



**重庆盟讯电子科技有限公司**  
CHONGQING UNICATION ELECTRONIC TECHNOLOGY CO.,LTD

# Product datasheet

## SPECIFICATION

NAME(SERIES): THREE-COIL WIRELESS CHARGING  
MODULE

ITEM: MXC-A28

Version Information: V1.0



### Revision Table

numbering	Version number	Reviser	Revisions	date
1	V1.0		Create a document	2023/10/13

### Approval records

Version number	Approver	Approval opinions	date
V1.0			



## 1. Product Introduction

### (1) Overview

A wireless charging module is a device that integrates wireless charging technology into the module, which usually consists of two parts: a transmitter and a receiver. The transmitter is responsible for generating high-frequency electromagnetic fields, while the receiver is responsible for converting this electromagnetic field into electrical energy for charging, which is a convenient, safe, applicable, energy-saving and environmentally friendly charging method, which can provide users with a more convenient and comfortable charging experience.

### (2) Product features

◆ **Convenience:** Users don't need to use the charging cable to connect the device, just need to place the device in the charging area.

◆ **Safety:** The electromagnetic wave energy transmission method adopted will only transmit electrical energy to the equipment that can receive electromagnetic waves within the electromagnetic field range, and will not cause harm or electromagnetic wave interference to the human body.

◆ **Applicability:** Compatible with a variety of devices, such as mobile phones, smart watches, headphones, etc., as long as the device supports wireless charging function, you can use the wireless charging module for charging.

◆ **Energy saving and environmental protection:** It can avoid the waste and loss of charging cables, and also reduce the negative impact of waste charging cables on the environment.

## 2. Product appearance and structure drawing



Figure 1 Front



Figure 2 Back



### 3. Product Parameters

Model	MXC-A28
Master control	IP6809
Input voltage/current	DC12V <u><math>\pm 10\%</math></u>
Standby current	Average quiescent current: 25mA
Charging efficiency	The system has a charging efficiency of up to 79%.
Charging distance	The charging equipment needs to be charged 2-4mm away from the coil of the wireless charging module
LED indicator	support
Upgrade method	Burner upgrade
Structural dimensions	59*100 (mm)
Operating temperature	-20°C~+70°C
Storage temperature	-30°C~+85°C
Humidity requirements	<70%

### 4. Software Features

Wireless charging protocol	PD3.0 input requests are supported
	PID algorithm is adopted
	Compatible with WPC Qi v1.2.4 standard
Charging power	Support 5W
	Support 7.5W
	Supports 10W
	Supports 15W
FOD foreign body detection function	Support
protection	5V overcurrent protection: 2A
	9V over-current protection: 2.5A
	12V Overcurrent Protection: 2.2A (20W Transmitter Protection)
	NTC over temperature protection: 70° C $\pm$ 5° C
	NTC overtemperature recovery: 60° C $\pm$ 5° C
	Locking time after NTC over-temperature protection: 10 minutes
	Under-voltage protection: < 4.5V
	Overvoltage protection: >13.5V
	Operating temperature: -20-85° C $\pm$ 5° C



LED1. Green light	Power-on: Flashing
	Standby: Solid on
	Charging Complete (Full): Solid on
	Undervoltage/Foreign Body/Overcurrent: Flashing
	Overtemperature: Flashing
LED2. Red light	Power-on: Flashing
	Charging: Solid on
	Overtemperature: Flashing
	Overvoltage/DPM/RX/Abnormal: Blinking