

FlexCharge-RX

Embedded Qi Wireless Power Receiver Module

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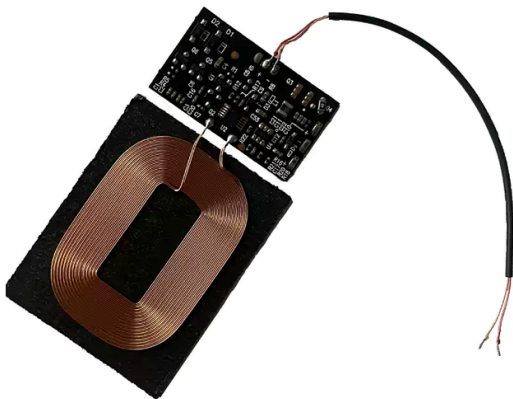
5 W / 7.5 W / 10 W | Ultra-thin retrofit module

5 W
5 V / 1 A

7.5 W
5 V / 1.5 A

10 W
9 V / 1.1 A

Wireless power, built in.
Compact PCB, flexible coil and ferrite shield
for cable-free charging in compact electronics.



5 W 5 V / 1 A	7.5 W 5 V / 1.5 A	10 W 9 V / 1.1 A
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Product Overview

FlexCharge-RX is an ultra-thin Qi-compatible receiver module engineered to add wireless charging to products that were originally designed for wired DC input. A flexible planar coil captures magnetic power from a compatible transmitter, while the compact PCBA converts and regulates the received energy into a usable DC output. Three power options allow designers to balance charging speed, thermal performance and available enclosure space.

Model	Rated power	Wireless input	DC output
RX-5	5 W	Qi-compatible inductive link	5 V / 1 A
RX-7.5	7.5 W	Qi-compatible inductive link	5 V / 1.5 A
RX-10	10 W	Qi-compatible inductive link	9 V / 1.1 A

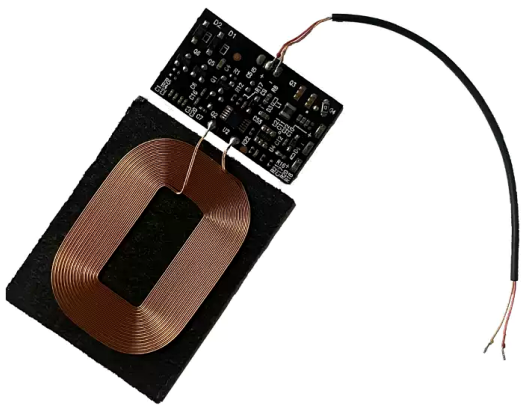
Functional Summary

- Receives power wirelessly from a Qi-compatible transmitter.
- Converts the received AC magnetic energy into regulated DC output for the host device.
- Supports direct retrofit connection to the host product charging-input positive and negative terminals.
- Provides a thin, separable coil-and-PCB architecture for constrained internal layouts.
- Uses a ferrite sheet to direct magnetic flux and help isolate nearby electronics.

Mechanical Configuration

5 W Mechanical Reference

Documented receiver assembly dimensions



Receiver PCBA

14 x 25 x 1 mm

Planar Coil

29 x 41 x 0.3 mm

Ferrite Sheet

36 x 46 x 0.3 mm

Dimensions apply to the documented 5 W version.

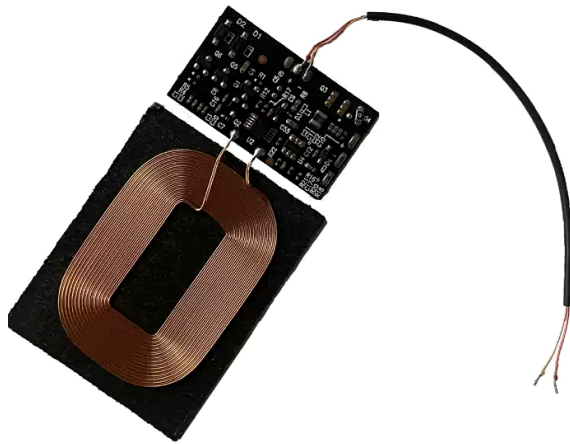
Item	Documented 5 W dimensions
Receiver PCBA	14 x 25 x 1 mm
Planar coil	29 x 41 x 0.3 mm
Ferrite sheet	36 x 46 x 0.3 mm

Mechanical dimensions above are explicitly documented for the 5 W configuration. Confirm final dimensions for 7.5 W and 10 W variants before enclosure release.

Key Product Advantages

Designed for Embedded Integration

Compact power conversion with a flexible receiver coil



● 3 Power Options

5 W / 7.5 W / 10 W

● Ultra-Thin Receiver

0.3 mm coil and ferrite layers*

● Direct DC Output

5 V or 9 V output by model

● Integration Ready

PCB + coil + ferrite shield

*Dimensions shown for the documented 5 W configuration.

Ultra-thin integration

A 0.3 mm coil and 0.3 mm ferrite layer minimize added stack height in the documented 5 W configuration.

Multiple power tiers

One product family covers 5 W, 7.5 W and 10 W designs.

Flexible placement

The receiver coil and conversion PCB are connected by leads, allowing each element to fit where space is available.

Retrofit capability

Adds cable-free charging to products that provide access to their normal DC charging input.

Non-metallic enclosure compatibility

Designed for installation behind plastic or other non-metallic charging surfaces.

Broad device fit

Suitable for phones, earphones, wearables, handheld instruments, sensors and other compact electronics.

Application Scenarios



Category	Typical use
Mobile and handheld devices	Retrofit wireless charging for phones, scanners, controllers and portable instruments.
Wearables and audio	Charging integration for earphones, wearable electronics and compact accessories.
Industrial and IoT	Sealed sensors, data loggers, smart tags and small control devices.
Medical and laboratory prototypes	Low-power handheld instruments and enclosures where exposed charging contacts are undesirable.
Custom electronics	LED products, displays and other 5 V electronics that can accept the appropriate receiver output.

Integration Guidelines

Enclosure material

Place the receiver coil behind a non-metallic surface. Do not place a metal wall or plate between the transmitter and receiver coils.

Internal clearance

Reserve sufficient area for the coil, ferrite sheet, PCBA, wiring and insulation. Avoid compressing or sharply folding the coil.

Electrical connection

Connect the receiver DC positive and negative outputs to the host product charging-input positive and negative terminals. Verify polarity before power-up.

Coil alignment

Align the receiver coil with the transmitter coil and validate performance across expected placement tolerances.

Thermal validation

Verify receiver IC, coil, battery and enclosure temperatures at maximum load and worst-case alignment.

Model selection

Confirm the host device accepts the selected output: 5 V/1 A, 5 V/1.5 A or 9 V/1.1 A.

System qualification

Validate charging behavior, EMI/EMC, foreign-object response, battery charging control and regulatory compliance in the complete product.

Important Engineering Note

The supplied source material identifies Qi compatibility, rated power options, output ratings and 5 W mechanical dimensions. It does not provide guaranteed conversion efficiency, operating frequency, charging distance, protection thresholds, temperature limits or certification reports. These parameters should be confirmed through supplier documentation and product-level validation before publication as guaranteed specifications.