



## **RF EXPOSURE EVALUATION**

**FCC CFR 47 Part 1.1307**

**Report No.: NOVA17-U5 Rev A**

**Company:** Novanta Inc.

**Model:** HS1RXS & HS1RX

## RF EXPOSURE EVALUATION

**Company:** Novanta Inc.

**Model:** HS1RXS & HS1RX

**To:** FCC CFR 47 Part 1.1307

Report Serial No.: NOVA17-U5 Rev A

This report supersedes: NONE

**Applicant:** Novanta Inc.  
125 Middlesex Turnpike  
Bedford, Massachusetts 01730  
USA.

Issue Date: 30<sup>th</sup> April 2026

### **This Report is Issued Under the Authority of:**

**MiCOM Labs, Inc.**  
575 Boulder Court  
Pleasanton California 94566  
USA  
Phone: +1 (925) 462-0304  
Fax: +1 (925) 462-0306  
[www.micomlabs.com](http://www.micomlabs.com)



**MiCOM Labs is an ISO 17025 Accredited Testing Laboratory**

**The Novanta Inc. HS1RXS & HS1RX** has 2 transmitters comprising; -

- 1) 125 kHz RFID radio; and
- 2) 13.56 MHz RFID radio.

The **Novanta Inc. HS1RXS & HS1RX** is a Portable device used within 20 cm of the body of the user.

**§ 2.1093 Radiofrequency radiation exposure evaluation: portable devices.**

For the purpose of this section, the definition in **1.1307(b) (2)** of this chapter shall apply. A portable device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that the RF source's radiating structure(s) is/are within 20cm of the body of the user.

**Part 1.1307(b) (3) Determination of Exemption**

**(ii)**, For multiple RF sources: Multiple RF sources are exempt if:

**(A)**The available maximum time-averaged power of each source is no more than 1 mW and there is a separation distance of two centimeters between any portion of a radiating structure operating and the nearest portion of any other radiating structure in the same device, except if the sum of multiple sources is less than 1 mW during the time-averaging period, in which case they may be treated as a single source (separation is not required). This exemption may not be used in conjunction with other exemption criteria other than those in paragraph **(b)(3)(i)(A)** of this section. Medical implant devices may only use this exemption and that in paragraph **(b)(3)(i)(A)**.

The EUT radiated EIRP was measured at a distance of 3 meters.

The exemption limit of 1 mW EIRP is 95.2 dBuV/m measured at distance of 3m.

From the radiated measurement results in the NOV17-U4 report

The maximum field strength measured for the RFID operating at 125 kHz (operating on 99 % duty cycle) at 3 meters is 68.90 dBuV/m.

The maximum field strength measured for the RFID operating at 13.56 MHz (operating on 99 % duty cycle) at 3 meters is 57.34 dBuV/m.

## **Conclusion**

From above calculations we can see that even without considering the time-averaged power of the RFID radios in normal operation (taking into account the transmitters Duty Cycle) the Novanta Inc. HS1RXS & HS1RX comply with the 1 mW exemption limits of FCC Part 1.1307(b) (3).



575 Boulder Court  
Pleasanton, California 94566, USA  
Tel: +1 (925) 462 0304  
Fax: +1 (925) 462 0306  
[www.micomlabs.com](http://www.micomlabs.com)