

SOLTERRA

ST120-10KV1

10kW CHARGING MODULES



PRODUCT INTRODUCTION

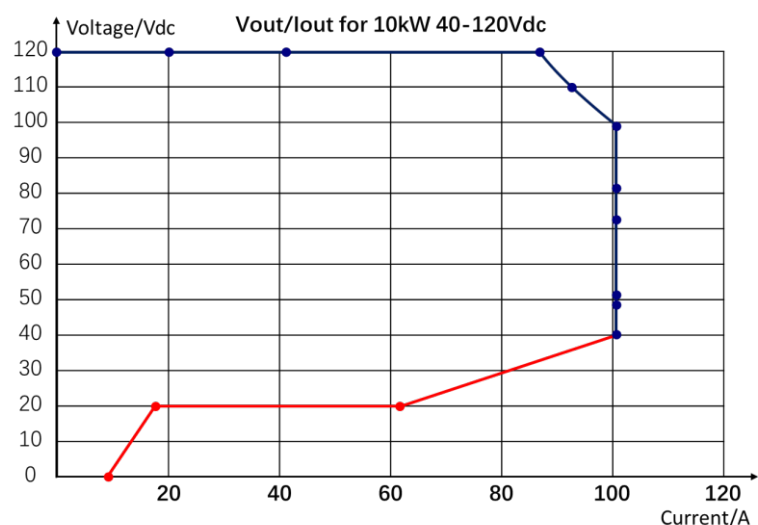
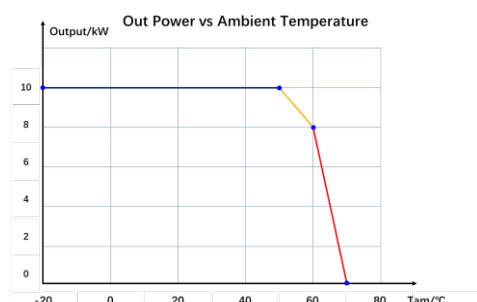
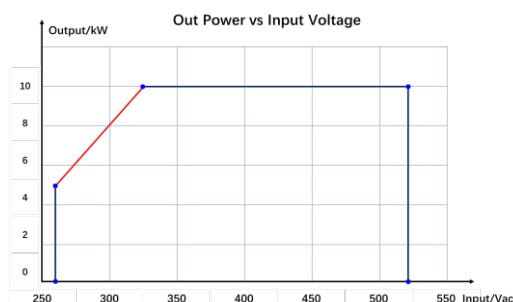
The STL120-10K AC/DC charging module is designed for low-voltage charging equipment. The module adopts DSP digital control, resonant soft switching, and active PFC technology, offering features such as high power density, high power factor, low harmonics, and high efficiency. It supports parallel installation for higher power charging and provides a wide output voltage range of 40–120 VDC to meet current and future low-voltage charging requirements. Its wide operating temperature range allows it to function effectively even in hot weather conditions.

APPLICATIONS

e-Scooters, e-Mopeds, e-Bikes, e-Tricycles, e-Forklift, Golf Cart, Low Speed Vehicles, etc.

KEY FEATURES

- High Efficiency
- High Power Density
- Low Grid Impact
- Wide Output Voltage Range
- Wide Operation Temperature
- Hot Swapping
- Failure Self-detection Prompts



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ST120-10KV1 SPECIFICATIONS

Parameter		ST120-10KV1
Input	Voltage	Rated 380Vac, full load @ 323~520Vac, linear derate @323~260Vac
	Current	< 20A
	Frequency	45Hz~65Hz
	Power Factor	≥0.99
	THD	≤5%
	Protection	Fuse; Lightning protection circuits
Output	Rated Power	10kW
	Voltage Range	40-120Vdc
	Rated Current	83.3A
	Adjustable Current Limiting	9.2~101.2A Continuously Adjustable
	Efficiency	≥95%
	Voltage Regulation Accuracy	≤±0.5
	Current Regulation Accuracy	≤±1%
	Current Sharing Imbalance	≤±5%
Condition	Temperature	-40°C~75°C, derate from 50°C~75°C, 80% load @ 60°C
	Relative humidity	0~95%, Non-Condensing
	Storage Temperature	-40°C ~ 75°C
	Altitude	under 2000m
General Info.	Cooling	force-air cooling
	Communication	CAN, parallel 60pcs max
	Address setting	Software or POT setting
	Dimension	130*84*396(W*H*D, mm)
	Weight	7Kg
	MTBF	120k hours

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Disclaimer: The specifications in this catalog are for reference only. The performance of the products may vary depending on application scenarios and environmental conditions. Product specifications are subject to change without prior notice.