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Nuvation Energy Cell Interface

Mounting Bracket Assembly Instructions

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1. Introduction

Thank you for choosing Nuvation Energy BMS.

The Cell Interface Mounting Bracket (Bulkhead-to-DIN) kit includes hardware to securely mount the standard bulkhead mount Cell Interface to a EN50022-compliant DIN rails. This document provides kit assembly and installation instructions.

1.1. Mechanical Overview

The Mounting Bracket kit assembly adds an extra 14.2 mm to the overall width of the Cell Interface module, bringing it from 104.4 mm to 118.6 mm. The kit assembly holds the module approximately 7 mm away from the inside lip of the DIN rail.

The Mounting Bracket offsets the Cell Interface module from the center of the DIN rail approximately 30 mm upwards as shown in Figure 1.

A Cell Interface with the Mounting Bracket weighs approximately 540 g.

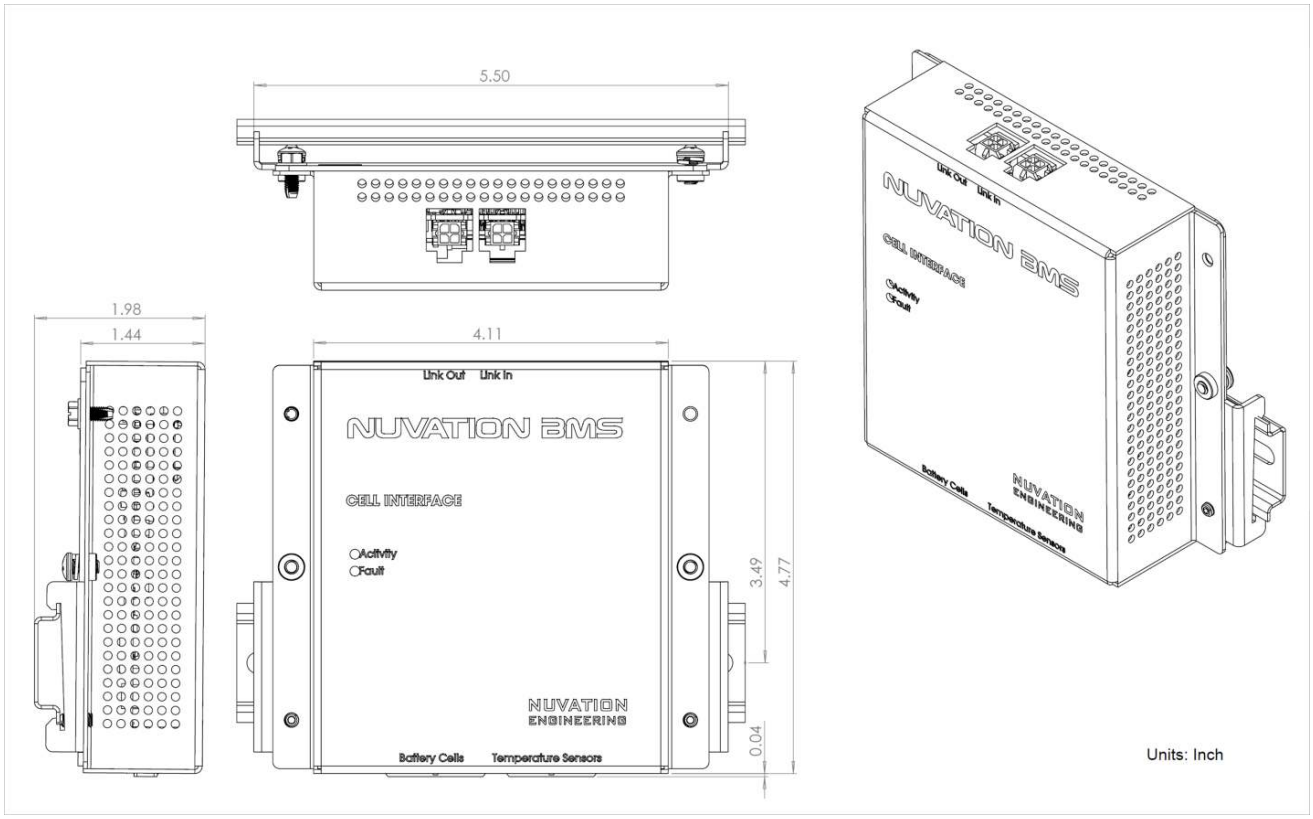

Figure 1. Mechanical Drawing of Cell Interface with Cell Interface Mounting Bracket (Bulkhead-to-DIN)

1.2. Package Contents

Within the package you should find:

- 1x mounting plate
- 1x hardware package

Inside the hardware package, you should find:

- 2x Phillips mounting screws, #8-32 x 5/16"
- 2x #8 lock washer
- 1x Thread-cutting hex head grounding screw, #8-32 x 3/8"
- 2x Set screws, #8-32 x 3/8"

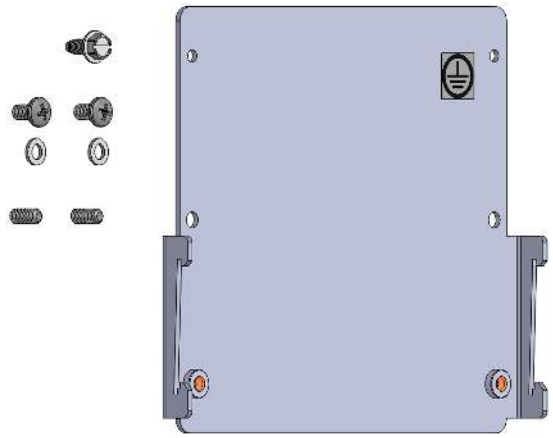

Figure 2. Package Contents

1.3. Tools Required

- #1 Phillips-head driver
- 1/4" wrench or socket driver
- 5/64" hex driver
- Blue thread-locker (optional)

2. Assembly Instructions

2.1. Overview

The exploded view in Figure 3 below provides an overview of how the mounting bracket aligns with the bulkhead mount Cell Interface module. Note the orientation of the bracket with respect to the Cell Interface. This should be maintained for proper mounting to keep the Cell Interface facing right-side-up as shown in Figure 4.

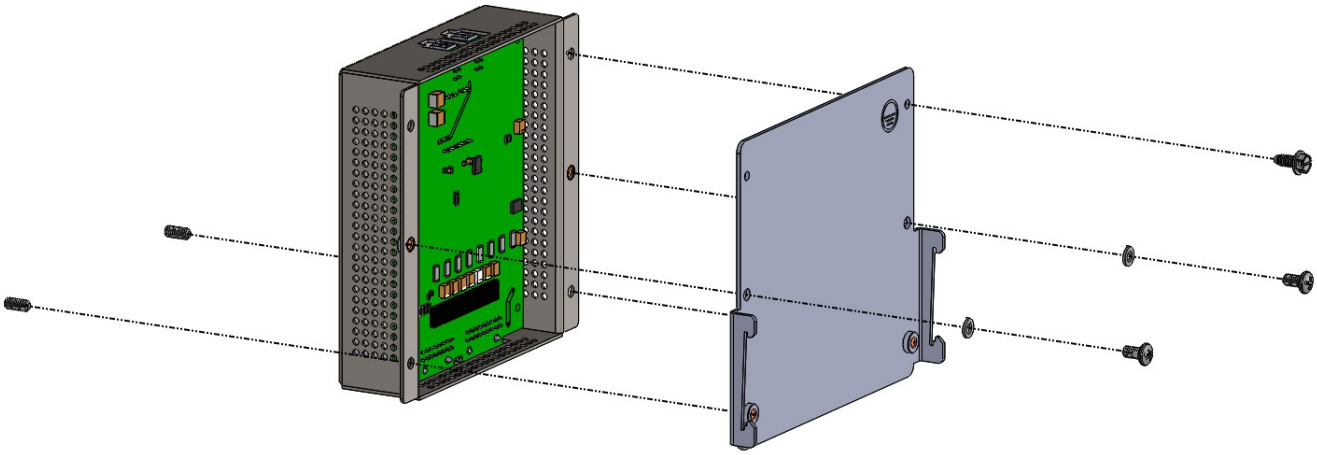

Figure 3. Exploded view of Cell Interface and mounting bracket assembly

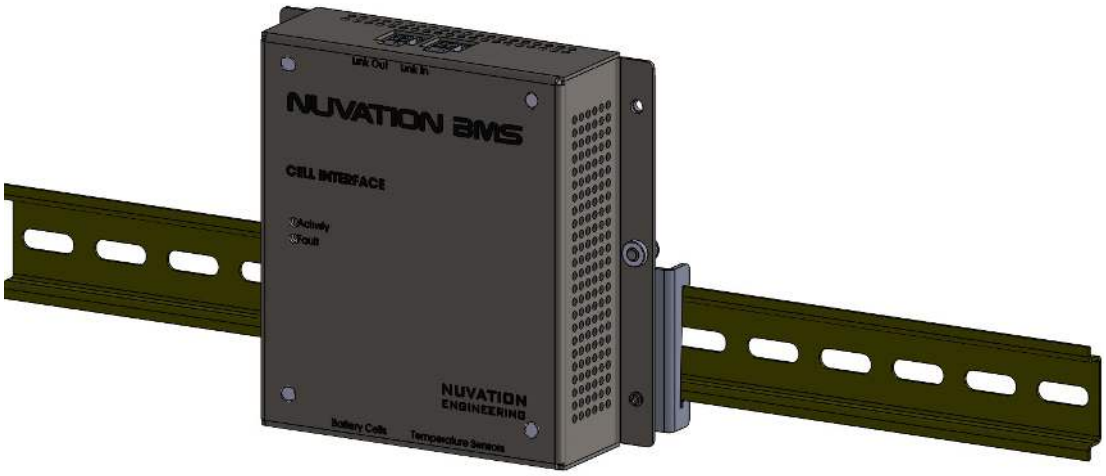

Figure 4. Cell Interface with mounting bracket on DIN Rail

2.2. Step-by-step Instructions

1. Insert the Phillips head mounting screws with the lock washers to the middle holes of the bracket and to the bulkhead nuts, shown in Figure 5.

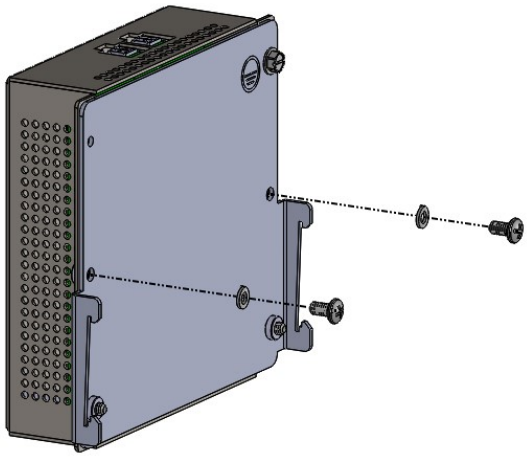

Figure 5. Installing bracket with mounting screws

2. These screws must be tightened to 19 in-lbs (inch-pounds) using a #1 Phillips screw driver.
3. Insert the thread-cutting grounding screw to the bracket hole nearest the ground symbol, shown in Figure 6.

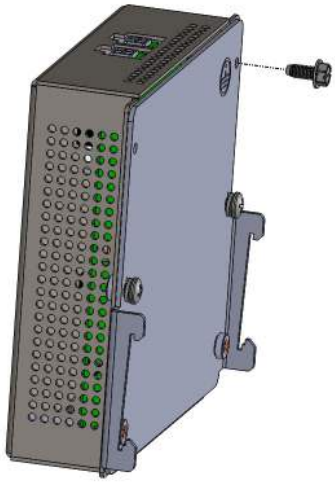

Figure 6. Installing grounding screw

4. This screw must be tightened to 8 in-lbs using a 1/4" hex driver.

5. If necessary for the application, apply one small drop of blue thread-locker to the center of each of the set screws, as seen in Figure 7.

Figure 7. Applying thread locker to set screw

6. Insert set screws through Bulkhead into bracket nuts, shown in Figure 8. Do not extend past the nut in the bracket or it may cause difficulty mounting to the DIN rail, as shown in Figure 9.

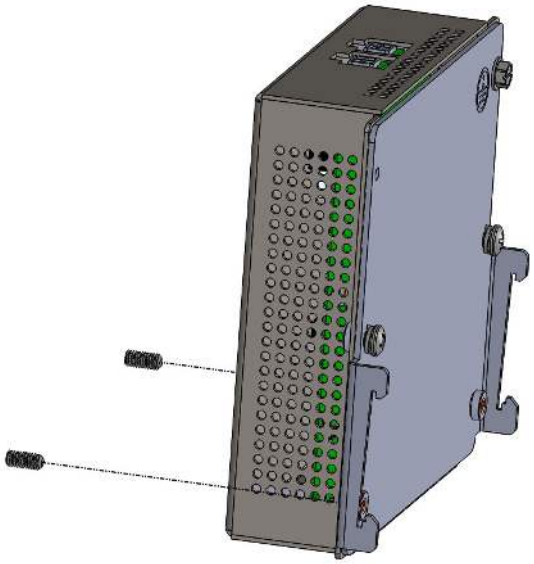

Figure 8. Installing set screw

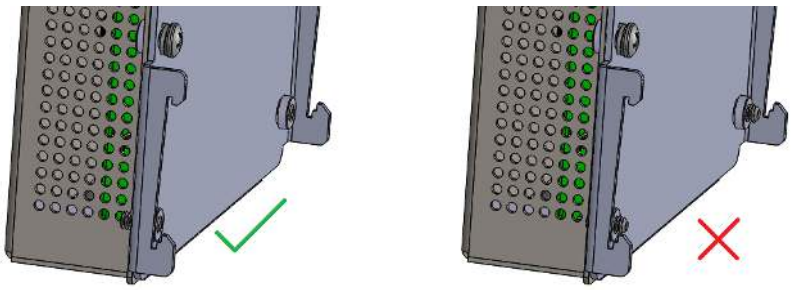

Figure 9. Set screw insertion

7. Mount the Cell Interface assembly onto the DIN rail as seen in Figure 10.

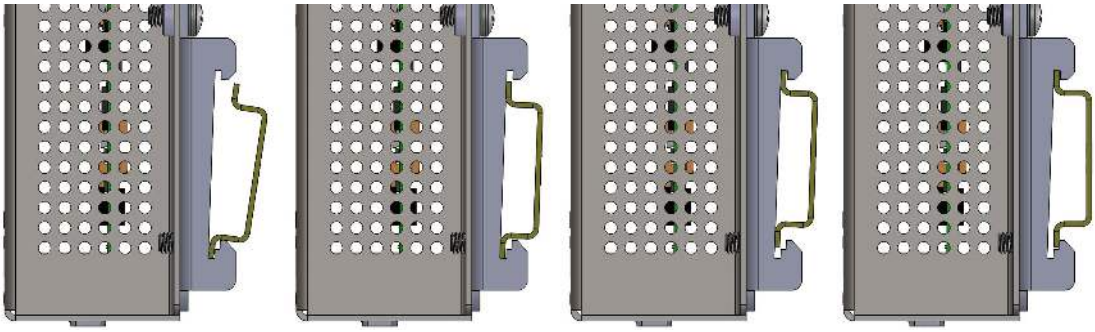

Figure 10. Mounting Cell Interface on DIN-rail

8. Finally, tighten set screws against DIN rail, as shown in Figure 11, to 12 in·lbs.

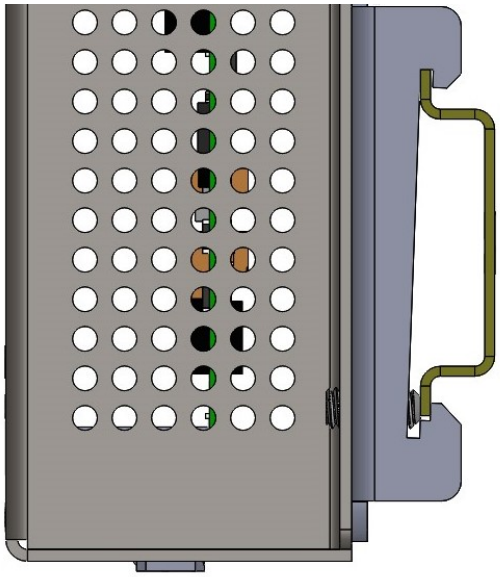

Figure 11. Set screw tightening against DIN rail

From time to time Nuvation Energy will make updates to Nuvation Energy BMS in response to changes in available technologies, client requests, emerging energy storage standards, and other industry requirements. The product specifications in this document, therefore, are subject to change without notice.