

BC50kW1000V

BC50kW1000V is a high-power, bi-directional DC conversion module specifically designed to meet the application of energy storage devices, DC microgrids, and the cascade utilization of retired batteries.



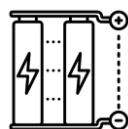
High efficiency

50kW DC power with
98% peak efficiency



VPP ready

VPP interactive charge
/ discharge operations



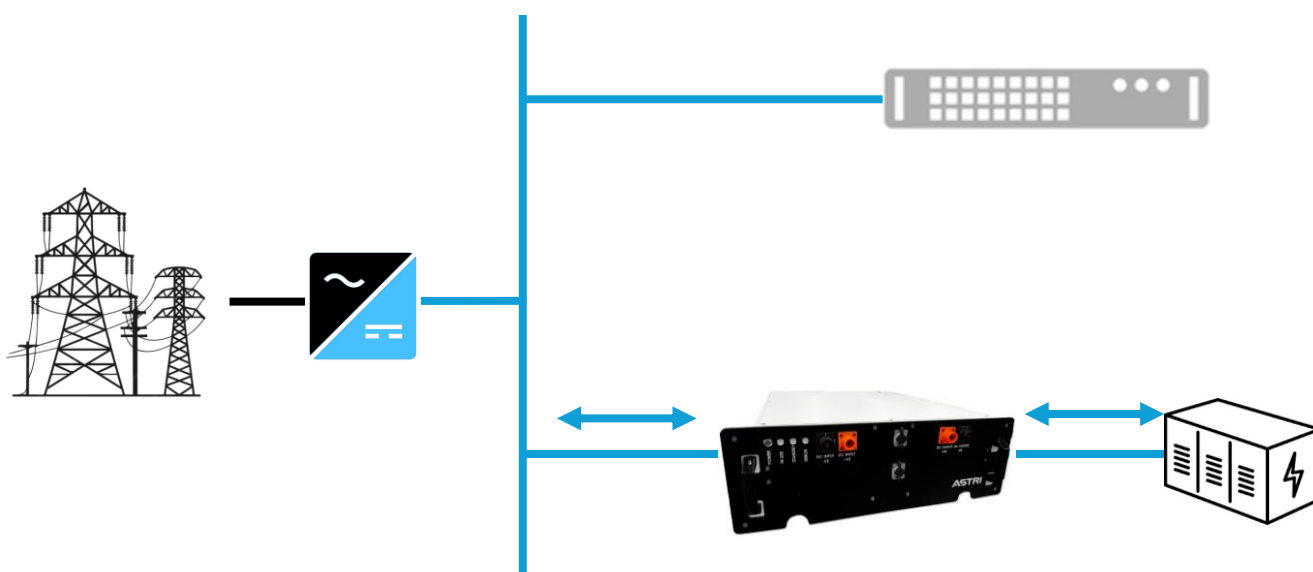
Wide range

200 – 1000V battery /
400 – 900V bus voltage
range



Simple control

Remote & local
monitoring & control



Product Specification

BC50kW1000V

Input DC (Bus side)	
Nominal Input Power	50kW
Input Voltage Range	400 – 900Vdc
Input Current Range	0 – 100A
Input Voltage Accuracy	$< \pm 0.5\%$
Input Current Accuracy	$< \pm 1\%$ (Output loading of 100 – 200%)
Output DC (Battery side)	
Nominal Output Power	50kW
Output Voltage Range	200 – 1000Vdc
Output Current Range	0 – 120A
Output Voltage Accuracy	$< \pm 0.5\%$
Output Current Accuracy	$< \pm 1\%$ (Output loading of 100 – 200%)
Efficiency	98.0% (peak)
Equipment Protection	
DC Output Overcurrent Protection	Yes
DC Output Overvoltage Protection	Yes
DC Input Overcurrent Protection	Yes
DC Input Overvoltage Protection	Yes
Thermal Protection	Yes
Output Undervoltage Load Drop Protection	Yes
General Data	
Operating Temperature Range	-40 to +65°C, Derating at 45°C and above
Permissible Ambient Humidity	0 – 100%
Permissible Altitude	2000m
Noise	$\leq 25\text{dB}$
Inverter Topology	Isolated
Communication	CAN
Cabinet Size (mm)	500 (W) x 203.2 (H) x 598 (I) (Excluding connectors)
Weight	45kg
Type of Cooling	Liquid cooling

