## ClearCount SmartSponge Flex Antenna Details

The SmartSponge Flex system incorporates multiple custom antennas. Which specific antennas are active depend on the device operating mode.

The SmartSponge Flex modes of operation are Count In, Count Out and Wand. Count In and Count Out mode are also referred to as Scan In and Scan Out. Each operating mode uses a specific antenna(s).

Count In mode utilizes a dedicated rectangular loop antenna that is approximately 5.125" x 9".

In Count Out mode uses an array of 3 square loop antennas, each antenna is driven sequentially with only one antenna driven at a time. Two of the loops measure 12.5" x 12.5" and the third measures 13.75" x 13.75".

In Wand mode a tethered hand held antenna is driven. This antenna is referred to as either the Wand or SmartWand. This antenna is circular loop with an diameter of 16.25".

## 15.203 Compliance

Compliance with section 15.203 is accomplished with permanently attached antennas and unique identification information integrated into the system antennas. The unique identification information is programmed into each antenna and can be read by the system radio. When a system antenna is active the radio detects and reads the information embedded in the antenna and if the information does not match what is expected the system will go into error mode shutting off the RF. If an antenna that was not provided with the system was connected to the radio the unique identification information would be missing and the system will error and shutdown.

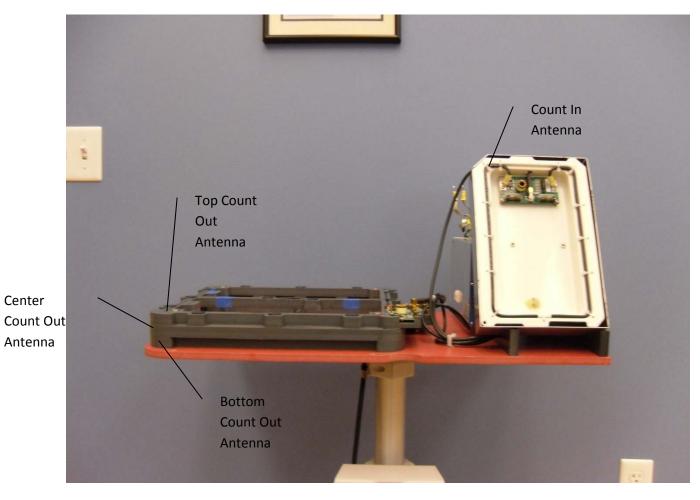


Figure 1- Count In /Count Out Antenna Photo

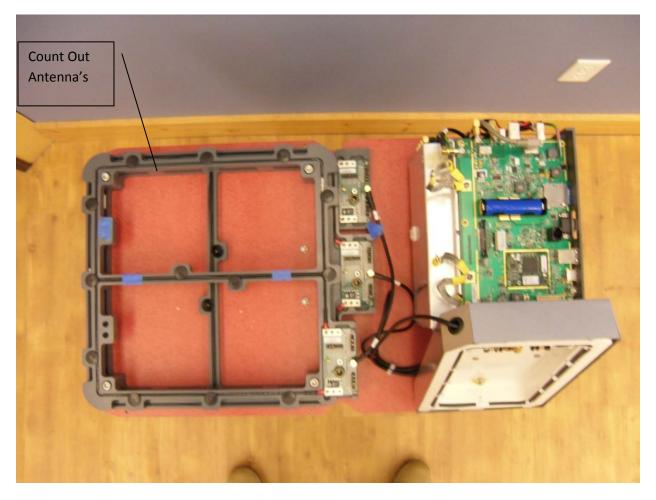


Figure 2- Count Out Antenna Top View

## **Wand Antenna**

The system Wand is a single loop antenna that is tethered to system by RG58 coax. The inside diameter of the loop is 16.25".

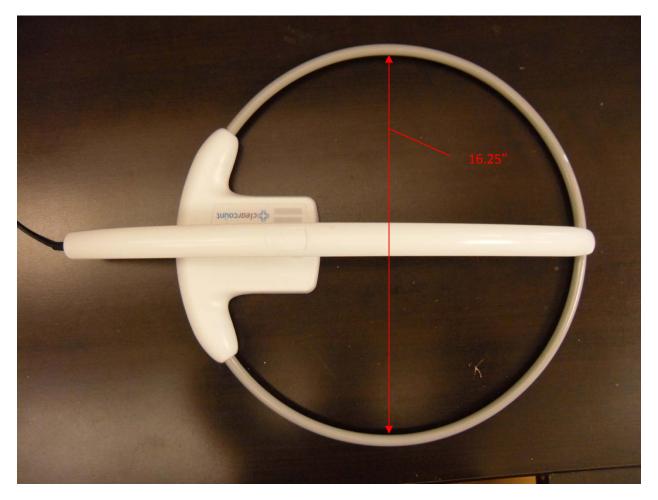


Figure 3- Wand photo