

Operational Description

1 FCC 15.203 ANTENNA REQUIREMENTS

The antenna is permanently attached to the PCB. The antenna is internal to the EUT and it is not readily available to be modified by the end user. Therefore it meets the 15.203 requirement.

2 DESCRIPTION OF RF SECTION

The reader transmits 13.56MHz RF energy to power and communicates with a passive, contactless smart card. The RF energy from the reader antenna is collected by the RFID tag antenna and is used to power up the microchip in order to obtain identification, location, and other information about the device embedded within.

RFID read-only readers: As the name suggests, these devices can only query or read information from a nearby RFID tag. These readers are found in fixed, stationary applications as well as portable, handheld varieties.

RFID read-write readers: Also known as encoders, these devices read and also write (change) information in an RFID tag. Such RFID encoders can be used to program information into a "blank" RFID tag. A common application is to combine such a RFID reader with a barcode printer to print "smart labels". Smart labels contain a UPC bar code on the front with an RFID tag embedded on the back.