

Antenna Specifications:

The TS Keypad Mechanical Tamper Reader has an RFID interface for HF. It works based on the principle of inductive coupling between the resonant circuits of the reader and the card. The card is powered by the readers resonant inductive loop. The data communication between the card and the reader is based on load modulation of the inductive field.

1. HF Interface

1.1 Antenna Parameters

- Type of Antenna – PCB Loop antenna
- Number of turns - 2 turns
- Coil Inductance – $1.13\mu\text{H}$ @13.56MHz
- Resonance Frequency – 13.56 MHz, Series Resonance
- Impedance of the tuned antenna – 50 Ohm
- Antenna Power (Filed strength) unloaded - 2.37 A/m at on top and 1.22A/m at 2cm from the reader's surface
- The antenna PCB is directly soldered to the main PCBA and not field replaceable

1.2 HF PCB Antenna Dimensions

