Project		Catalog #		Type	
Prepared by		Notes		Date	
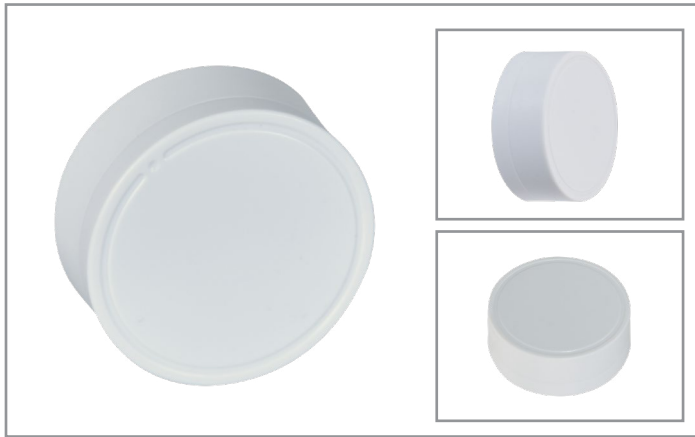
WaveLinx

CORE Locate Asset Tag
TRX-TAG-AST2

CORE Locate Asset Tag

Typical Applications
Office • Education • Healthcare • Hospitality • Retail

Interactive Menu

- Order Information page 2
- Connected Systems page 3
- Product Warranty

Product Certification

FC
Part 15

CE
EN300328 /
301489 / 60950
/ 62479

- Bluetooth QDID/EPL

Product Features

Web
Based

CORE
Locate

Asset/Inventory
Tracking

- Bluetooth 5.0
- Small form Factor
- Accelerometer
- Unique MAC address

Compatibility

WaveLinx
PRO

Overview

CORE Locate delivers real-time indoor location service and management, by leveraging the WaveLinx CORE smart space platform. Designed to allow you to monitor activities by sensing the location of your assets, staff and patients and use the data to improve business/production workflows, improve safety and security.

Product Features & Benefits

- Ideal for asset tracking and activity monitoring applications
- Configurable parameters using Tag config mobile app
- Low power consumption
- 3-Axis accelerometer
- User replaceable battery
- Internal button
- IP67 waterproof design
- Battery level monitoring

Order Information

Catalog Number

Catalog Number	Description
TRX-TAG-AST2	WaveLinx CORE Locate Tag - Asset 2 year- E7

Required Accessories

All WaveLinx CORE system accessories require WaveLinx CORE on-premise hardware platform hosting WaveLinx CORE Smart Spaces applications (TRX-TCENT2 or TRX-TCVRT2).

Ensure the bill of material includes one WaveLinx CORE and one software license from the components below.

Catalog Number

Catalog Number	Description
TRX-TCENT2	WaveLinx CORE Enterprise is an on-premise hardware platform hosting CORE software applications (supports up to 300 WaveLinx Area Controllers)
TRX-TCVRT2	WaveLinx Virtual CORE Enterprise is a virtual platform hosting CORE software applications (supports up to 300 WaveLinx Area Controllers)
TRX-LOCSNR-1YR	WaveLinx CORE Locate annual subscription
TRX-LOCBAS	WaveLinx CORE Locate application

Product Specifications

Key Features

Real-time location for assets using CORE Locate
- Indoor position tracking of assets (tools, portable equipment, vehicles, etc.)
- Position based alerting, heat-maps etc.

Mechanical

Size: Φ 1.53" x 0.61" (Φ 39mm x 15.5mm)
Weight: 0.74 oz (21 g)
Environment:
- **Operating temperature:** -4°F to 140°F (-20°C to 60°C)
- **Storage temperature:** -4°F to 140°F (-20°C to 60°C)
- For indoor use and outdoor conditioned spaces

Mounting: 3M VHB adhesive sticker provided with unit
Color: White
Housing: ABS plastic housing

Electrical

Power Supply Type: CR 2477 Battery
Power Activation:
- Open the rotatable housing
- Pressing "push button" and keeping on 3 seconds;
- The LED lights on 5 seconds, then the tag starts broadcasting

Battery Life:

Beacon Rate	Expected Life
1 second	36 months
3 seconds	42 months
4 seconds	48 months
30 seconds	60 months

Hardware Specifications

Status Indicators:
- Status LED on front of unit

Software Specifications
- CORE Locate Tag Configuration App
- CORE Locate

Compatibility
- CORE Locate

Wireless Specifications

Radio: Bluetooth Low Energy
Standard: BLE 5.0
Transmitter Power: -40dBm to 4dBm
Range: up to 164ft (50m)
Programable Beacon Rate: 1-30 seconds

Standards/Ratings
- FCC Part 15/ECES-003
- CE (EN300328 / 301489 / 60950 / 62479)
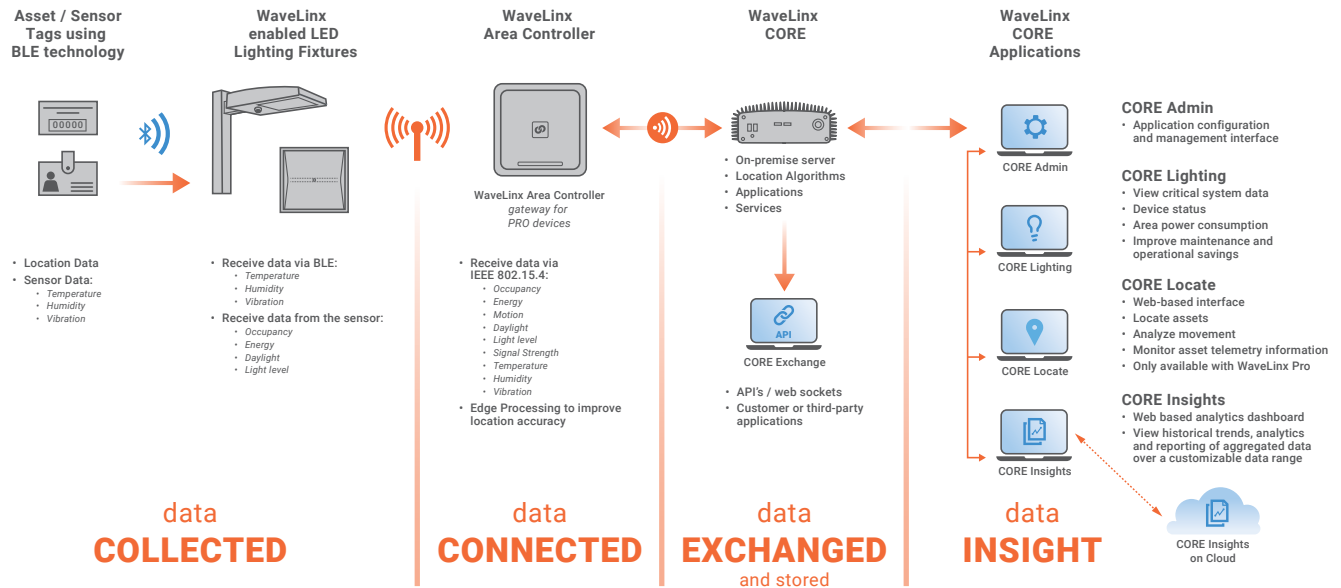- Bluetooth QDID/EPL

Warranty

One year warranty

Better Data. Better Decisions.

WaveLinx CORE combined with our WaveLinx PRO wireless connected lighting system is a distributed network of LED lighting fixtures with integrated sensing and beacon technology that captures real-time data; making your facility smarter so you can make smarter decisions.
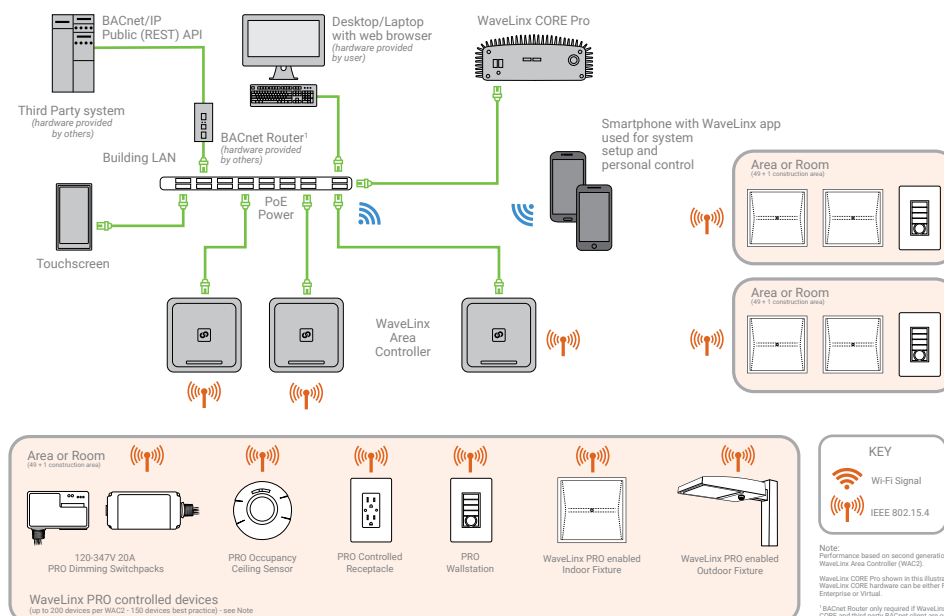
WaveLinx CORE provides an open IoT platform and infrastructure that connects intelligent sensors leveraging the real-estate of the physical light fixture to solve higher complexity problems in a commercial building to deliver actionable insights through the aggregation of valuable data.

Asset / Sensor Tags using BLE technology

WaveLinx enabled LED Lighting Fixtures

WaveLinx Area Controller
gateway for PRO devices

WaveLinx CORE
- On-premise server
- Location Algorithms
- Applications
- Services

WaveLinx CORE Applications

CORE Admin
- Application configuration and management interface

CORE Lighting
- View critical system data
- Device status
- Area power consumption
- Improve maintenance and operational savings

CORE Locate
- Web-based interface
- Locate assets
- Analyze movement
- Monitor asset telemetry information
- Only available with WaveLinx Pro

CORE Insights
- Web based analytics dashboard
- View historical trends, analytics and reporting of aggregated data over a customizable data range

- Location Data
- Sensor Data:
  - *Temperature*
  - *Humidity*
  - *Vibration*

- Receive data via BLE:
  - *Temperature*
  - *Humidity*
  - *Vibration*
- Receive data from the sensor:
  - *Occupancy*
  - *Energy*
  - *Daylight*
  - *Light level*

- Receive data via IEEE 802.15.4:
  - *Occupancy*
  - *Energy*
  - *Motion*
  - *Daylight*
  - *Light level*
  - *Signal Strength*
  - *Temperature*
  - *Humidity*
  - *Vibration*
- Edge Processing to improve location accuracy

CORE Exchange
- API's / web sockets
- Customer or third-party applications

CORE Insights on Cloud

data **COLLECTED**

data **CONNECTED**

data **EXCHANGED** and stored

data **INSIGHT**

Sample System Topology

This diagram shows the main components of the WaveLinx PRO wireless connected lighting system. The PRO devices communicate using wireless mesh technology based on the IEEE 802.15.4 standard. A PoE LAN connection for each WaveLinx Area Controller (WAC) is required for power and data access to the building lighting network. The WaveLinx CORE Enterprise and WaveLinx Area Controllers (WAC) communicate with WaveLinx CORE Apps over the Ethernet network. Please refer to the WaveLinx PRO Network and IT Guidance Technical Guide for more information.

View WaveLinx PRO Network and IT Guidance Technical Guide

Third Party system
(hardware provided by others)

BACnet/IP Public (REST) API

Desktop/Laptop with web browser *(hardware provided by user)*

WaveLinx CORE Pro

Building LAN

BACnet Router[1]
(hardware provided by others)

Touchscreen

PoE Power

Smartphone with WaveLinx app used for system setup and personal control

Area or Room
(49 + 1 construction area)

WaveLinx Area Controller

Area or Room
(49 + 1 construction area)

Area or Room
(49 + 1 construction area)

120-347V 20A PRO Dimming Switchpacks

PRO Occupancy Ceiling Sensor

PRO Controlled Receptacle

PRO Wallstation

WaveLinx PRO enabled Indoor Fixture

WaveLinx PRO enabled Outdoor Fixture

WaveLinx PRO controlled devices
(up to 200 devices per WAC2 - 150 devices best practice) - see Note

KEY

Wi-Fi Signal

IEEE 802.15.4

Note:
Performance based on second generation WaveLinx Area Controller (WAC2).

WaveLinx CORE Pro shown in this illustration. WaveLinx CORE hardware can be either Pro, Enterprise or Virtual.

[1] BACnet Router only required if WaveLinx CORE and third party BACnet client are on different subnets.

Control Systems
- WaveLinx