

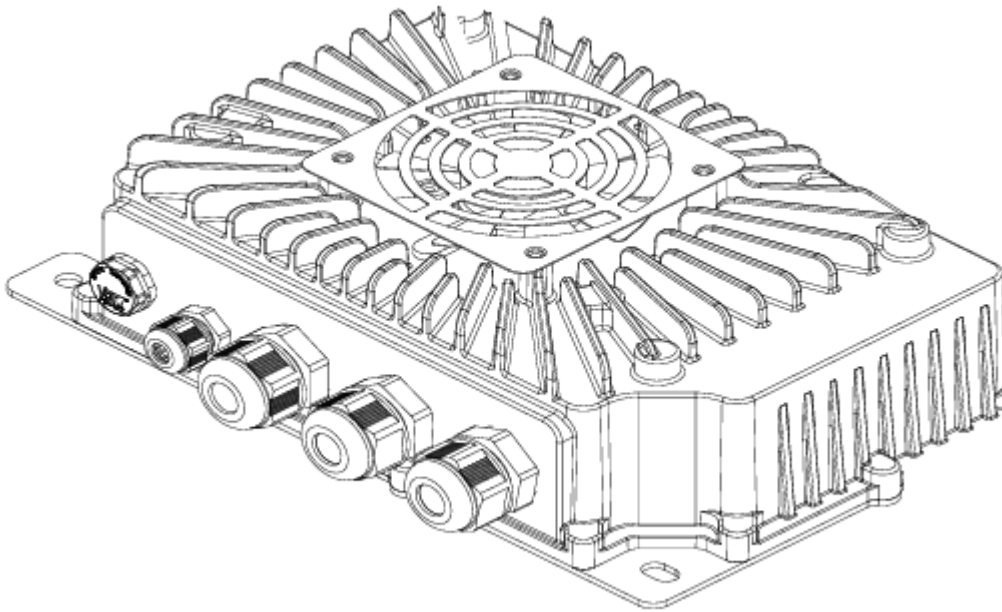


General Specifications - Boson Series

Document details:

Note: Specifications are updated from time to time to reflect changes in developmental process

General Specifications for Boson SiC Series			
Version	Date	Authors	Change content
V0	01-5-2024	Pradeep	First release
V1	18-06-2024	Pradeep	Updated specs



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Features

- Charger for Lithium ion Batteries
- Universal Voltage input
- Compact
- Rugged housing for All weather and environment operation and IP67
- SiC FETS for efficient switching
- EMI/ EMC complaint
- Multiple safety cutoffs
- Soft start
- Constant Power
- GUI for debugging and Calibration
- Bluetooth module for Mobile app integration

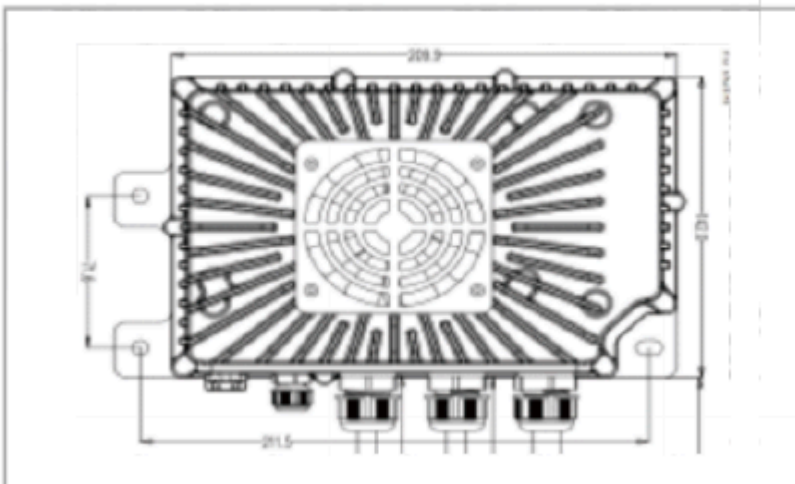
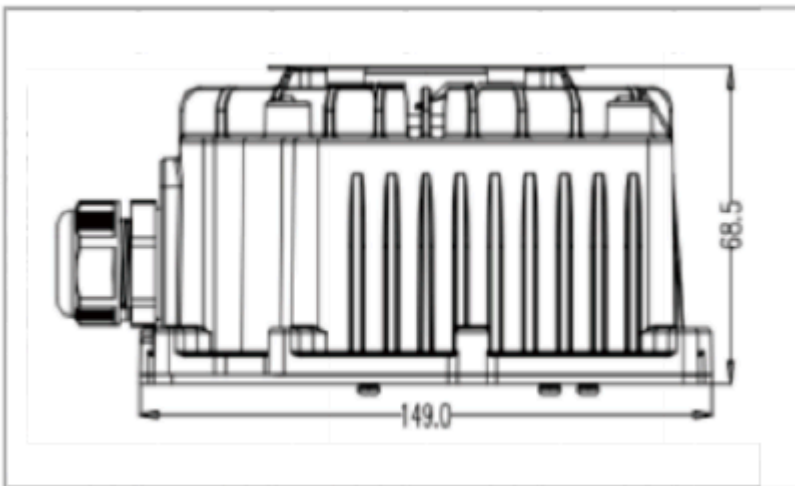
Specifications

Specification		LW-1K2-4825	LW-2K0-4835	LW-3K3-4860
Functional spec	Battery type	Lithium ion		
	Vehicle type	Light Electric Vehicles like two wheelers, buggies etc		
	Form factor	On Board Charger/ Compact Portable charger		
	Cooling	Forced air convection (Fan)		
	Housing	Rugged Aluminium casting		
	Communication	CAN 2.0b (Customizable Baud rate)		
	Charging profiles	CC-CV, Dynamic with CAN		
Dimension/ weight	Dimensions	210 x 150 x69 mm	210 x 150 x69 mm	276 x 180 x 90mm
	Weight	< 3.2 Kg	< 3.2 Kg	< 5.6 Kg
Input	AC input Phase	Single		
	AC input voltage	100-265 VAC single phase		
	AC input frequency	45-65 Hz		
	AC current	< 6A/ 8A	< 10 A	< 16 A
	Power Factor	>0.99		
Output/ Performance	Efficiency	Typical 94%		
	Output power	1200/ 1500W	2000W	3300W



	DC output voltage	20V - 67V		
	DC output current (Rated)	20 to 25A	35A	60 A
	Voltage regulation	≤1%		
	Current regulation	≤2%		
General/ Environmental	Operating Temp	-10°C to 50°C		
	Storage Temperature	-20°C to 85°C		
	IP	IP67		
	IK	IK08		
	Resistance	Resistant to Industrial chemicals		
Cable and Connectors	AC cable length	Standard 1.5M, Customizable		
	DC cable length	Standard 1.2M, Customizable		
	AC connector	Plug/ / PRCD, customizable as per requirement		
	DC connector	customizable as per requirement		
Protection	Comprehensive cutoffs	Over voltage protection		
		Under Voltage Protection		
		Short circuit protection		
		Over temperature protection		
		Reverse Polarity Protection		
		Automatic charge cutoff		
Safety/ Surge and Harmonics	Dielectric Strength	3750VAC between L-N, 1500VAC between L-N and G		
	Insulation	20MΩ		
	Harmonics	IEC 61000-3-2 Class A		
	Radiation, conduction and Immunity	EN/IEC 61000-6-1 EN/IEC 61000-6-3		
	Other EMI/ EMC/ Surge	EN/ IEC 61000-3-3		
		EN/ IEC 61000-4-2, EN/ IEC 61000-4-3, EN/ IEC 61000-4-4, EN/ IEC 61000-4-5, EN/ IEC 61000-4-6, EN/ IEC 61000-4-8		
Standards	International	CE (Other standards including IS, UL as required)		
Indication	LED indication	Charging - Red: Fully charged - Green, Error - Red blinking		

Dimensions - LW-1K2-4825 / LW-2K0-4835



Dimensions - LW-3K3-4860

