

## **Meshed nCounter v3**

### **Product Description, Installation and Compliance**

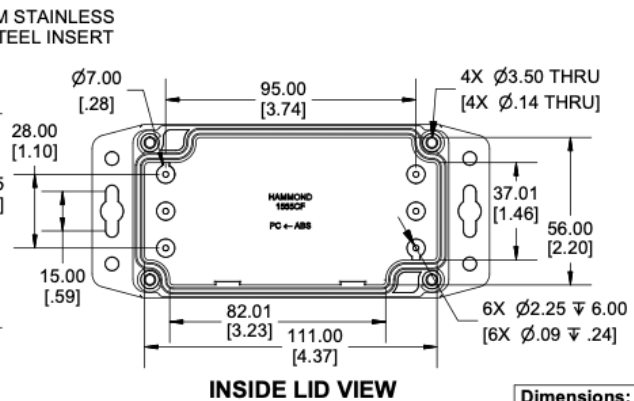
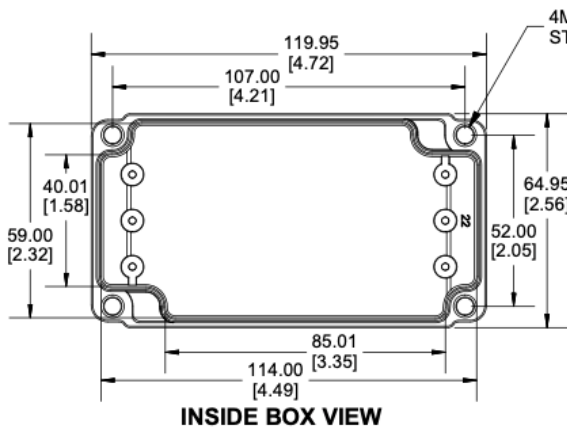
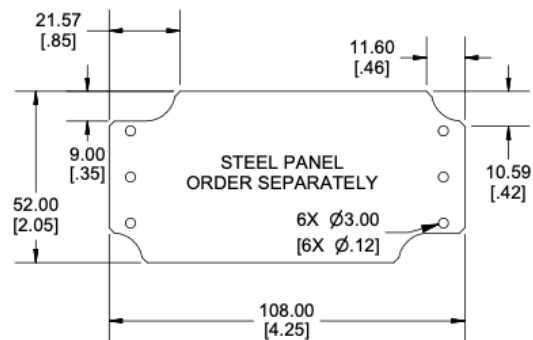
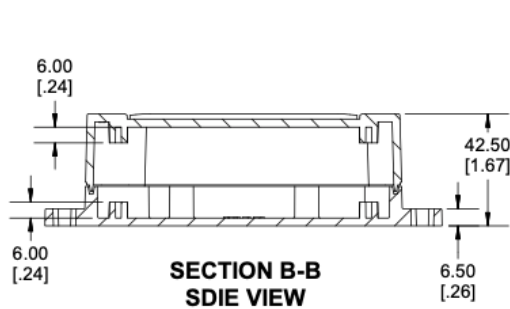
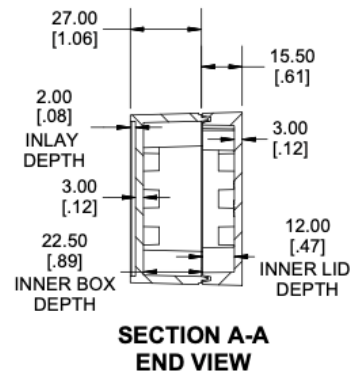
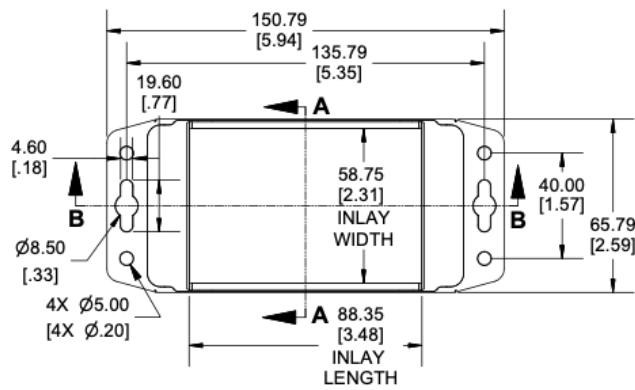
#### **Product Overview**

The Meshed nCounter solution is designed to provide an approximate count of the number of people in it's vicinity. It achieves this by anonymously counting the number of WiFi – enabled devices in it's vicinity in 10 – minute segments, and reporting the counts over a LoRaWAN® connection to the nCounter platform where the data can be visualised.

#### **nCounter Device Specifications**

Power Requirements	5-16 VDC, <300mA (Solar powered optional)
Dimensions	151(W) x 66(D) x 42(H)mm
Connectivity	LoRaWAN AS923 or AU915
IP Rating	IP67 for nCounter device. USB Power Supply not IP rated

## nCounter Case Dimensions



Dimensions:  
mm  
[inches]

## Hardware Installation Instructions

### Items supplied in the box

nCounter Device	
Power Cable 2-3m. Various lengths available.	
USB Power Supply	

## Installation Steps

### 1. Access to the Dashboard

- If you are a new customer, check your inbox for a notification from **Grafana** ([mailer@meshed.com.au](mailto:mailer@meshed.com.au)).
- If you are an existing customer and already have been invited to the Meshed Dashboard, log in and open the nCounter Dashboard

### 2. Bench test device to ensure connectivity with platform

- The device needs to be connected to either the USB power supply or the Solar Kit.
- If using the Solar Power Kit, make sure the solar battery is charged before placing on site.
- The location of the nCounter needs to be within range of a The Thing Network (TTN) or MeshedX LoRaWAN gateway.
- After approximately 3 minutes you should see the nCounter displayed in the LoRaWAN panel on the dashboard
- Need Help? Contact [Meshed Support](#) online or on 1-300-637-433

### 3. Selecting a location to place your nCounter

- If pole-mounting an nCounter device, aim to orient it so that the pole is not located in-between the device and the LoRaWAN gateway.
- Do not mount the nCounter device until you have first checked you have LoRaWAN (The Things Network) connectivity at each mounting location.

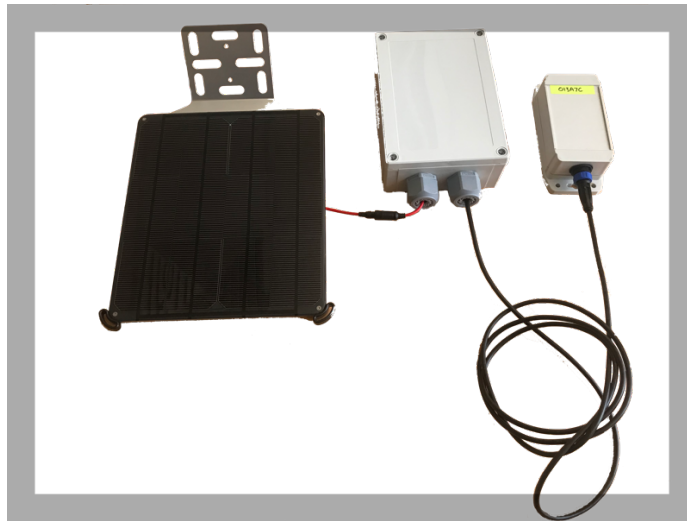
### 4. Installing the Device at the Location:

- Make sure you record the Device ID at each location so that the device can be identified on the Dashboard map.
- Do not drill holes in the enclosure. The nCounter device has external flanges for mounting and does not need to be opened.
- Metal or UV rated plastic bands can be used for attachment to larger posts or other appropriate structures.
- Use 'Armadillo' or other flexible conduit to protect cables if necessary.
- The Meshed nCounter device and Solar Battery unit (if supplied) should be mounted with power connector and glands facing towards the ground to avoid water ingress.
- Solar Battery unit has "blind" attachment points that are accessed by removing the enclosure lid, inserting screws and then replacing the lid.
- Solar panels need direct sunlight to operate and should face as close as possible to North and remain un-shaded for a majority of daylight hours.

## Warning!

- When installing in a public place, ensure the power connections are well away from reach and secured.
- Avoid placing the nCounter device less than 3 metres off the ground to avoid vandalism/theft and no higher than 6-8 metres off the ground to maximise active nCounter zone.
- Always secure cables and try to prevent disturbance of the cables by the wind, debris and damage by curious birds and animals.

## nCounter Solar Option

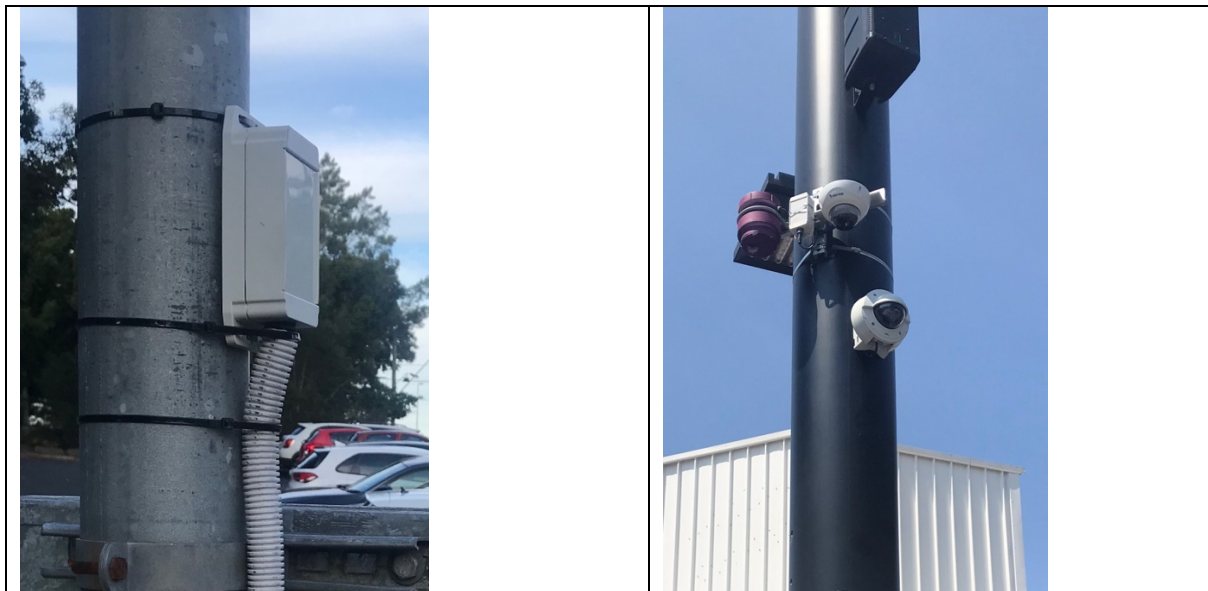


nCounter Solar Kit

When installing the solar kit, ensure the solar panel faces upwards and is pointed in the direction of maximum sunlight exposure (usually North facing)

The Solar battery unit should not be exposed to direct sunlight and can be mounted underneath the solar panel, as per the example installation picture below.

## Installation Examples





## FCC 15.105 Information to the user

Note:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

## FCC 15.21 Modification Warning

Warning: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

## FCC RF Exposure

This equipment complies with the FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and all persons during normal operation.