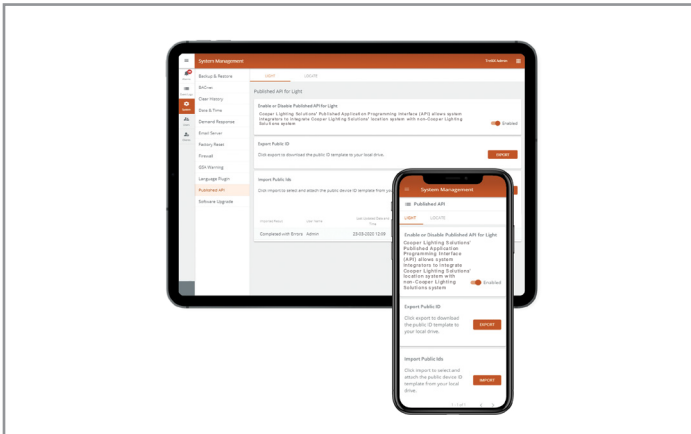


Project		Catalog #		Type	
Prepared by		Notes		Date	



Trellix

Public (REST) API

APIs for Trellix on-premises smart spaces IoT platform

Typical Applications

Office • Education • Healthcare • Industrial

Interactive Menu

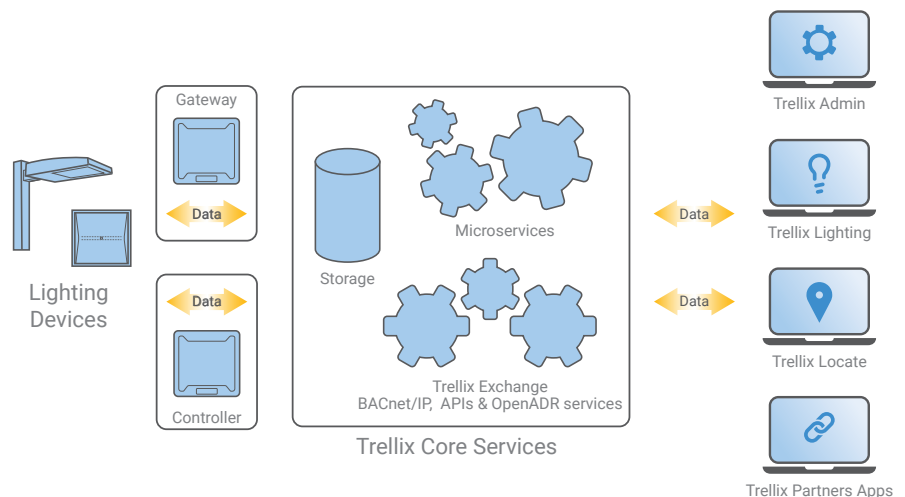
- Order Information [page 2](#)
- Connected Systems [page 3](#)
- Product Warranty

Product Features



Top Product Features

- **APIs for space management applications** – Allows third party partners to securely exchange data with Trellix Lighting and obtain data such as a space occupancy status, energy usage and light level. Third party partners can use these insights to offer solutions that would optimize operation efficiency and tenant experience including solutions that would reduce a facility's energy usage, improve floor layout, and optimizes conference rooms usage.
- **APIs for asset management and workflow optimization application** – Allows third party partners to securely exchange data with Trellix Locate and obtain data gathered from assets and geo-fence notifications. Third party partners can use these insights to optimize business operations and tenant experience including solutions that automatically identify workflow deficiencies, efficiently locate specific assets within the facility and improve equipment utilization rates.
- **REST (Representational State Transfer)**
 - Simplifies the exchange of data and operations interface between third party applications and Cooper Lighting Solutions connected lighting system using HTTPS and JSON data format with simple POST, GET actions to exchange data between the applications.
- **Secured Authentication and authorization** – Using the OAuth 2 authorization framework, the interface enables a third-party application to obtain limited access to an HTTPS service by orchestrating an approval interaction between Trellix and the HTTPS service or by allowing the third party application to obtain access on its own behalf.



Order Information

Trellix Core models TRX-TCPRO2, TRX-TCENT2 and TRX-TCVRT2 come with a base software license for interfaces that includes Public API for 250 nodes. For systems with more than 250 nodes, users need to purchase Public API Software License Adders.

Note: A node is a device connected to the connected lighting system such as ceiling or integrated occupancy sensors, wallstations, relay switchpacks, powerpacks, connected driver or receptacle.

Catalog Number

API Adder License	Description
TRX-API250	API Software License option for 250 nodes

Notes

1. The Trellix applications are preloaded on Trellix Core platforms, i.e. Trellix Pro (TRX-TCPRO2), Trellix Enterprise (TRX-TCENT2) and Virtual Trellix Enterprise (TRX-TCVRT2). Please refer to the Trellix Core datasheet to learn more about the capability of each platform.
2. All Trellix Core platforms are shipped with a base software license which enables Trellix Lighting and Trellix Exchange interfaces, except for OpenADR, for up to 250 nodes.
3. Capacity adder licenses are offered to increase the number of devices for Trellix lighting, Trellix BACnet and Trellix API for systems larger than the Trellix Core includes.

Product Specifications

Network Requirements

- The IP network shall allow HTTP data exchange between the Trellix Core and the third party applications. Please refer to the Wavelinx Installation and Planning guide for more information with regards to the IT network requirements.

Performance Specifications

- Trellix Core Pro: Maximum of 2,000 connected devices
- Trellix Core Enterprise: Maximum of 45,000 connected devices
- Trellix Core Virtual Enterprise: Maximum of 45,000 connected devices

Supported Commands

- A subset of the HTTP methods is supported by the REST API.
- The supported methods are GET, POST
(Notes: PUT and DELETE actions not currently supported).
Please refer to the Trellix Reference Manual for more details.

Warranty

Consult website for warranty information.

Sample System Topology:


This diagram shows the main components of the WaveLinX Wireless and Wired Connected Lighting system.

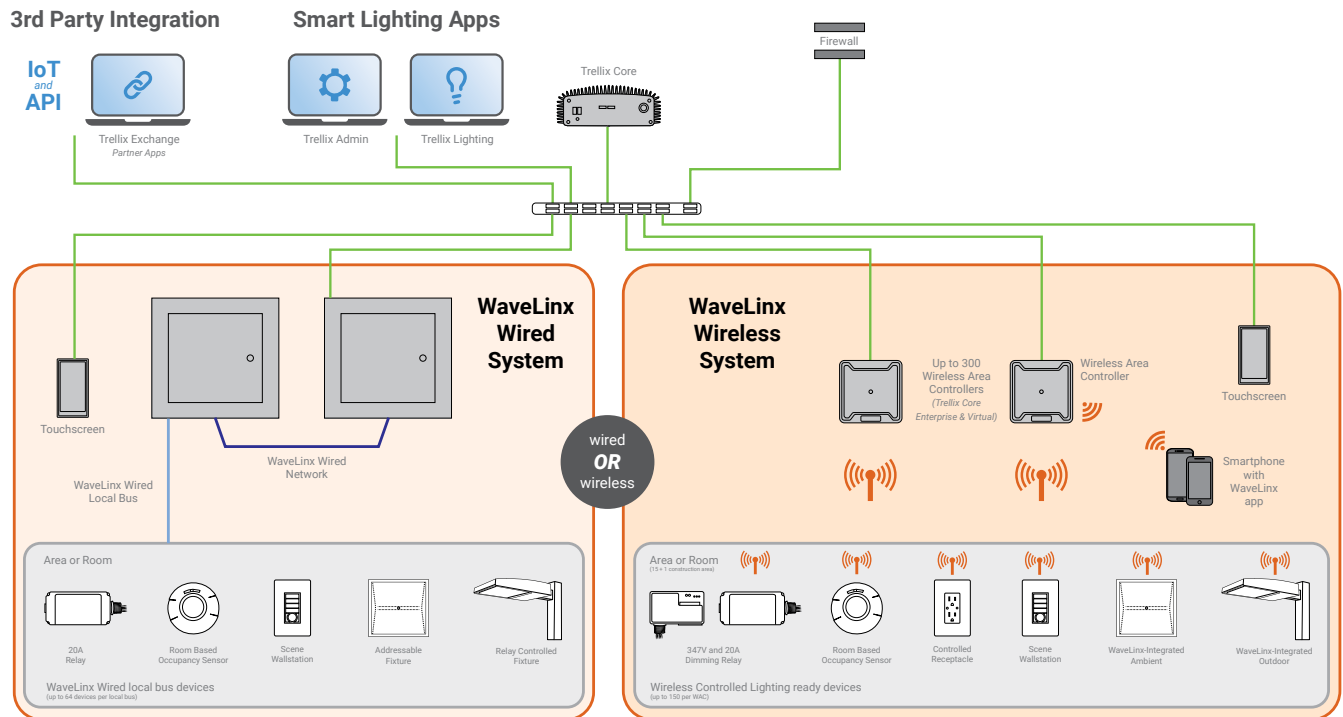
The **WaveLinX wireless system** communicates using wireless mesh technology based on the IEEE 802.15.4 standard. A PoE LAN connection for each Wireless Area Controller (WAC) is required for power and data access to the building lighting network.

The **WaveLinX wired system** controls the devices using relay, 0-10V, DMX and the WaveLinX wired digital local bus. The WaveLinX wired system connects to the building LAN using the EG2 module. Each WaveLinX wired area controller communicate on the WaveLinX wired network.

WaveLinX Area Controllers (WAC) and WaveLinX Ethernet Gateways (EG2) communicate with Trellix over the Ethernet network.

Please refer to the WaveLinX Wireless Network and IT Guidance Technical Guide and WaveLinX Wired Network and IT Guidance Technical Guide for more information.

 **View**
WaveLinX Network
and IT Guidance
Technical Guide



		WaveLinX Wired	WaveLinX Wireless
Trellix	Connects to Trellix Core (Pro, Enterprise, Virtual)	●	●
	Trellix Core # of gateways/devices	20 / 2000	20 / 2000
	Trellix Enterprise # of gateways/devices	300 / 45,000*	300 / 45,000*
	Trellix Virtual Enterprise # of gateways/devices	300 / 45,000*	300 / 45,000*
	Connecting device	EG2/EG2-NA	WAC-POE
Trellix Lighting	Alarms	○	●
	Events	●	●
	Operate (floorplan control)	●	●
	Operate - area control	●	●
	Operate - zone control	●	●
	Operate - device control	●	●
	Scheduling	○	●
	Energy Dashboard		●
Trellix Exchange	Occupancy Dashboard		●
	BACnet/IP	○	●
	Public (REST) API	○	●
Trellix Admin	OpenADR		●
	Manage Users	●	●
	Manage roles	●	●
	Manage clients	●	●
	Manage licenses	●	●
	System settings (backup/restore, network etc)	●	●

* For larger number of gateways and devices, please contact Cooper Lighting Solutions Sales representatives. Recommend designing the system at 70-80% of maximum capacity.

● = All Features ○ = Subset of features

Control Systems

- Trellix
- WaveLinX Wireless
- WaveLinX Wired
- VividTune