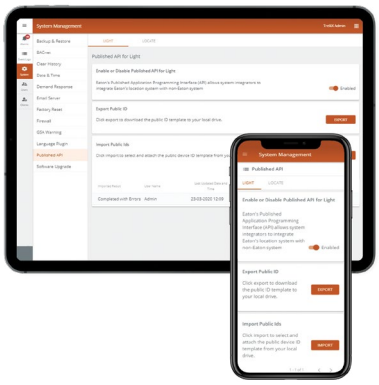
Project		Catalog #		Type	
Prepared by		Notes		Date	



Trellix

Public (REST) API

APIs for Enterprise Lighting Management Application

Typical Applications

Office • Education • Healthcare • Industrial

Discontinued 30-02-2023

Interactive Menu

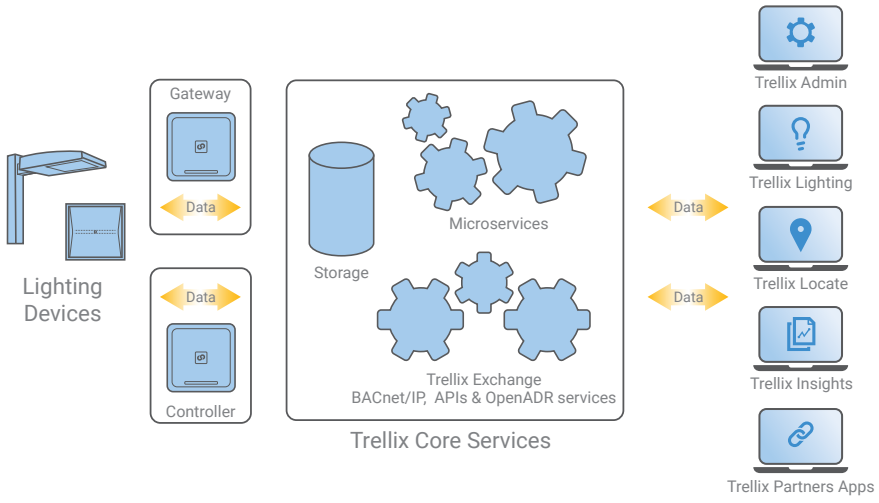
- Order Information page 2
- Connected Systems page 3
- Product Warranty

Product Features

Trellix Lighting · Trellix Exchange · Trellix Admin · Trellix Locate

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

The Trellix Core (Pro, Enterprise, Virtual) platforms are preloaded with Trellix Admin and Lighting . The Trellix Core is shipped with a base software license which enables the Lighting application for up to 250 devices. After 250 devices, the customer should purchase Trellix Lighting license adders.

Trellix API requires a dedicated software license. Customers should purchase the appropriate software license adders for any additional features.

Catalog Number

Catalog Number	Description
TRX-API	API software license for unlimited devices

Notes
1. All Trellix Core platforms are shipped with a base software license which enables all the Lighting features for 250 devices except for Occupancy dashboard, API, BACnet and OpenADR.
2. Trellix Locate application is not available with the base software license.
3. For a system with more than 250 devices, the users must order software license adders for the applications and interfaces that they are planning to use.
   Please refer to Trellix Lighting, Trellix Locate, Trellix BACnet, Trellix Public API Trellix OpenADR datasheets to learn more about the software license catalog numbers.
4. Please refer to the Trellix Core datasheet to learn more about the capability of each platform, i.e. Trellix Pro (TRX-TCPRO2), Trellix Enterprise (TRX-TCENT2) and Virtual Trellix Enterprise (TRX-TCVRT2).

Trellix Commissioning Services

The Trellix Lighting application includes graphical floor plan and energy dashboard. Services to configure these items MUST BE INCLUDED in Trellix Core and Trellix Basic License Addition 250 options for the number of nodes indicated with those products.

Catalog Number

Catalog Number	Description
TRX-CONFIG	Trellix Energy and Graphical Floorplan Setup Services for 250 devices*

Notes
1. Devices placement only available for wireless devices

A device is an input/output wireless/wired device that is connected to the controller.

Wireless

All Wireless Devices (integrated sensors, ceiling sensors, outdoor sensors, wall stations, switch packs, receptacles, wireless drivers). Each device counts as one.

Notes: WaveLinx Pro Touchscreen is not counted as a device

Wired

DAC & Field Relay Devices: Each device counts as one.

SCMH : 12 devices (A single SCMH counts as 12 devices)

SCMR : 0 devices (see below)

Notes: As Trellix 9.0 does not support device level monitoring, the device count is limited to output devices only listed above, i.e. wallstations and sensors are not included in the device count.
We are not counting the SCMR in the device count.

Discontinued 06-02-2023

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 Pro Installation and Planning guide for more information with regards to the IT network requirements.

Performance Specifications

- Trellix Core Pro: Maximum of 3,000 connected devices
- Trellix Core Enterprise: Maximum of 32,5000 connected devices
- Trellix Core Virtual Enterprise: Maximum of 32,500 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 wired and Pro wireless connected lighting system.

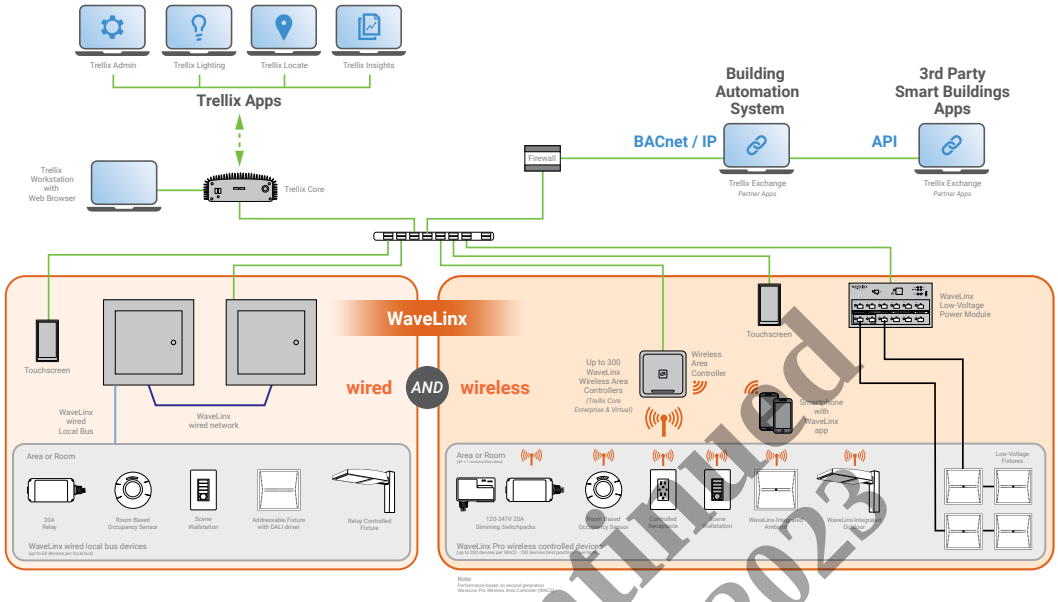
The **WaveLinx Pro wireless system** communicates using wireless mesh technology based on the IEEE 802.15.4 standard. A PoE LAN connection for each Wireless Area Controller (WAC) is required for power and data access to the building lighting network.

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 EG2-S-NA module, mounted within the WaveLinx Wired Area Controller. Each WaveLinx wired area controller communicates on the WaveLinx wired network.

WaveLinx Pro Wireless Area Controllers (WAC) and WaveLinx Ethernet Gateways (EG2-S-NA) communicate with Trellix over the Ethernet network.

Please refer to the WaveLinx Pro Wireless Network and IT Guidance Technical Guide for more information.

View WaveLinx Pro Network and IT Guidance Technical Guide



		WaveLinx wired	WaveLinx Pro wireless
Trellix	Connects to Trellix Core (Pro, Enterprise, Virtual)	●	●
	# of WAC or EG2-S-NA / # of devices per Trellix Core Pro	2 / 3000	20 / 3000
	# of WAC or EG2-S-NA / # of devices per Trellix Core Enterprise	10 / 32,500*	300 / 32,500*
	# of WAC or EG2-S-NA / # of devices per Trellix Core Virtual Enterprise	10 / 32,500*	300 / 32,500*
	Connecting device	EG2-S-NA	WAC2-POE
Trellix Lighting	Alarms	○	●
	Events	●	●
	Operate (floorplan control)	●	●
	Operate - area control	●	●
	Operate - zone control	●	●
	Operate - device control		●
	Scheduling	○	●
	Energy Dashboard		●
	Occupancy Dashboard		●
Trellix Exchange	BACnet/IP	○	10,000 objects with Trellix Pro up to 30,000 with Enterprise/Virtual
	Public (REST) API	○	●
	OpenADR		●
	Demand Response		●
Trellix Admin	Manage Users	●	●
	Manage roles	●	●
	Manage clients	●	●
	Manage licenses	●	●
	System settings (backup/restore, network etc)	●	●
Trellix Insights	Occupancy Trends and Comparison		●
	Average Occupancy		●
	Occupancy on Floor Plan		●
	Generate and Export Reports to pdf		●
	Hierarchical Navigation		●
	Quick Search		●
	Department Filter		●
	Historical View		●
	Popular Spaces		●

* For larger number of gateways and devices, please contact Cooper Lighting Solutions Sales representatives.
Recommend designing the system at 70-80% of maximum capacity. Specifications based on WAC2-POE.
The number of gateways and devices mentioned above are the total for a single system or the combination (Wired + Wireless) that can be used with a server.

● = All features ○ = Subset of features

Discontinued 06-02-2023

Control Systems

- Trellix
- WaveLinx Pro wireless
- WaveLinx wired
- VividTune

© 2022 Cooper Lighting Solutions
All Rights Reserved.

Specifications and dimensions subject to change without notice.