

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



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

For pricing/ordering information or to visit AVID's wireless power technology forum please see: www.avid-tech.com/wirelesspower

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

Specifications
Subject to Change

APPLICATION

Product developers looking to quickly analyze and debug Qi wireless transmitter system operation, firmware operation, and error handling. The Receiver Simulator provides a variety of tests for assessing transmitter performance. It is useful for debugging, product demonstrations, Qi pre-compliance test, production test, and as a general purpose Qi receiver.

FEATURES

- Stand alone, easy to use device in rugged enclosure
- Regulated +5VDC 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 increments
- Screw terminals for connecting external loads up to 5.0W
- Available in two models for WPC V1.0 or WPC V1.1 compatibility
- RxSim V1.1 is factory calibrated for more accurate received power measurements. Over reports power by +200 mW (within WPC spec)
- RxSim V1.1 reports proprietary 16 bit high resolution received power values in addition to the WPC required 8-bit packets

TEST MODES

- Standard Qi compatible receiver
- No comm. packets
- Invalid comm. data bit rates
- Invalid comm. packet checksum
- Invalid packet order
- Invalid WPC spec version
- Undefined comm. packets
- Multiple power control hold-off packets
- Error packets at minimum intervals
- Repeated negative error packets
- EPT packets with reason codes
- Invalid packet timing
- No rectified (V1.0) or received (V1.1) 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)