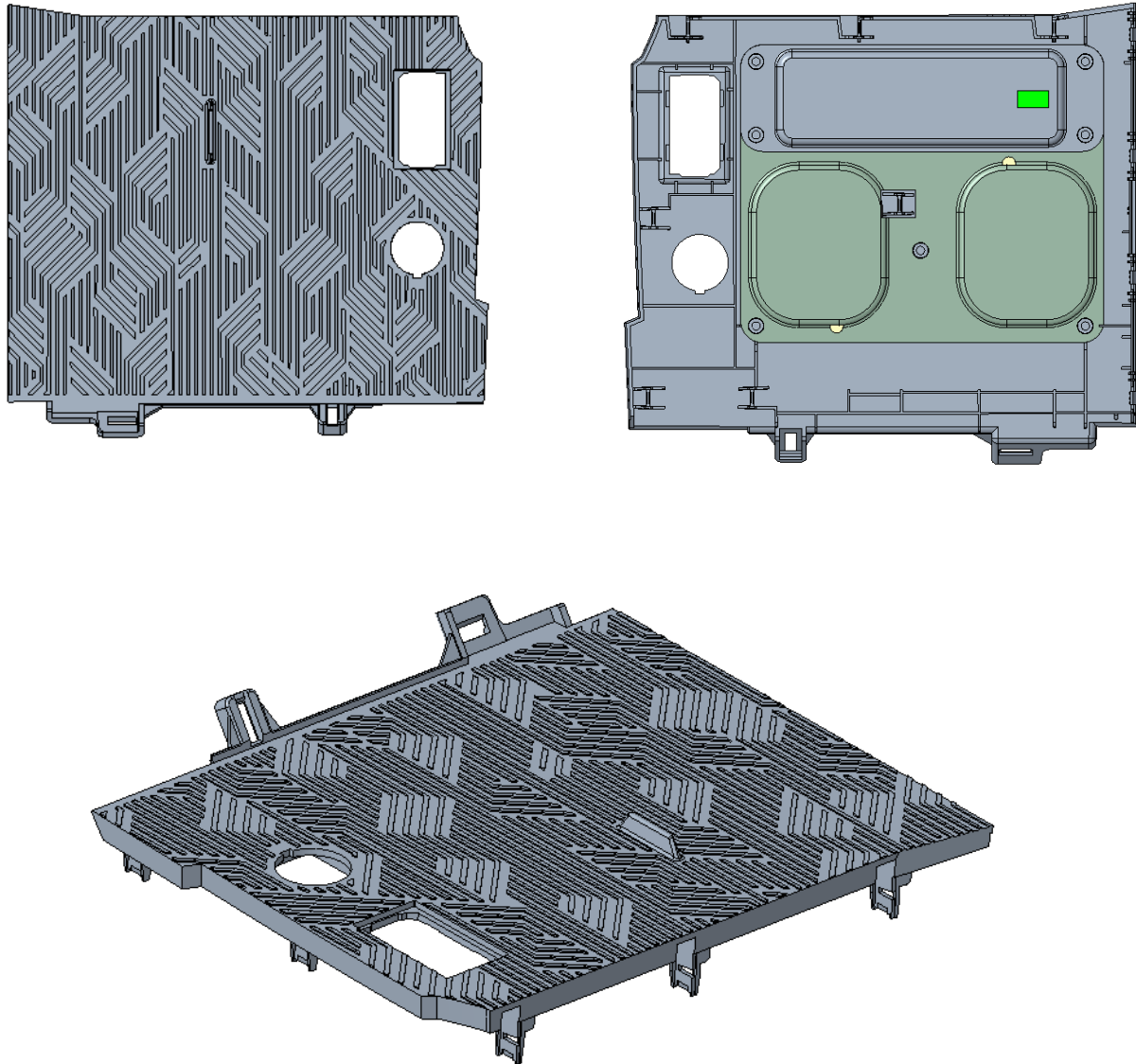


Car Wireless charger for 4Runner



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1. Product definition description

The 2 coil wireless charging module that complies with the Wireless Power Consortium (WPC) Qi1.3.3 10W standard. This module can automatically detect Qi-standard receivers, initiate data communication with them, and intelligently manage wireless power transmission. It supports 7.5W fast wireless charging for Apple iPhone 12 to 15 series, as well as 10W fast wireless charging for Samsung Huawei google etc android phones .

To enhance application flexibility, it is equipped with a dynamically detectable input power supply, compatible input DC 9-18V Power input . By continuously monitoring the efficiency conversion between received power and transmitted power, the module can detect the presence of metallic foreign objects, thereby preventing abrupt temperature rises during charging.

2. Product features

1. WPC Qi1.3.3 BPP standard ;
2. Maximum support for charging 15W receiver;
3. Compatible with charging equipment with Qi BPP, EPP standards;
4. Support Samsung, LG, Google Huawei mobile phone 10-15W fast charging;
5. Support Apple mobile phone Max 7.5W fast charge;
6. Overvoltage and overcurrent protection;
7. Foreign body detection (FOD);
8. Up to 73% charging efficiency ;
9. Reserved expansion interface, can be connected with LED-RGB fan, etc ;
10. Certificated : Support Passed CE-RED / FCC-ID / Rohs 2.0 / Qi1.3.3

3. Electrical Specification

1. Input voltage : 12V4A
2. Rated input current: 4A MAX
3. Required input ripple voltage:<150mVp-p @ 2.3A 15V
4. Output power of Rx: 15W (Max 15W)
5. Switching frequency: EPP 115Khz-205Khz
6. Wireless charging efficiency 72% (Max)
7. Ambient operating Temperature: -30℃ to 80℃
8. Over current protection: 4.1A
9. Over voltage protection: 18.5V
10. Thermal protection:yes : 75℃ (80℃ power reduction, 85℃ error reporting , 65℃ recovery)
11. Operating temperature: 0℃ to 45℃
12. Storage temperature: -20℃ to 80℃
13. Operating humidity: 10% to 70% RH
14. Effective charging area: typ. +/-5mm from coil centre (Dz=3 mm)
15. Effective charging distance: 1~ 6mm from Tx-coil to Rx-coil
16. Charging power with charging distance : ≤3mm (15W) >3mm (10-15W)

Wireless charger design compatible the phone brand and charging power

Brand	mode	Charging power
Iphone	iPhone8	7.5W
	iPhone8plus	7.5W
	iPhoneX	7.5W
	iPhoneXS	7.5W
	iPhoneXS Max	7.5W
	iPhone XR	7.5W
	iPhone 11	7.5W
	iPhone 11 Pro	7.5W
	iPhone 11 ProMAX	7.5W
	iPhoneSE 2	7.5W
	iPhoneSE 3	7.5W
	iPhone 12	7.5W
	iPhone 12mini	7.5W
	iPhone 12Pro	7.5W
	iPhone 12ProMax	7.5W
	iPhone 13	7.5W
	iPhone 13mini	7.5W
	iPhone 13Pro	7.5W
	iPhone 13ProMax	7.5W
	iPhone 14	7.5W
	iPhone 14Plus	7.5W
	iPhone 14Pro	7.5W
	iPhone 14ProMax	7.5W
	iPhone 15	7.5W
	iPhone 15Plus	7.5W
	iPhone 15Pro	7.5W
	iPhone 15ProMax	7.5W
	iPhone 16	7.5W
	iPhone 16Plus	7.5W
	iPhone 16Pro	7.5W
	iPhone 16ProMax	7.5W
	iPhone 17	7.5W
	iPhone 17Pro	7.5W
	iPhone 17Pro Max	7.5W
Google	PIXEL 5	10W
	PIXEL 6	10W
	PIXEL 6pro	10W
	PIXEL 7a	7.5W
	PIXEL 7	10W
	PIXEL 7pro	10W
	PIXEL 8a	10W
	PIXEL 8	10W

	PIXEL 8pro	10W
	PIXEL 9a	10W
	PIXEL 9	10W
	PIXEL 9pro	10W
	PIXEL 9proXL	10W
	PIXEL 9 Pro Fold	7.5W
Samsung	Galaxy Note9	10W
	Galaxy Note10	10W
	Note10+	10W
	Note10+ 5G	10W
	Note20 5G	10W
	Note20 Ultra 5G	10W
	Galaxy S8	10W
	Galaxy S8+	10W
	Galaxy S9	10W
	Galaxy S9+	10W
	Galaxy S10	10W
	Galaxy S10e	10W
	Galaxy S10+	10W
	Galaxy S20	10W
	Galaxy S20+	10W
	Galaxy S20 Ultra	10W
	Galaxy S21	10W
	Galaxy S21+	10W
	Galaxy S21 Ultra	10W
	Galaxy S22	10W
	Galaxy S22+	10W
	Galaxy S22 Ultra	10W
	Galaxy S23	10W
	Galaxy S23+	10W
	Galaxy S23 Ultra	10W
	Galaxy S24	10W
	Galaxy S24+	10W
	Galaxy S24 Ultra	10W
	Galaxy S25	10W
	Galaxy S25+	10W
	Galaxy S25 Ultra	10W
	Galaxy Z Flip 4	10W
	Galaxy Z Flip 5	10W
	Galaxy Z Flip 6	10W
	Galaxy Z Fold 1	10W
	Galaxy Z Fold 2	10W
	Galaxy Z Fold 3	10W
	Galaxy Z Fold 4	10W
	Galaxy Z Fold 5	10W
	Galaxy Z Fold 6	10W
	Galaxy W21	10W

	Galaxy W22	10W
	Galaxy W23	10W
	Galaxy W23 Flip	10W
	Galaxy W24	10W
	Galaxy W24 Flip	10W
	Galaxy W25	10W
	Galaxy W25 Flip	10W

FCC Warning

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC RF exposure statement:

The equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance between 20cm the radiator your body.