

UXC95050B



20kW@950V Isolated Bi-directional DCDC Charging-discharging Power Module



+ Introduction

UXC95050B power module is a DC-DC module designing for direct micro-grid. This module has competitive advantage in wide range of voltage and high efficiency. It also contains high level of protection, power density and wide range of working temperature as core features. UXC95050B can be widely used in interaction between DC bus side and battery side, such as energy storage, PV, ESS and charging, battery cascade utilization, data center and other multi-energy complementary scenarios.

+ Excellent advantages

Dual-end Ultra-wide **200-950_{Vdc}**

output voltage range : **200-950_{Vdc}**

Meet the requirement of DC bus energy interaction in various level of voltage.

Electromagnetic compatibility

meets **Class B**

EMC meets Class B requirements of EN61000-6-1 and EN61000-6-3 standards, with low electromagnetic radiation and strong anti-interference capability. CE and UL certified for global use.

Ultra-wide dual-end voltage range, meeting charging needs across various electric vehicles and bus supply environments.

Outstanding

conversion efficiency: **98.8%**

Sharply reduces system energy consumption.

Dual-end Wide Constant Power Range

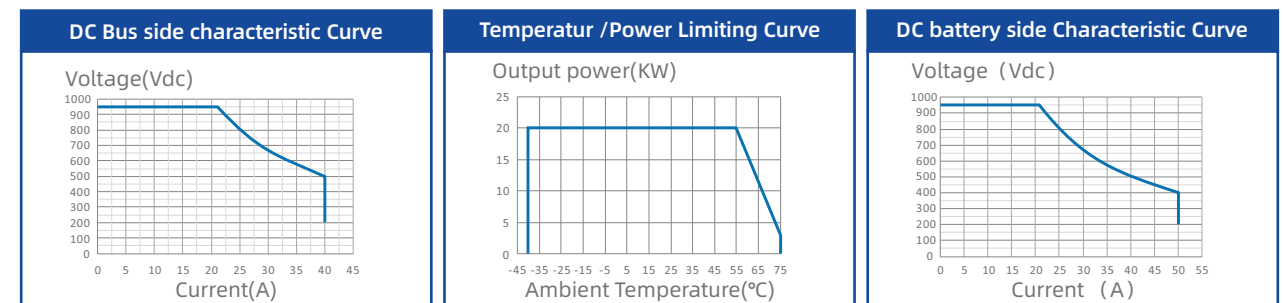
Bus Side: **500-950_{Vdc}** Battery Side: **400-950_{Vdc}**

Ultra-wide dual-end voltage range, meeting charging needs across various electric vehicles and bus supply environments.

High-standard electromagnetic compatibility design simplifies power system design.

+ Key features

- Wide working output voltage range, DC bus side 200V~950V, Battery side 200V~950V;
- Inside high frequency isolated transformer, high safety & reliability;
- Bidirectional fast switching enables "seamless switching" of energy transmission;
- High power density of 45.4W/in³, saving system space;
- Full-load working efficiency ≥98.5%;
- Semi-independent air duct design, suitable for all environment;



Item		Specifications
Basic Specifications	Dimensions	85mm (H) ×226mm (W) ×376mm (D)
	Weight	≤ 9.5kg
	Efficiency (full load)	>98.5%
	Cooling Mode	Fan cooling
	Communications bus protocol	CAN bus
	No. of Parallel Modules	≤60pcs
DC Bus side	Indicator	Green: normal operation Yellow: alarm Red: fault
	Voltage Range	200Vdc~950Vdc
	Current Range	0~40A
	Steady Voltage Accuracy	≤±0.5%
	Steady Current Accuracy	≤±1% (output power in 20%~100%)
	Ripple Voltage Peak Value	≤1%
Battery side	Current Sharing Imbalance	≤±5%
	Voltage Range	200Vdc ~ 950Vdc
	Current Range	0 ~ 50A
	Steady Voltage Accuracy	≤±0.5%
	Steady Current Accuracy	≤±1% (output power in 20%~100%)
	Ripple Voltage Peak Value	≤1%
Environmental Conditions	Current Sharing Imbalance	≤±5%
	Operating Temperature	- 40°C ~ +75°C, output derating at above 55°C
	Storage Temperature	- 40°C ~ +75°C
	Relative Humidity	≤ 95% RH, non-condensing
	Altitude	≤2000m
	MTBF	>500,000 hours
Protection Specifications	Input Over/Undervoltage Protection	Automatic recovery after power-off
	Output Overvoltage Protection	Manual recovery after power-off
	Overcurrent and Short-circuit Protection	Manual recovery after power-off
	Over temperature Protection	Automatic recovery after power-off