium iron are compatible.
- Voltage and current charging setup are available.
- Charge and discharge time is adjustable, Maximizing the peak cutting and valley filling performance.

## Smart

- RS485\*2, CAN\*1(lithium battery), WiFi (optional).
- Multiple monitoring modes: APP, website.
- 50Hz/60Hz auto adaptation.

## Reliable

- IP65 protection.
- Use international top brand components, with perfect protection function.

## Simple

- Small in size, light in weight, easy to install.
- Friendly HMI, 4.3-inch LCD display.



## Specification

	BD3KTL-PS
<b>AC grid parameters</b>	
Rated output power (W)	3000
Max. output current (A)	13
Rated output voltage (V) / frequency (Hz)	230 (L+N+PE), 50/60
Power factor	≥0.99 (±0.95adjustable)
THDi	≤3% (at rated power)
Max. output fault current (A)	50
<b>Battery</b>	
Battery type	Lithium/Lead-acid
Rated voltage (V)	48
Max.charging current (settable) (A)	60
Max. discharging current (settable) (A)	65
charging curves	Three stage
Max. efficiency	93%
<b>Protection</b>	
Protection	DC breaker, AC short-circuit protection, Over current protection, Over voltage protection, Isolation protection, RCD, Surge protection, Anti-island protection, Over-temperature protection, Ground fault monitoring, etc.
<b>Others</b>	
Isolation method (battery side)	High-frequency isolation
Degree of protection	IP65
Dimension (H x W x D mm)	360x150x507
Range of working temperature	-25°C~+60°C
Cooling method topology	Air cooling
Relative humidity	0~95%, no condensation
Display	LCD
Communication interface	RS485(standard); WiFi(optional), CAN-BUS
Grid Qualification	VDE-AR-N4105, AS4777/3100
Factory warranty (years)	5

# US2000B Lithium Iron Phosphate Battery



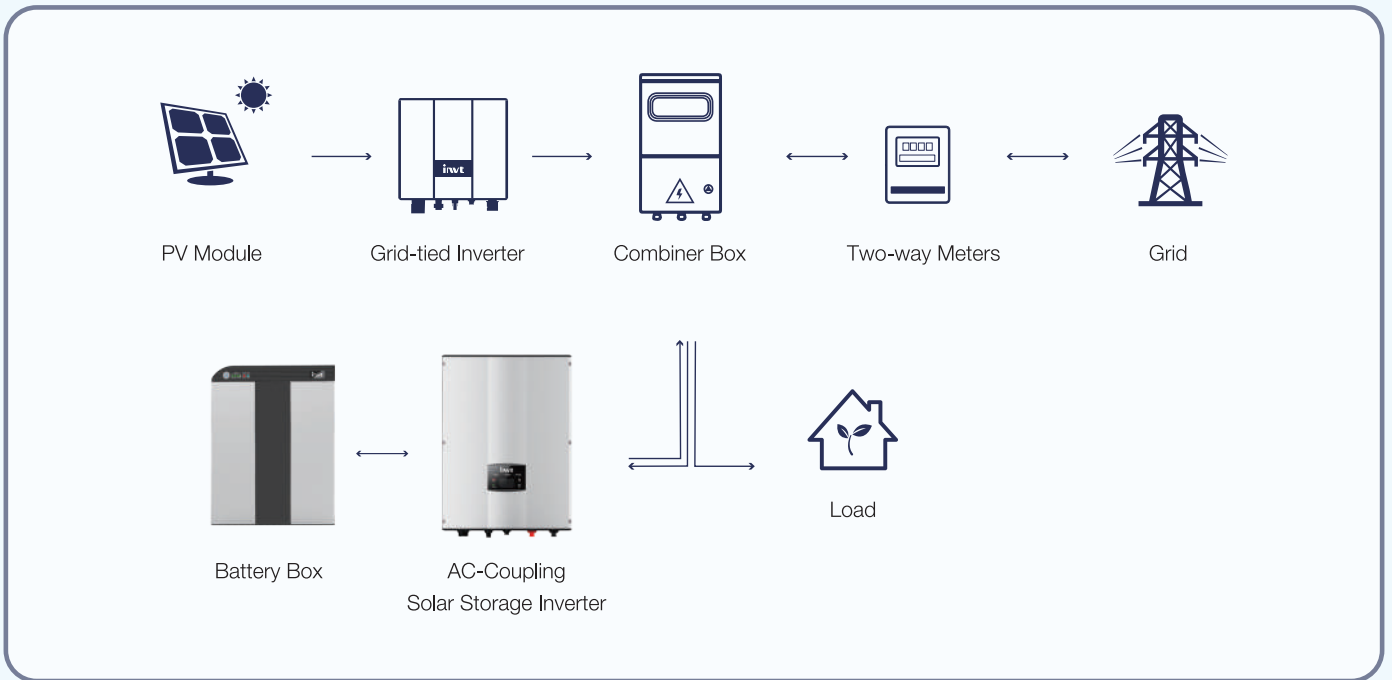
- Support parallel application;
- The maximum charge and discharge rate reaches 2C;
- Awarded by TUV (IEC62619),CE, and UN38.3;
- With various communication modules: RS-485, CAN. And we can know of the station of battery whenever through such monitoring modes;
- Real-time monitoring, providing short circuit protection, reverse connection protection, high voltage protection, low voltage protection, charge over current protection, discharge over current protection, over charge protection and over discharge protection, high temperature protection as so on.

## Specification

Items	Specification	Remarks
Standard voltage (V)	48	
Rated capacity (Ah)	50	
Charging ways	0.2C constantly charging to stop value 0.01C	
Rated discharging value (A)	25	
Discharge voltage (V)	45~54	
Charge voltage (V)	52.5~54	
Discharging protection current (A)	100	Delay 15s protection, delay 1min after protection and recovery of charging current immediately
Rated charging current (A)	25	
Charge protection current (A)	100	Delay 15s protection, delay 1min after protection and recovery of discharging current immediately
Charge max. voltage point (V)	54±0.1	Suggest charging voltage 53.5±0.5
Charge min. voltage (V)	44.5±0.1	
Work temperature	Charge	-10℃~60℃
	Discharge	-10℃~60℃
Communication interface	RS232,RS485,Can	
Certificate	TUV/CE/Un38.3/TLC	
Humidity	5%~95%	
Storage temperature	-25℃~60℃	
Circles	6000	
Dimension (H x W x D mm)	440x410x89	
Weight (kg)	24	
Factory warranty (years)	>10(25℃/77F)	



# Home Energy Storage System



## Applications



Sales E-mail: [solar@invt.com.cn](mailto:solar@invt.com.cn) Service E-mail: [solar-service@invt.com.cn](mailto:solar-service@invt.com.cn) Website: [www.invt-solar.com](http://www.invt-solar.com)

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