XNET Installation Requirements

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General Information

All outdoor XNET systems are high power systems (specified as Class B CBRS devices) and require support from a Certified Professional Installer (CPI) to complete the installation and start earning XNET tokens. This installation verification process is required to utilize the available CBRS frequencies used by XNET. Indoor XNET systems (categorized as Class A devices) do not need a CPI to verify installation as long as they are not installed outdoors over 6 meters above average terrain height. Both Category A and Category B devices need to be registered on the SAS in order to operate and earn XNET tokens.

Installation Overview

Step 1: Decide on outdoor location and antenna type. Plan for maximum coverage (higher up, pointing towards larger data populations etc.) and within XNET cluster areas for preferred locations and coverage planning.

Step 2: Prepare site. Ensure the site has access to an antenna mounting structure, weatherproof location for the XNODE gateway server, as well as safe power and internet connections. Higher capacity internet connections (e.g. fiber) will offer more throughput and reward opportunities.

Step 3: Install and record data. Install the XNET system (eNodeB with antenna & XNODE gateway server). Install eNodeB (radio) per instructions included with the kit. Plug into power and internet - record Antenna GPS location (Latitude, Longitude in Decimal Degrees), Antenna Height above ground level (AGL in meters), and Antenna pointing direction (Azimuth from North and Elevation from horizontal). Record installation data (see example below) and attach pictures. A Certified Professional Installer (CPI) will need this information to record on the Spectrum Access System (SAS) for approval to operate.

Step 4: Work with CPI to go live. After receiving your submission, the CPI will confirm the installation meets requirements and will submit to the Spectrum Access System (SAS) for authorization. Please work with the CPI to correct any deficiencies as the XNET system cannot go live until it has been approved.

Step 5: Earn XNET Tokens. After confirming your XNET system has been properly installed and is running, we will distribute tokens per installation and ongoing operations schedule.

Data Needed for each xNode Site

Each XNET Node consists of an XNET Gateway and an XNET Radio. In order to be compliment with FCC regulations various data for each node neds to be collected. It is the responsibility of the XNET operator to provide this data in order for XNET to fully provision the node and allow it to begin operating.

Here is an example of the data that must be supplied for _each xNode_ during a site installation:

> **Gateway Name:** name1-name2-name3-1234 (eg: strong-fast-smart-2763)
> **Radio Serial Number**: (eg: 1202343265417RB0263)
> **Location:** Precise GPS coordinate of antennas provided in decimal degrees (37.586111, -122.292694)
> **Antenna (or Radio) Height:** Height above ground level in meters (e.g. 12.5 m AGL) [All outdoor deployments must be at greater than 6 meters above ground level!]
> **Antenna Azimuth:** Cardinal antenna direction xNode Radio is pointing (e.g. 270 degrees from North)
> **Antenna Elevation:** Vertical antenna direction (e.g. -5 degrees)

In addition to the data needed for each xNode Site, the following information is required for each xNode operator:

> **Operator Name:** Legal Name of the individual(s) operating the xNode
> **Operator:** Contact Information (Mailing address, shipping address, phone number, e-mail)
> **Operator (Metamask) Wallet Address:** This is the digital wallet "account" where earned xNet tokens are delivered.