

Project		Catalog #		Type	
Prepared by		Notes		Date	



Trellix

Trellix Core Enterprise

Hardware platform hosting Trellix Applications

Typical Applications

Office • Education • Healthcare • Industrial

Interactive Menu

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

Product Certification



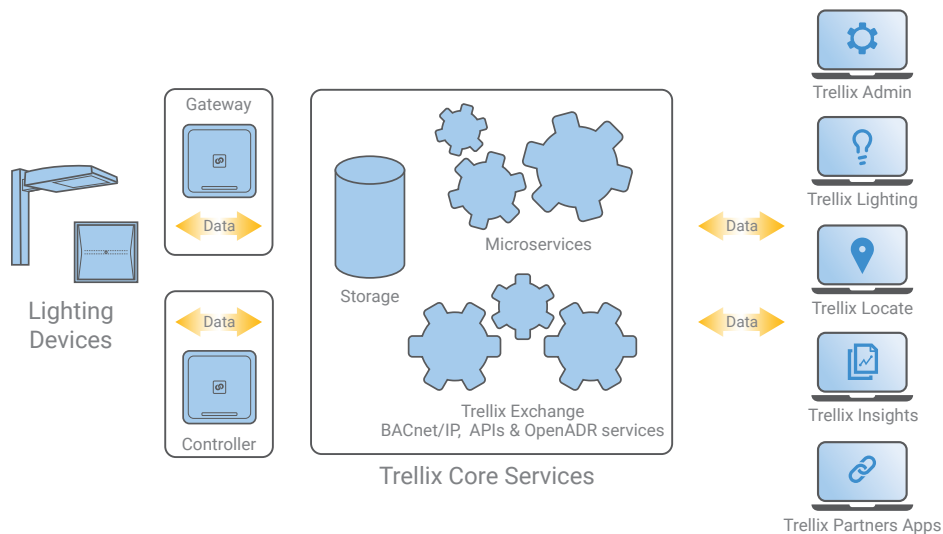
• Ref HPE ProLiant DL360 Gen 10 Server Datasheet1

Product Features

- Trellix Lighting
- Trellix Exchange
- Trellix Admin
- Trellix Locate
- Trellix Insights

Top Product Features

- Quickly establish and future-proof user's IoT strategy by enabling secure data flow between their connected lighting control system and the other building's sub-systems.
- Designed for WaveLinX Pro systems composed of up to 300 networked area controllers / gateways.
- Hosts the Trellix Applications that provide enterprise-level functionality for the WaveLinX Pro system users to improve operational savings and maintenance. The applications include Trellix Admin, Lighting, Locate and Insights. Please refer to the applications datasheets to learn more about each application.
- Stores system data such as devices status, devices present value, areas power consumption from the connected devices and shares it with third party systems via BACnet IP and Public API (REST).



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 Insights, BACnet/IP, API and OpenADR require a dedicate software license. Customers should purchase the appropriate software license adders for any additional features.

Catalog Number	Description
TRX-TCENT2	Trellix Core Enterprise(shipped with Trellix Lighting and Admin)

Optional Trellix Software Licenses

Catalog Number	Description
TRX-LGT250	Trellix Lighting license adder for additional 250 devices
TRX-API	API license for unlimited devices
TRX-BACNET	BACnet License for unlimited devices
TRX-OPNADR	OpenADR Interface license for unlimited devices per site

Notes
 1. Please refer to the respective datasheets to learn about the other features.

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	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: WaveLinux 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.

Product Specifications

Key Features

- **Compact form factor server with high performance** - Powered by HPE 1P 1U rack server, the Trellix Core Enterprise provides the right balance of performance, expandability, reliability and manageability for a distributed lighting control system.
- **Redundant power supply capability** - Keeps your business running and provides data protection and accessibility even in the event of a power supply failure.
- **Smart Array technology by HPE** - Provides businesses with protection for critical data through RAID mirroring and striping capability and captures and holds data indefinitely in the event of a power loss, equipment failure, or human error.

System Performance

Maximum number of area controllers: 300

Maximum number of nodes supported: 32,500 devices

Maximum number of BACnet objects: 30,000

Note: Recommend designing the system at 70-80% of maximum performance

Mechanical

Size: 1.69" H x 17.11" D x 27.83" L (4.29cm x 43.46cm x 70.69cm)

Weight: 17.37lb (7.88 kg)

Environment:

- **Operating temperature:** 50°F to 95°F (10°C to 35°C)
- **Non-operating temperature:** 50°F to 95°F (-30°C to 65°C)
- **Relative humidity operating:** 8% to 90%
- **Relative humidity non-operating:** 5% to 95%
- **Storage temperature:** -4°F to 140°F (-20°C to 60°C)
- For indoor use only

Mounting: Mounting plate provided with the unit

Electrical

Input Requirements:

- Range input voltage: 100 to 240 VAC
- Rated input current: 5.5A max (at 100 VAC)
- Rated input frequency: 50 to 60 Hz

Power supply type: (1) 290W non-hot plug power supply

Power supply output: Ref HPE ProLiant DL360 Gen 10 Server Datasheet1

Hardware Specifications

Processor: Intel® Intel® Xeon® E3-1240 v5 (4 core, 3.5 GHz, 8MB, 80W) NUC7i5DNFE

Number of processors: 1

Processor core: 4

Processor cache: 8 MB SmartCache

Processor speed:

- 3.5 GHz
- Storage Controller
- (1) Dynamic Smart Array B140i
- Expansion Slots
- (2) PCIe

Form factor: 1U

Form factor chassis: Rack

Memory: 48GB DRAM

Memory slots: 4 DIMM slots

Drive: 3.5" SATA-2 5000 GB

System fan features: Non-hot plug non redundant

Graphic card: NVIDIA K2200

Network controller: 1 GB 332i Ethernet Adapter 2 ports per controller

Manufacturer: HPE

Model: HPE ProLiant DL360 Gen 10 Server

Software Specifications

Refer to Trellix spec sheet to learn about Trellix applications

Warranty

One year warranty

Sample System Topology:

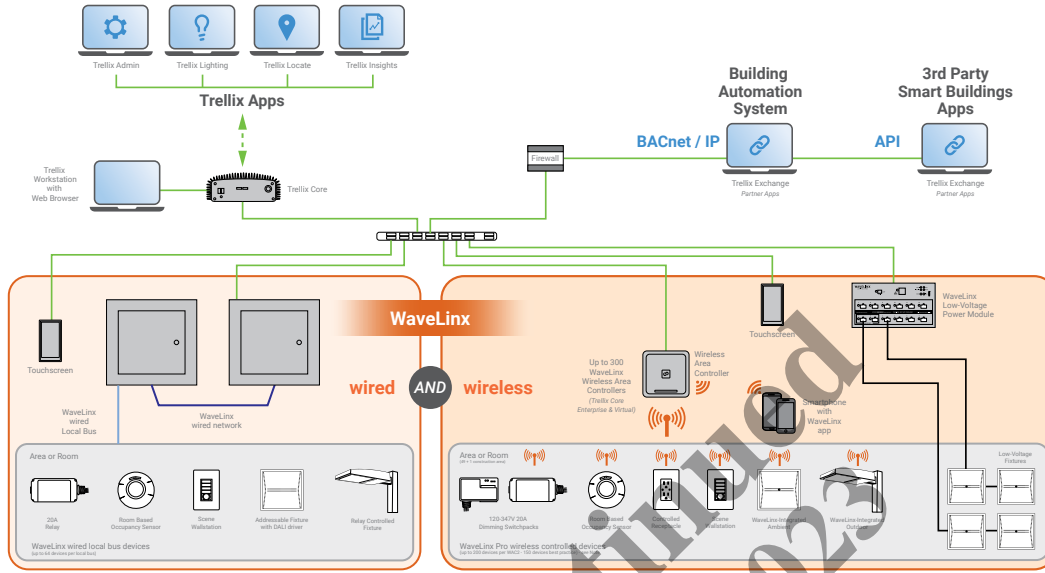
This diagram shows the main components of the WaveLinx wired and Pro wireless connected lighting system.

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 and WaveLinx Wired 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

Control Systems

- Trellix
- WaveLinx Pro wireless
- WaveLinx wired
- VividTune