



# User Manual

## BC4520 ProxPoint

**(v1.2)**

*24 June 2021*

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## Introduction

The ProxPoint processes all Tag signals in range, assessing the signal strength and applying algorithms to determine location and movement. Using our Loop Cloud software, you can access all data received from the ProxPoints on your site. The coverage area of each ProxPoint can be uniquely customised.



**WARNING:** Read through this entire User Manual before operating the product. Failure to follow the included instructions and safety warnings may result in damage to the product or other property.



**Figure 1.**  
BC4520 ProxPoint.

## Safety Information

Read and follow all instructions in this User Manual before using this product.



**WARNING:** Changes or modifications not expressly approved by BlueCats could void your authorization to operate this product.

- Do not use the BC4520 ProxPoint if it is damaged.
- Do not install in environments that exceed temperature and humidity requirements.
  - Operating temperature: -40°C to +85°C
- Do not place or leave the ProxPoint on a heat source.
- Do not open the ProxPoint. It does not contain any user-serviceable parts or replaceable parts.
- Dispose of non-functioning ProxPoints in accordance with local regulations.

This equipment has been tested and found to comply with UL 62368-1 / CSA C22.2 No. 62368-1 + IEC/EN 62368-1.

- This product is intended to be used at an altitude <2000m.
- This product's classification is Pollution Degree 2.

## Operating Instructions

To install your ProxPoint:

1. Open the box and inspect the ProxPoint, antennas, and cabling for damage. Figure 2 shows the various antennas that come with the ProxPoint:
  - 2 straight Bluetooth LE antennas
  - 2 right angle Bluetooth LE antennas
  - 1 GNSS (GPS) antenna
  - 1 LTE antenna



**Figure 2.** ProxPoint antennas.



**WARNING:** If any issue, damage, or defect is found, please [submit a ticket](#) to BlueCats for assistance. Do NOT attempt to repair the device.

2. Attach the four Bluetooth LE antennas at the connectors labeled **BT1-4**. There will need to be one straight antenna and one angled antenna per side (Figure 3).
3. Connect to the internet using LTE or Ethernet:
  - LTE: attach the LTE antenna to the connector labeled **LTE**. The LTE antenna has an adhesive back that can be stuck to a wall. It should be located 20 cm or more from the ProxPoint and oriented **upright**. The ProxPoint comes equipped with an LTE SIM card which will automatically connect to a cellular network if one is available.
  - Ethernet: screw in the included RJ45-to-M12 Ethernet cable to the **ETH** connector on the ProxPoint, then plug the RJ45 connector into an active data port.
4. Attach the GNSS antenna to the connector labeled **GNSS**. It is magnetic so can attach to any metal surface, or it can be adhered to a wall using double-sided tape.
5. Connect the provided power cable to the **PWR** connector on the ProxPoint, and plug the receptacle end into wall power.



**Figure 3.** ProxPoint with all antennas attached.

If installing outdoors, the higher the ProxPoint is mounted, the larger the coverage area. So if possible, mounting on a pole at a height of 10-15 feet is ideal.

Alternatively, the ProxPoint can be installed outdoors, as it is IP67 rated. The ProxPoint plug should be connected to power at a weatherized receptacle, and follow all electrical safety standards.

## BlueCats Support

We're here to help. If you need any assistance, please [contact us for technical support](#) via the BlueCats Support site. We also welcome your questions and suggestions to improve your experience with our products.

## Regulatory Information

### FCC

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception (which can be determined by turning the equipment off and on), the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance 20cm between the radiator & your body.

## IC

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1) This device may not cause interference. (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil contient des émetteurs / récepteurs exemptés de licence conformes aux RSS (RSS) d'Innovation, Sciences et Développement économique Canada. Le fonctionnement est soumis aux deux conditions suivantes : (1) Cet appareil ne doit pas causer d'interférences. (2) Cet appareil doit accepter toutes les interférences, y compris celles susceptibles de provoquer un fonctionnement indésirable de l'appareil.

<b>Band</b>	<b>Maximum TX Power</b>
Dual band: 2.4 GHz, 5 GHz	5 dBm