

### Debug and Verification System for Qi Wireless Transmitters and Receivers



## APPLICATION

Product Developers of Qi wireless power products looking to quickly analyze and debug system operation, firmware operation, and validate timing parameters related to TX/RX detection, communication, and control defined by the Wireless Power Consortium (WPC) Qi specifications.

## FEATURES

- Non-interfering, contactless signal acquisition
- USB-powered (+5VDC)
- **Compatible with the latest WPC Specifications (v1.3.0)**
- **Supports Basic Power Profile ( $\leq 5W$ ) and Enhanced Power Profile (0W-15W) devices**
- **Supports FOD extensions (Calibrated Power Loss Accounting)**
- **Supports Data Transport Streams and Authentication Protocol**
- **Summarizes and parses Authentication commands and responses**
- Older Sniffer devices can be upgraded and enabled by purchasing a license key
- Compact USB device, easy to set up and use
- Multiple pickup coils allow flexibility with positioning
- LEDs for device status and positioning assistance
- Intuitive Windows Application for real-time data display
- Packet content and timing analysis
- Data logging
- Decodes high resolution 16-bit received power packets sent by AVID Qi Receiver Simulator (V1.1 and newer) and AVID FOD Receiver devices

## TEST MODES

- TX ping frequency and timing
- TX operating frequency
- TX field strength (relative to Sniffer position)
- TX comm. (power negotiations and FOD)
- RX comm. signal strength (relative to Sniffer position)
- RX power (rectified, or received)
- RX and TX comm. packet data, signal polarity, and timing
- Real-time graphs of operating frequency, control error, and RX power

## MODULATORS AND LOADS

- Qi Sniffer devices can be updated to add latest WPC spec compatibility and features by downloading and installing the latest application software and purchasing an upgrade key. Software downloads and upgrade instructions can be found on AVID's wireless power forum.

The Qi Sniffer is a USB device that can be placed near a Qi compliant wireless power system (TX and RX pair) and used to capture the wireless communication packets and other system operating information. The Qi Sniffer detects, demodulates, and decodes comm. data with different polarities and bit rates.

A Windows graphical user interface application displays and logs the packets and other data captured by the Sniffer.

For pricing/ordering information please see:

[www.avid-tech.com/wireless-power-products](http://www.avid-tech.com/wireless-power-products)

Send technical inquiries to:

[wirelesspower@avid-tech.com](mailto:wirelesspower@avid-tech.com)

Specifications  
Subject to Change