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

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The Qi FOD Receiver is a power receiver that can be placed on Qi wireless transmitters and used to test the operation and FOD performance. DIP switches on top of the FOD Receiver are used to program received power offsets and to change internal loads.

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For a quotation or for technical inquiries please contact:
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Visit AVID's wireless power forum:
www.avid-tech.com/wirelesspower

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Specifications
Subject to Change

APPLICATION

Product developers looking to quickly characterize and debug Qi V1.1 wireless power transmitter functionality and foreign object detection (FOD) performance. The FOD Receiver accurately measures received power (PPR) and sends the WPC specified V1.1 packets to the transmitter. It is useful for V1.1 design debugging, characterization, Qi pre-compliance testing and production testing.

FEATURES

- Fully functional Qi V1.1 Receiver
- Stand alone, easy to use device in rugged enclosure
- +5VDC output
- LEDs for device status
- Test points for bridge voltage and digital comm. data
- Uses same coil as FOD test receiver TPR#5 specified by WPC. Coil is mounted in external frame to minimize parasitic losses.
- Factory calibrated and characterized using AVID FOD Transmitter
- Selectable (PPR) offsets up to +/- 630mW in 5.0mW or 10.0mW steps
- Accurately measures and reports PPR per WPC V1.1 spec
- Reports proprietary 16 bit high resolution PPR values in addition to the WPC required 8-bit packets
- Selectable internal loads up to 2.0W in 0.25W steps
- Screw terminals for connecting external loads up to 5.0W
- External load board (included) has min, max, and in between loads for testing and characterizing transmitter FOD performance

TEST MODES

- Standard Qi V1.1 compatible receiver
- Can emulate WPC TPR#5 or TPR#6 using different PPR offset values

PPR OFFSETS AND LOADS

- Selectable PPR offset step (-5.0mW, -10.0mW, +5.0mW, or +10.0mW)
- Selectable PPR offset multiplier (0 to 63)
- Selectable 0.0W to 2.0W internal loads in 0.25W steps
- External loads up to 5.0W can be connected (internal load disabled)