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

APPLICATION

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

FEATURES

- Fully functional Qi low power receiver that emulates TPR#5 and TPR#6
- Stand alone, easy to use device in rugged enclosure
- +5VDC +/- 5% 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 plastic 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 specifications
- Reports proprietary 16 bit high resolution PPR values in addition to the WPC required 8-bit packets for improved accuracy
- 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 with different loads
- WPC TPR#5 or TPR#6 emulation 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)

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