

# UXR100040B

40kW@1000V DC Charging Module



## + Introduction

UXR100040B is a charging power module designed to overcome the bottleneck of charging station industry with prominent advantages of ultra-high full load working temperature and ultra-wide constant power range in the industry. At the same time, key features of this module include high reliability, high efficiency, high power factor, high power density, wide output voltage range, low noise, low standby power consumption and good EMC performance.

## + Excellent performance advantages

Full load working during Ultra-high temperature: **50°C**

Charging station is a product used for outdoor applications. During summer, temperature at air intake is normally 50°C, thus thermal dissipation is a serious problem for charging power module. Most of the modules on market which cannot withstand the high temperature environment (ambient temperature limit for full load working condition is usually 50°C in the industry) could only operate in derating condition by limiting output power and therefore the charging speed is hugely reduced.

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**UXR100040B works at full power under 50°C ambient temperature, ensuring fast charging speed in high temperature environment.**

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Ultra-wide output constant power range: **300V-1000V**

For improving the mileage range of electric vehicles, increasing the capacity and voltage of power battery will become a trend in the future. Now, the maximum output voltage of the mainstream DC module in the market is 750V, and the maximum output power is 20kW. And UXR100040B output voltage range is 100-1000V. Under the range of 300V~1000V output voltage, it can achieve 40kW constant power output, which features leading edge ultra-wide output voltage range and ultra-wide constant power range in the industry.

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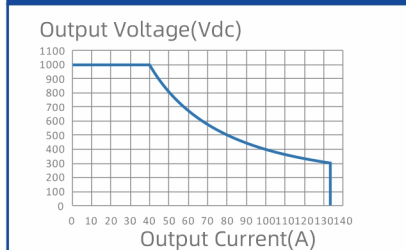
**UXR100040B ultra-wide output voltage range and ultra-high output power is suitable for different types EVs charging, and improves greatly fast charging speed.**

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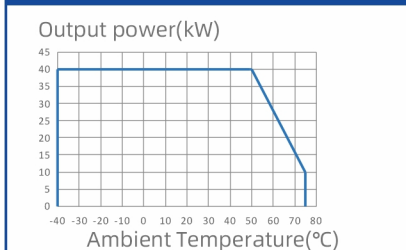
## + Key features

- Ultra wide output voltage, 100~1000Vdc, suitable for different types EVs;
- Ultra high output power, under 300V~1000V output voltage, 40KW constant power output;
- Full-power wide working temperature, -40~50°C;
- Full-load working efficiency  $\geq 95.5\%$ , high efficiency in full working range, extra energy saving;
- Ultra low noise, improving user experience;
- No current retraction in low voltage range, faster charging rate;
- Pass CE、TUV and UL Certifications, meet ROHS requirements;
- Built-in residual voltage releasing circuit, lower cost and higher reliability;

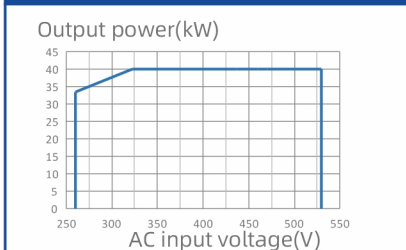
Output Voltage vs.output Current Curve



Temperature Derating Curve



AC input Power Limiting Curve



Item		Specifications
Basic Specifications	Dimensions	85mm (H) ×360mm (W) ×459mm (D)
	Weight	≤ 20 kg
	Efficiency (full load)	>95.5%
	Standby Power Consumption	<13W
	Cooling Mode	Forced air cooling
	Communications bus protocol	CAN bus
	No. of Parallel Modules	≤60pcs
	Indicator	Green: normal operation Yellow: alarm Red: fault
Input Characteristics	Input Voltage	260Vac~530Vac, Three phase+Protective Earth
	Input Current	<60A
	Grid Frequency	45Hz~65Hz
	Power Factor	≥0.99
	ITHD	≤5%
Output Characteristic	Output Power	40kW@output voltage≥300Vdc
	Voltage Range	100Vdc ~ 1000Vdc, default value: 200Vdc
	Current Range	0A~133.3A
	Voltage stabilized accuracy	≤±0.5%
	Current stabilized accuracy	≤±1%
	Current Sharing Imbalance	≤±3%
	Ripple voltage peak value coefficient	≤1%
Environmental Specifications	Operating Temperature	-40°C ~ +75°C, output derating at above 50°C
	Storage Temperature	- 40°C ~ + 75°C
	Relative Humidity	≤ 95% RH, non-condensing
	Altitude	≤2000 m. Full power;> 1000 m, the operating temperature decreases by 1°C for each additional 100 m.
	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