



Qi Configurable Receiver for Debug, Verification, and Testing of Qi Transmitters



The Qi Receiver Simulator is a low power receiver that can be used to test the operation and performance of Qi wireless power transmitters. DIP switches on top of the Qi Receiver Simulator can be used to select different operational test modes as well as select different communication modulators and internal loads.

For pricing/ordering information please see:

www.avid-tech.com/ wireless-power-products

Send technical inquiries to: wirelesspower@avid-tech.com

Specifications Subject to Change

## **APPLICATION**

Product developers looking to quickly characterize and test Qi wireless power transmitter functionality. The Receiver Simulator provides a variety of test modes for assessing transmitter performance. It is useful for system debugging, product demonstrations, Qi pre-compliance testing, production testing, and as a general purpose Qi receiver.

## **FEATURES**

- Fully functional Qi low power receiver. V1.0 and V1.1 models available
- · Stand alone, easy to use device in rugged enclosure
- Regulated +5VDC +/- 5% @1A output
- · Selectable comm. tests and modulators
- LEDs for device status
- · Test points for bridge voltage and digital comm. data
- Selectable internal loads up to 2.0W in 0.25W steps
- Screw terminals for connecting external loads up to 5.0W
- V1.1 specific features
  - Factory calibrated to improve received power accuracy
  - Over reports received power by +200 mW (within WPC spec)
  - Reports proprietary 16 bit high resolution received power values in addition to the WPC required 8-bit packets

## **TEST MODES**

- Standard Qi compatible receiver
- Various test modes using DIP switches
  - No comm. or undefined or invalid comm. Packets
  - Invalid data bit rates or checksum
  - Invalid packet order or timing
  - Invalid WPC spec version
  - Multiple power control hold-off packets
  - Control error packets at minimum intervals
  - Repeated negative control error packets
  - EPT packets with reason codes
  - No power packets

## MODULATORS AND LOADS

- Selectable AC capacitive, AC resistive, and DC resistive modulators
- Selectable 0.0W to 2.0W internal loads in 0.25W steps
- External loads up to 5.0W can be connected (internal load disabled)