

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



APPLICATION

Product developers looking to quickly characterize and test Qi medium power wireless transmitter functionality. The Receiver Simulator provides a variety of test modes for assessing transmitter performance. Advanced test modes include bi-directional data streams and Authentication message sequences*. 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 medium power (15 Watt) receiver
- +12VDC +/- 5%, 1.25A max output
- Selectable comm. tests and modulators
- Bi-directional data stream communications and Authentication*
- 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 15.0W
- Factory calibrated to improve received power accuracy
- Over reports received power by +200 mW (for FOD)

TEST MODES

- Standard Qi compatible medium power receiver
- All test modes from v1.2 Rx Simulator using DIP switches
- Extended test modes for v1.3 functionality using DIP switches
 - FOD status and calibration tests
 - Proprietary data transport streams
 - Simulate missed data stream packets
 - Sequentially Request All Digests/Certificates from Tx
 - Sequentially Challenge all certificates in Tx
 - Authentication Simple Flow Messages*
 - Authentication Caching Flow*

*Rx exercises Authentication protocols, but does not validate Tx authenticity

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 15.0W can be connected (internal load disabled)

The Qi Receiver Simulator is a 15W 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:

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Specifications
Subject to Change