

# Qi FOD Transmitter

#### Qi Configurable Transmitter for Debug, Verification, and Testing of Qi Receivers



The Qi FOD Transmitter is a low power transmitter that can be used to test the operation and performance of Qi receiver devices. A USB serial port provides the user interface for displaying operational parameters and for programming transmitted power offsets and operating modes.

For a quotation or for technical inquiries please contact: wirelesspower@avid-tech.com

Visit AVID's wireless power forum: www.avid-tech.com/wirelesspower

Specifications Subject to Change

## APPLICATION

Product developers looking to quickly characterize and debug wireless power receiver functionality and foreign object detection (FOD) performance. The FOD Transmitter accurately measures and reports transmitted power (PPT) and system power loss (Ploss). The transmitter is useful for design debugging, characterization, Qi pre-compliance testing, and production testing.

### FEATURES

- Fully functional Qi low power transmitter that emulates TPT#2
- Stand alone, easy to use device mounted in plastic frame
- +19VDC +/-1V power input (AC adapter included)
- LEDs for device status
- USB/serial port for displaying PPT, PPR, Ploss, and other parameters
- Uses same coil as FOD test transmitter TPT#2 specified by WPC. Coil is mounted to the side in the plastic frame to minimize parasitic losses
- Factory calibrated and characterized using AudioDev CATS Calibrator
- Accurately measures and reports PPT to meet WPC requirements
- Decodes standard 8-bit WPC received power (PPR) packets
- Decodes high res 16-bit received power packets sent by AVID Qi Receiver Simulator V1.1 and AVID FOD Receiver devices
- Programmable PPT offset and FOD threshold values (serial commands)
- Open loop (fixed frequency) mode for characterizing receivers and for checking TX accuracy using AudioDev CATS calibrator
- Position mode (ping loop) for easy center alignment of receivers

#### **TEST MODES**

- Standard Qi V1.1 compatible transmitter with USB serial port
- Open loop mode (fixed frequency operation)
- Position Mode (ping loop for using signal strength to center RX)

### PPT OFFSET AND FOD THRESHOLD

- Selectable PPT offset (+/-1000mW max, 1.0mW steps)
- Selectable FOD trip threshold (0 to 30000mW, 1.0mW steps)
- Enable or Disable transmitter shutdown after trip events or timeout