

NFC Exposure Requirements

Product Description: NuStar 65 Portable Data Collector

Model No.: Nustar65

FCC ID: 2ATAN-NUSTAR65

According to the KDB 447498 D04 V01, clause 1.4.2, the following RF exposure evaluation shall to demonstrate RF exposure compliance.

Tx frequency: 13.56 MHz Type of Modulation: ASK

Antenna Type: FPCB Antenna

Nominal rated field strength: 48.02 dB μ V/m at 3 meter

Based on the Maximum allowed field strength was 48.02 dB μ V/m at 3m in frequency 13.56MHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 0.000019mW$

The SAR Exclusion Threshold Level for 13.56MHz when the minimum test separation distance is < 50mm:

= $[474 \cdot (1 + \log_{10}(100/f(\text{MHz})))]/2$

= 442.65mW

Since the source-based time-averaging conducted output power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.