



# BD 3-6kW-RL1

## Single Phase Hybrid Inverter (48V)



Lead-acid/  
lithium  
battery



Battery reverse  
protection



IP65



Smart energy  
management



Zero export  
function  
(integrated)



Natural cooling,  
low noise



Charge/discharge  
protection

	BD3KTL-RL1	BD3K6TL-RL1	BD4KTL-RL1	BD4K6TL-RL1	BD5KTL-RL1	BD6KTL-RL1
<b>Input (PV)</b>						
Max. PV Input Power	4.6kW		6kW		7kW	
Max. PV Input Voltage	550V					
Start Voltage	120V					
MPPT Voltage Range	125V ~ 550V					
Rated MPPT Voltage	360V					
Max. PV Input Current	14A					
Number of MPP Trackers / String per MPPT	2 / 1					
<b>Output (AC)</b>						
Max. Output Current	13A	16A	17.4A	20A	21.7A	26A
Rated Power	3kVA	3.6kVA	4kVA	4.6kVA	5kVA	6kVA
Rated Voltage	230V, L + N + PE					
Operating Voltage Range	180V ~ 280V					
Frequency	50Hz / 60Hz					
Power Factor	1 (0.99 lagging~0.99 leading)					
THDi	<3%					
<b>Output (EPS)</b>						
Rated Power	3kVA	3.6kVA	4kVA	4.6kVA	5kVA	6kVA
Rated Voltage	230Vac					
Rated Current	13A	16A	17.4A	20A	21.7A	26A
Rated Frequency	50Hz / 60Hz					
Automatic Switch Time	<20ms					
Overload Capability	110%, 60s / 120%, 30s / 150%, 10s					
THDU	<2%					
<b>Battery</b>						
Battery Voltage Range	40V ~ 58V					
Max. Charging Voltage	58V					
Charge / Discharge Current	95A / 62.2A	95A / 75A	95A / 83.3A	95A / 95.8A	95A / 104.2A	95A / 110A
Battery Type	Lithium / Lead-acid					
Communication	CAN / RS485					
<b>Efficiency</b>						
Max. DC Efficiency	97.60%					
European Efficiency	97%					
MPPT Efficiency	99.90%					
Battery Charge / Discharge Efficiency	95.5% / 95%					
<b>Communication</b>						
Display	LCD					
Communication	standard: RS485 / CAN / DRM optional: WIFI / LAN					
<b>Standard Compliance</b>						
Certificates	CE、TÜV、SAA、IEC62116:2014、IEC61683:1999					
<b>General Data</b>						
Dimensions (W x H x D)	550 x 515 x 200 mm					
Weight	26kg					
Operation Temperature	-25°C ~ +60°C					
Cooling Method	Natural Cooling					
Protection Degree	IP65					
Noise Emission	<35dB					
Max. Operating Altitude	5000m (derating above 2000m)					
Relative Humidity	0 ~ 95% (non-condensing)					
Topology	Transformerless					
Standby Power Consumption	< 3W					



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