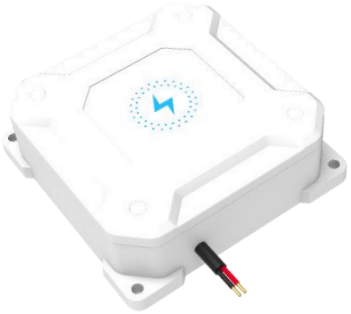
40~120W Wireless Charger Module



■ Features

- Proprietary communication protocol for Transmitter & Receiver module.
- 28V~42V 1~3A charging output, maximum power up to 120W.
- 24V 7A DC input source or ACDC power adapter
- Support FOD (Foreign Object Detection) function
- IP67 Water proof design for Tx & Rx module
- 20~40 mm allowable misalignment between Tx & Rx module
- 88% total power transmit efficiency.

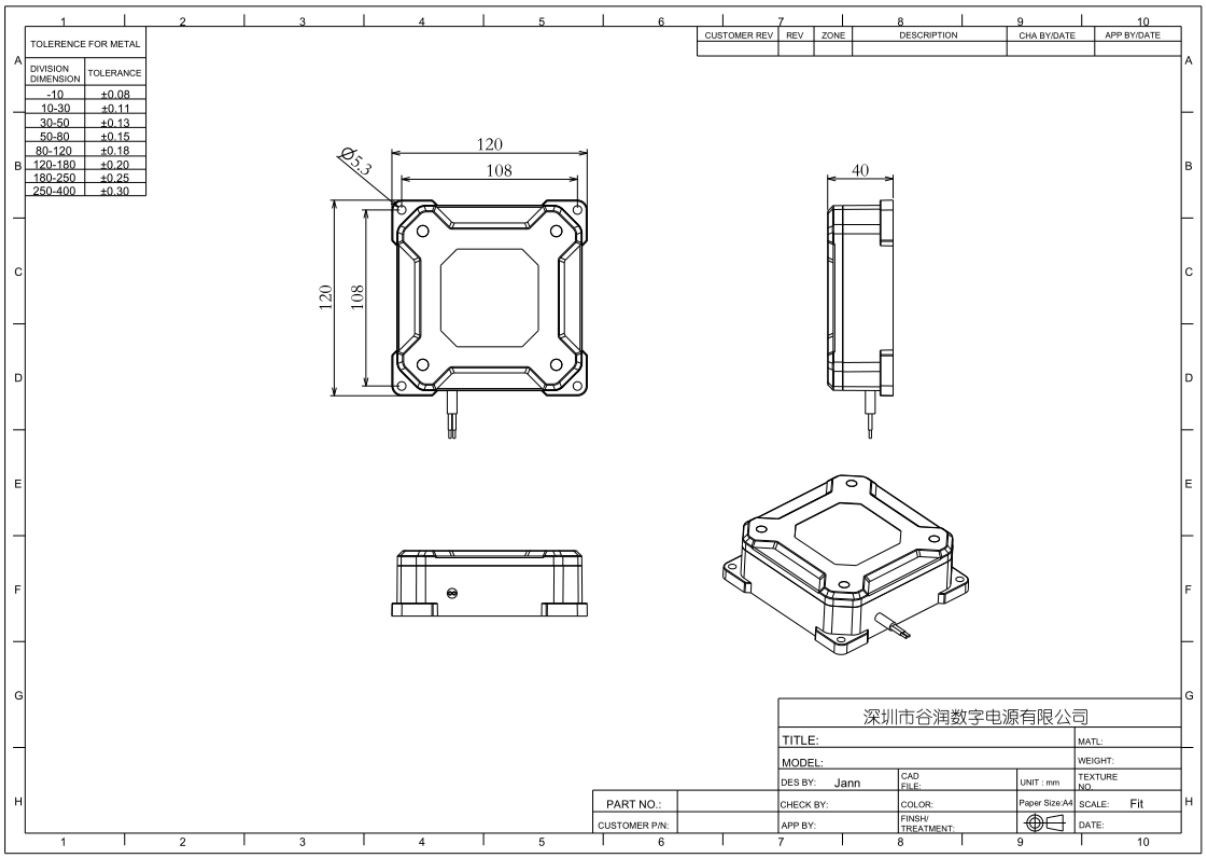
■ Applications

- Electric Scooter
- Power tool
- AGV & AMR
- Water proof electronics device

Specification for wireless charger transmitter module

Model P/N		WL120T		
Output	Wireless charging Protocol	Proprietary communication protocol (can be opened for ODM project)		
	Maximum Output Power	10~42V, 120W		
	Supported batteries types	12V~ 36V LiPo, Li-Ion, LiFePO4, NiMH, NiCD		
	Communication frequency	433MHz or 2.5GHz		
	Running indication	Bi-color LED, Red for charging, Green for standby, Red-flashing for errors, Green-flashing for communicating between Transmitter & Receiver module		
Input	Rating input voltage	DC 24V		
	Input voltage range	18V ~ 32V		
	Input power connector	M16 2pin water-proof socket		
	Maximum input current	10A		
	Maximum power efficiency	88%		
Protection	FOD protection	Yes		
	Input over voltage	Yes		
	Input over current	Yes		
Environment	Operating temperature	-10 - +40℃		
	Operating humidity	0 - 90% RH		
	Storage temp & humidity	-40 - +70℃, 0 - 95% RH		
	Cooling	Natural convection		
	Vibration resistance	10 - 50Hz, 2G 10min. 1cycle, 60min. each along X, Y, Z axes		
EMC & LVD	Max. temperature rise	< 45 on casing		
	Safety approval	CE FCC		
	EMC Emission	Parameter	Standard	Test Level I Note
		Conducted	EN55032 FCC PART15	Class B
		Radiated	EN55032 FCC PART15	Class B
		Harmonic Current	EN61000-3-2	.....
		Voltage Flicker	EN61000-3-3	.....
	EMC IMMUNITY	EN61000-4-2，EN61000-4-3，EN61000-4-4，EN61000-4-5，EN61000-4-6，EN61000-4-8，EN61000-4-11		
Others	MTBF	30000H		
	Size	122*122*40mm		
	Weight	450g		
Notice	N.A			

Specification for wireless charger receiver module

Model P/N		WL120R		
Output	Wireless charging Protocol	Proprietary communication protocol (can be opened for ODM project)		
	Maximum Output Power	10~43V, 120W		
	Supported batteries types	12V~ 36V LiPo, LiIon, LiFePO4, NiMH, NiCAD		
	Communication frequency	433MHz or 2.5GHz		
	Running indication	Bi-color LED, Red for charging, Green for standby, Red-flashing for errors, Green-flashing for communicating between Transmitter & Receiver module		
Input	Transmitter module	Only using with WL120T module		
	Receiver voltage range	18V ~ 32V		
	Input power connector	M16 2pin water-proof socket		
	Maximum input current	10A		
	Maximum power efficiency	88%		
Protection	FOD protection	Yes		
	Input over voltage	Yes		
	Input over current	Yes		
Environment	Operating temperature	-10 - +40℃		
	Operating humidity	0 - 90% RH		
	Storage temp & humidity	-40 - +70℃, 0 - 95% RH		
	Cooling	Natural convection		
	Vibration resistance	10 - 50Hz, 2G 10min. 1cycle, 60min. each along X, Y, Z axes		
EMC & LVD	Max. temperature rise	< 45 on casing		
	Safety approval	CE FCC		
	EMC Emission	Parameter	Standard	Test Level I Note
		Conducted	EN55032 FCC PART15	Class B
		Radiated	EN55032 FCC PART15	Class B
		Harmonic Current	EN61000-3-2	.....
		Voltage Flicker	EN61000-3-3	.....
	EMC IMMUNITY	EN61000-4-2，EN61000-4-3，EN61000-4-4，EN61000-4-5，EN61000-4-6，EN61000-4-8，EN61000-4-11		
Others	MTBF	30000H		
	Size	122*122*40mm		
	Weight	200g		
Notice	N.A			

■ Drawing for WL120-T[R]