



RAD-DX NEMA ENCLOSURE INSTALLATION INSTRUCTIONS

rad-DX™

RADIATION DETECTION SYSTEM



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1 Introduction

The Rad-DX NEMA Enclosure enhances the features of the standard Rad-DX by offering the following improvements to the overall system.

- NEMA enclosure for weather proofing the Rad-DX
- Integrated fan for improved cooling performance
- Larger, higher gain antennas for both mesh networking and Wi-Fi
- Larger capacity backup battery for longer emergency operation

2 System Enclosure

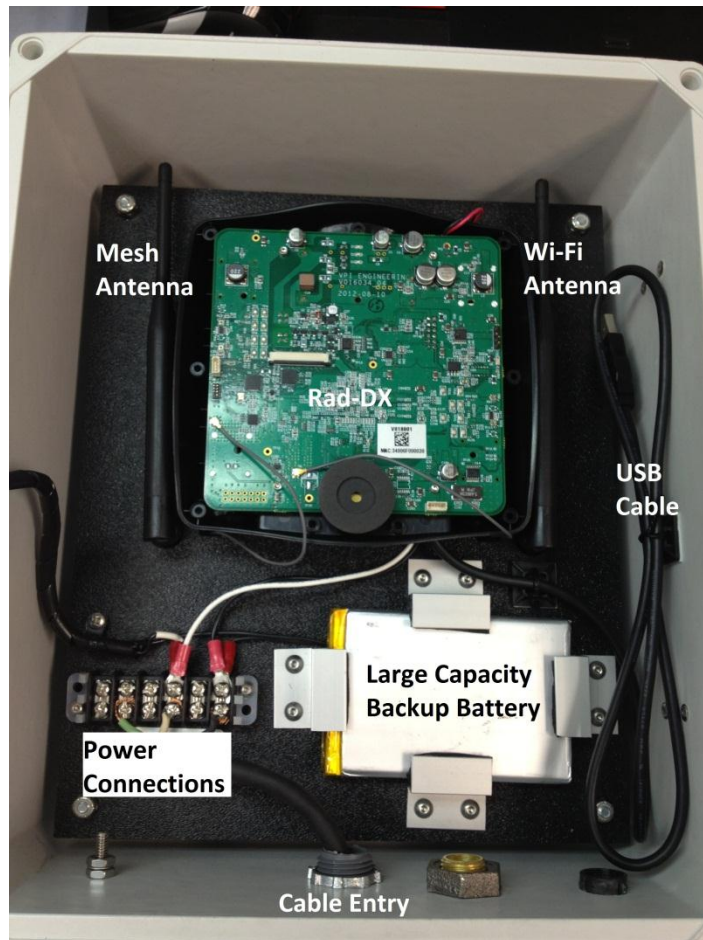


Figure 1 - System Enclosure

3 Configuration

The Rad-DX NEMA Enclosure ships with a temporary power cable which allows the user to easily configure and test the device.



Figure 2 – Rad-DX NEMA Enclosure with Temporary Power Cable

To configure or test the Rad-DX NEMA Enclosure plug the temporary power cable into a standard 120V wall outlet. The Rad-DX can now be configured through USB as shown in Section 8 of the manual. Once the Rad-DX NEMA Enclosure has been configured, it can now be physically installed and externally wired.

4 Physical Installation

The Rad-DX NEMA Enclosure is designed to be attached to a pole with metal strapping. See pictures below for example installation.



Figure 3 - Rad-DX NEMA Enclosure on Pole



Figure 4 - Close Up of Metal Strapping

5 External Wiring

To wire the Rad-DX NEMA Enclosure with external power, follow the steps below.

5.1 Step 1 – Remove the cable entry retaining nut



Figure 5 - Remove Retaining Nut

5.2 Step 2 – Remove the temporary power cable

Remove the wiring guard and loosen the screws that connect the temporary power cable to the terminal block. Pull the temporary power cable out of the NEMA Enclosure and the retaining nut and strain relief.



Figure 6 - Remove Power Cable

5.3 Step 3 – Route the cable into the NEMA Enclosure

Thread the external power cable through the retaining nut and the strain relief then pull the cable into the NEMA enclosure. Tighten the retaining nut onto the NEMA enclosure.

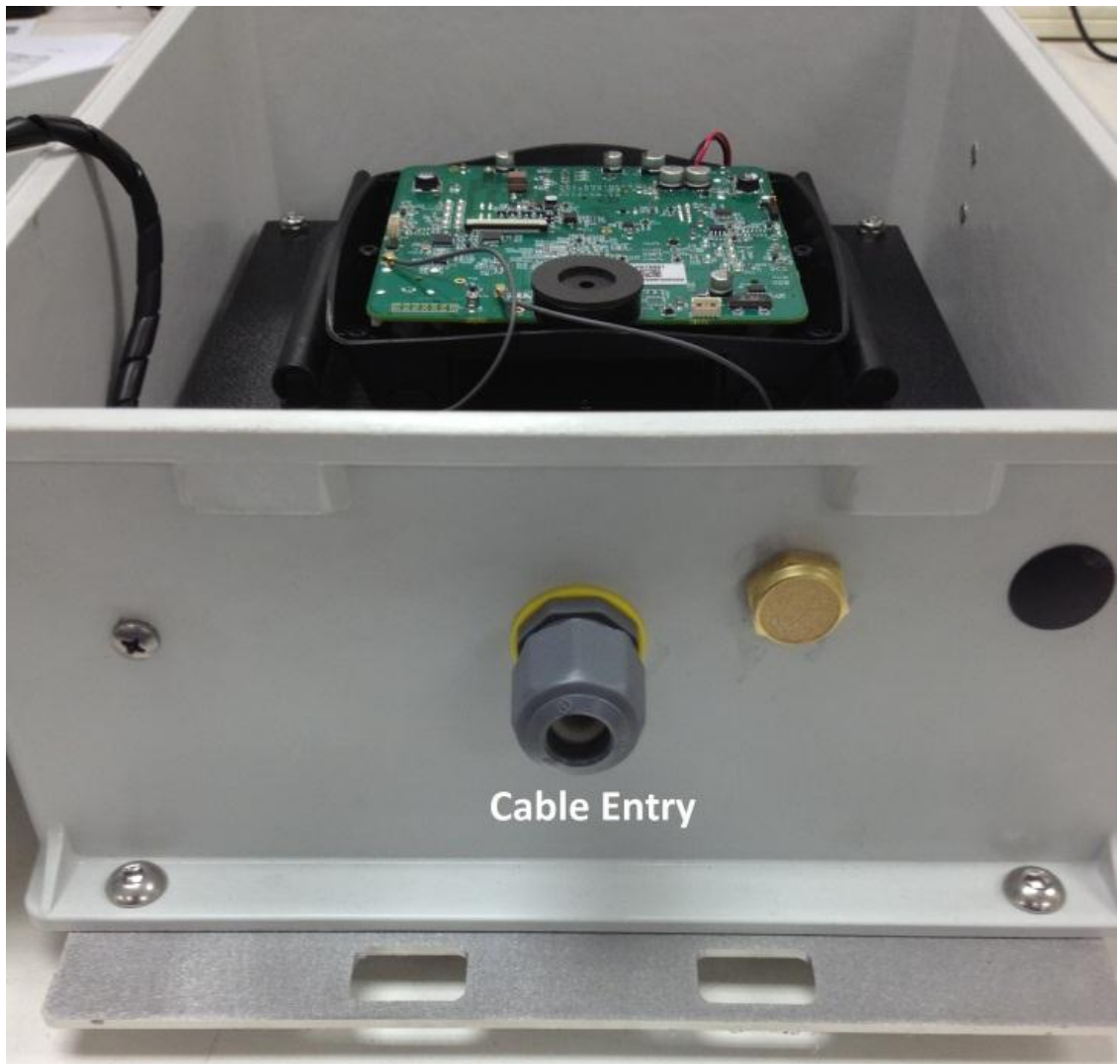


Figure 7 - Cable Entry

5.4 Step 4 – Wire the Power Connections

Attach the power connections to the screw terminal block.

For 120V Installations: Follow accepted NEC guidelines with a green wire for ground, white wire for neutral and a black wire for the hot lead. Replace the wiring guard and close the NEMA Enclosure.



Figure 8 – 120V Wiring Connections

For 240V Installations: Follow accepted NEC guidelines with a green wire for ground, white wire for neutral and a black wire for the phase 1 hot lead. Place a wire nut on the red wire to cap the phase 2 hot lead. Replace the wiring guard and close the NEMA Enclosure.



Figure 9 - 240V Wiring Connections