

LPN FIXED NETWORK COLLECTOR

We've got you covered.

RG3 Licensed Private Network (LPN) Fixed Network Collectors offer a strategic two-way communications option for smart water and smart gas deployments. Tesla Net LPN operates in the 450-470 MHz frequency band spectrum creating a highly reliable private network with extensive coverage and far-reaching range.

The two-way system incorporates rich security features and is end-to-end upgradable remotely with over-the-air updates. The proprietary LPN RF protocol provides time-synced operations to alleviate network RF collision. Data is time-stamped and mapped to show how it travelled through the network. The result is extremely reliable network coverage.



High-Capacity FNC Base Station and Repeater

Rugged Simplicity LPN Fixed Network Collectors (FNC) can operate as a base station or a repeater depending on internet connectivity. If plugged into Ethernet or connected to WiFi, the FNC is a base station. If not, it is a repeater. FNCs are elegantly designed with only a solid-state transceiver array and a few supporting components. The simplicity of the build makes LPN Fixed Network Collectors affordable, extremely durable, and maintenance free.

Scalability and Performance Depending on antenna installation height, geography, building construction, and land cover, LPN Base Stations and Repeaters can provide a coverage radius of up to 3.5-miles. A single FNC base station can communicate with up to 48,000 endpoints and store 38 million reads. FNC base stations can communicate with up to 12 FNC repeaters within a 10-mile radius. The repeater mode duty cycle limits FNC repeaters to 12,000 endpoints and a capacity of 153,000 reads.

Data Backhaul Ethernet is the preferred backhaul because hardwired connections are the most reliable and the data transfer speed allows utilities to view data in near real time. Wi-Fi is the second preference and offers similar performance. As a backup, stored data is also retrievable manually with a 450 TRX mobile data collector.

Features and Benefits

- Up to 38 Square Miles (3.5 mile radius from tower) of network coverage from a single Fixed Network Collector
- FNC to FNC communication up to 10 miles
- Quickly migrate part or all of your meter system to read from the office AMI
- Licensed Private Network with low RF interference
- Two-way communications
- Time-Stamped readings and alarms
- Two backhaul options
- Over-the-air remote firmware updates
- End-to-End security
- Hourly usage data
- Near real-time alarms
- Data Storage for redundant transmissions
- Point-to-Multi-Point network
- Easy to add Solo Repeaters as coverage needs grow

Specifications

Enclosure Dimensions

FNC Base Station

FNC Repeater

Weight

Mounting Options

Operating Temperature

Storage Temperature

Enclosure Rating

Humidity

Operating Power

Backup Battery (UPS)

Surge Protection

Frequency Band

Approvals

Backhaul Options

of Endpoints Served

of Repeaters Served

Capacity of Read Storage

Backup Mode Read Retrieval

20" x 16" x 8"

34 lbs

Pole mount

-4°F to +140°F (-20°C to +60°C)

-40°F to +185°F (-40°C to +85°C)

NEMA 3R

0% to 95% non-condensing

110VAC

Yes

3330 joules

450-470 MHz

FCC Part 90 and Part 15

Wired (Ethernet/Fiber), Wi-Fi

48,000

12

38,000,000 reads

Yes

20" x 16" x 8"

34 lbs

Pole mount

-4°F to +140°F (-20°C to +60°C)

-40°F to +185°F (-40°C to +85°C)

NEMA 3R

0% to 95% non-condensing

110VAC, Solar

Yes

3330 joules

450-470 MHz

FCC Part 90 and Part 15

--

12,000

--

153,000 reads

Yes



LPN FIXED NETWORK COLLECTOR PRODUCT DATA SHEET

RG3 Meter Company . 2912 South Access Road . Longview, TX 75602 . p 903.753.3456 . f 903.753.5678 . RG3Meter.com

LPNFNCDS12242