2x2 Multiband Mesh Rider Radio - Hardware Integration Guide

This Hardware Integration Guide provides the information to facilitate smooth integration and use of the mini-OEM Mesh Rider Radio.

The mini-OEM Mesh Rider Radio is a small mesh radio, capable of switching between 6 operating bands for deploying Private Wireless Networks. It is available in many frequency bands between 900 MHz and 6 GHz. The mini-OEM radio integrates Doodle Labs' Mesh Rider technology.

Hardware Description

The mini-OEM has a primary connector which includes power, Ethernet, USB and UART ports. An addition power connector is required for for this model as compared to standard mini-OEM models. The interfaces are shown in Fig. 1.

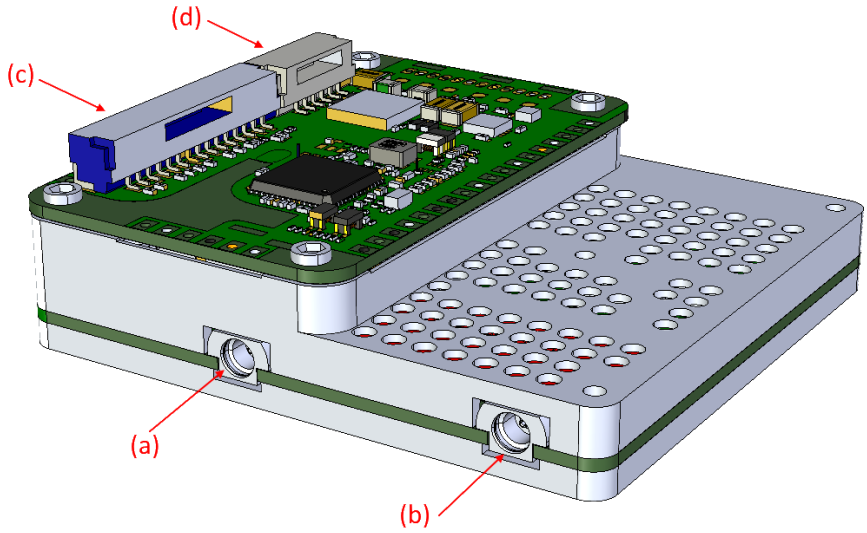

Fig. 1 Wearable Mesh Rider Radio Overview

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a. ANT0 (MMCX)
b. ANT1 (MMCX)
c. Primary Connector
d. PWR Connector
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Hardware Integration Notes

Power Supply Integration

Note that the mini-OEM Mesh Rider Radio requires a 5-V supply. See the datasheet for voltage tolerance. Exceeding the rated supply voltage can cause damage to the Mesh Rider Radio. All 5 power and their accompanying ground lines should be connected for optimal performance.

Additional Guidelines

The mini-OEM Mesh Rider Radio does not include galvanic isolation.

Additional hardware Integration Guidelines can be be found on our Hardware Integration Guidelines page.