Westell® | Smart Pole Management System

General Description

Westell's EdgeLink Smart Pole management system is a purpose-built IoT solution for smart cities, small cells, and 4G/5G wireless densification projects. This affordable solution consists of compact EdgeLink hardware for field deployment and hosted VantEdge Software-as-a-Service at half the cost of a modem.

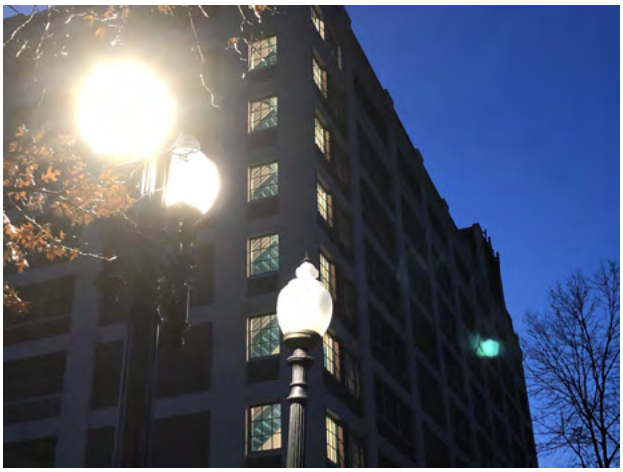
Edgelink's small footprint and extensive feature set make it the perfect hardware solution for carriers, tower operators, municipalities, integrators, and local utilities tasked with small cell and streetlamp management applications. This solution can be installed pre-construction or to pre-existing smart poles. Many times the small cell provider is required to maintain the lights on the pole. Westell provides the solution to ensure your light is on or off when it should be.

Although the small cell radio gives you a notification that there is a problem, the technician does not know the real issue forcing them to visit the site. Westell's smart pole solution can provide you information that will reduce truck rolls for things like power outages or fiber cuts as they would need to call the provider for resolution of those issues. The Westell solution can pay for itself by eliminating even a single truck roll.

For some small cell deployments, access via ladder or bucket truck adds additional time and equipment to access the small cell; the EdgeLink/ VantEdge solution can help eliminate this additional labor and cost for diagnosing infrastructure conditions. Options for Dual-SIM LTE Cat-M1, Fiber, and Ethernet connectivity make it suitable for virtually any network deployment. Onboard intelligence, coupled with Westell's VantEdge IoT platform, provides a complete turn-key to gaining visibility at the extreme network edge.

The EdgeLink Smartpole device comes standard in a stealthy, compact, outdoor-rated enclosure with extended temperature ratings, ready for deployment nearly anywhere. The NEMA rated polycarbonate enclosure allows for RF penetration of internal antennas on 4G models. Mounting options for pole mount, light base, inside a cabinet or cabinet exterior help eliminate additional permitting. The AC power input can be connected directly to electrical service and notify you of a local power outage with the onboard battery backup option. Dry contact inputs, coupled with low-cost voltage or current detection devices, allow for monitoring of electrical conditions on-site such as lamp status and power availability for radio devices. Other inputs provided to monitor equipment alarms, temperature, door or hatch tamper switches, or ancillary devices such as fans or active cooling systems.

By connecting optional high accuracy class electrical meters, EdgeLink provides cost-effective metering and, or sub-metering for tenant equipment,



Westell EdgeLink Smart Pole

with energy status and consumption data collected and reported through the VantEdge IoT portal.

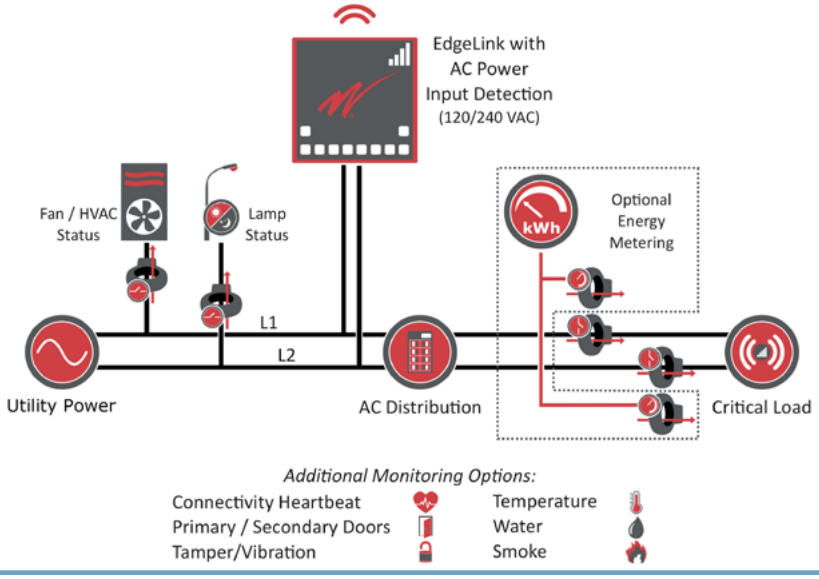
Magnet-triggered mobile application-based configuration eases deployment, allowing you to configure from the ground with a wireless mobile device. A robust onboard application architecture allows for incremental functionality enhancements from Westell, preserving investment in your monitoring hardware; this creates ease of installation for pole mount solutions enabling you to configure the EdgeLink from the ground with your mobile device.

Westell provides a single pane of glass with the VantEdge Platform. Intelligently engineered, this web-based IoT platform provides the users with a commanding multi-tenancy view with optional white-labeling for OEMs, carrier-neutral operators, and REITs*. The VantEdge platform provides alarms, alarm history, mapping, and configuration backup, ability to manage firmware, analytics, and notifications. Historical alarm information is exportable for reporting purposes. This solution is a low-cost way to provide the user with full access to critical site information. No training is needed to use VantEdge, enabling the user to troubleshoot issues at the site quickly.

Westell also offers bundled 4G private wireless data services (USA-only), simplifying IoT connectivity, deployment, and operations for customers. OEM white-labeling of the complete hardware and software solution is also available for qualifying partners.

**Real Estate Investment Trust*

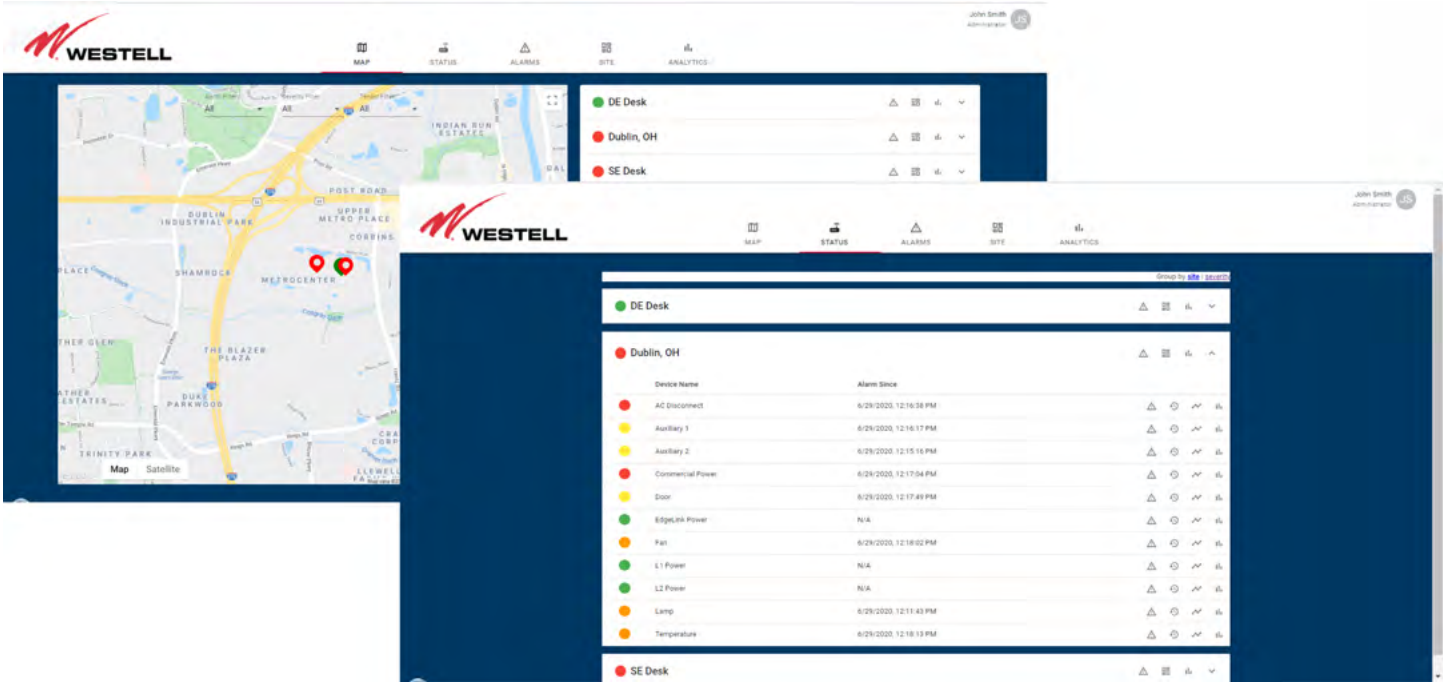
Application Overview



Monitored Conditions Supported

- Network connectivity (heartbeat)
- Mains power availability
- Lamp Status
- Power feed #1 Availability / Consumption
- Power feed #2 Availability / Consumption
- AC Disconnect Detection
- Fan/Cooling Status
- Additional ancillary sensors: Doors, Water, Tamper/Vibration and Temperature
- GPS location (when equipped with 4G option)

Westell VantEdge IoT Software



Ordering Information

EL-Example Model	4	0	1	-C001
WAN	2 = Ethernet Only 3 = SFP 4 = 4G LTE Cat-M1			
	0			
Power Supply	0 = 80-264VAC 50/60Hz, no Battery Backup 1 = 80-264VAC 50/60Hz, with Battery Backup			
Configuration	C001 = Smart Pole Application			

Westell EdgeLink Hardware

EdgeLink Feature Overview

Standard Models:	Ethernet 10/100	SFP 10/100/1000	4G Cat-M1	Serial Port	Dry Contact Inputs	SiteBus	Wireless Sensors	Battery Backup	Configure by Smartphone
EL-301-C001	1	1	-	(1) RS485	8	1	Optional		Yes
EL-401-C001	1	-	1 (integrated internal antenna)	(1) RS485	8	1	Optional		Yes

Software and Service SKUs:	Description
VS-EL-C001-BASE	Monthly VantEdge SaaS for EdgeLink Smart Pole - Base 100 Units
VS-EL-C001-500-1	Monthly VantEdge Saas for EdgeLink Smart Pole - Units 101-2000, each
VS-EL-C001-2K-1	Monthly VantEdge Saas for EdgeLink Smart Pole - Units 2001+, each
VS-EL-C001-4G-1	Monthly EdgeLink 4G Service for Smart Pole - 4G equipped units, each (optional)
EL-HWSUPPORT	Monthly Hardware Replacement coverage for EdgeLink (optional)

Physical Specifications

Depth:	3.0 in. (75 mm)
Height:	10 in. (254 mm)
Width:	7 in. (177.8 mm)
Weight:	2.05 lbs (32.8 oz) (0.93 kg)
Mounting:	Wall or Pole
Enclosure color	RAL 7035 light grey
Power Requirements:	AC Powered Models: 100-267VAC, 50 or 60Hz, 5W Maximum

Environmental / Reliability / Maintenance / Compliance

Extended temperature range of -40°C to 65°C (-40°F to 149°F)
Humidity: 5-95% (non-condensing)
Integrated Enclosure: • Ingress Protection (EN 60529) – IP66/IP67 • Impact Resistance (EN 62262) – IK08 • UV resistance: UL 508 • Flammability Rating: UL746C 5” • Glow Wire test (IEC 695-2-1) °C: 960 • NEMA Class: NEMA 1, 4, 4X, 6, 12, 13 • Closure mechanism – screws
MTBF - 200,000 hours
MTTR - 15 minutes
ANSI/UL 62368-1
ANSI/UL 60950-22
FCC Part 15
ICES-003
IEC/EN 62368-1
IEC/EN 60950-22
CE Mark

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