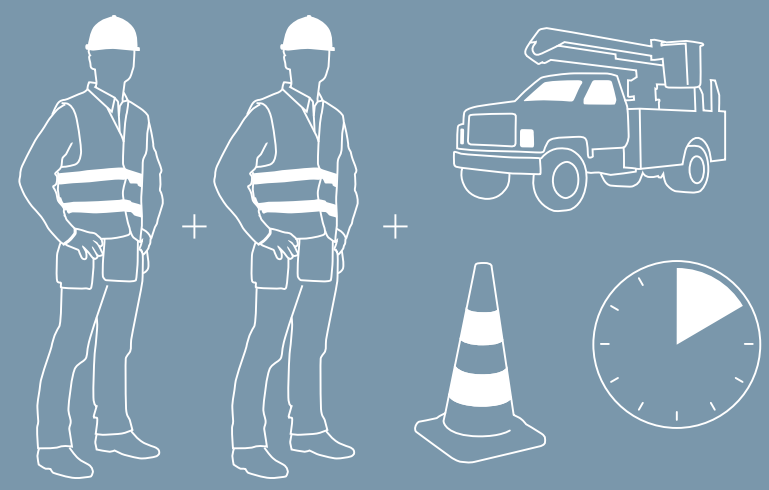


What can your LED luminaire do for you (besides save energy)?

LED lighting wireless controls provide non-energy benefits.

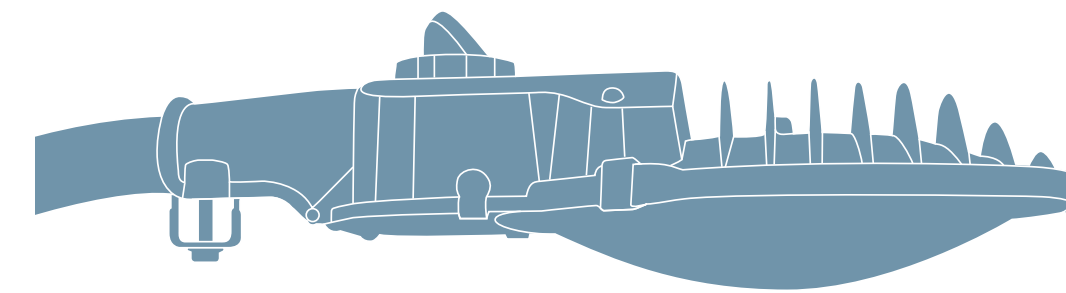


Lighting maintenance truck rolls require significant resources: time and equipment. Can cost \$150 - \$350!



Pend Oreille County PUD chose Evluma AreaMax with ConnectLED Bluetooth Controls to replace 1200+ 100-200W HPS fixtures.

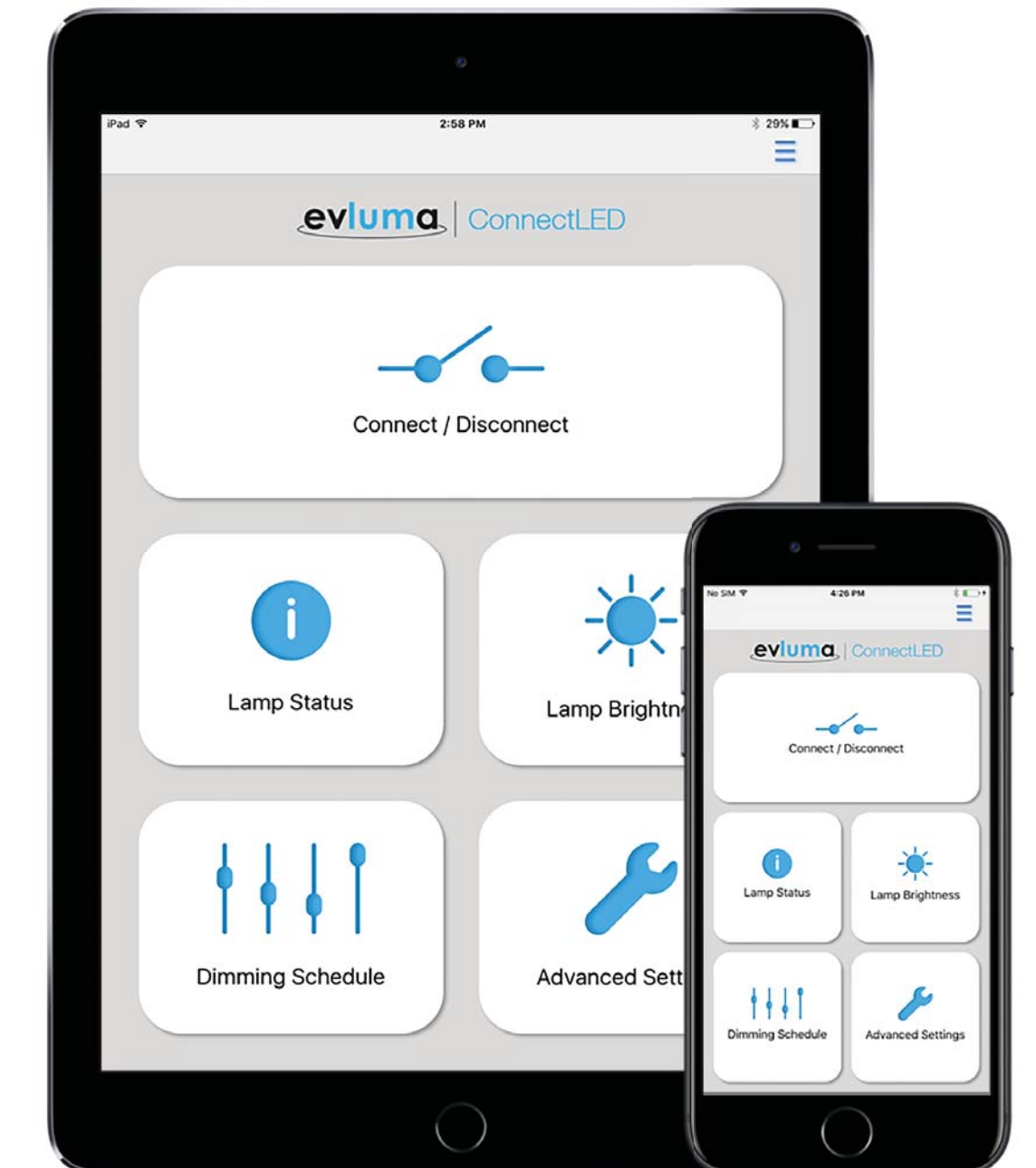
AreaMax LED luminaire for street & area lighting



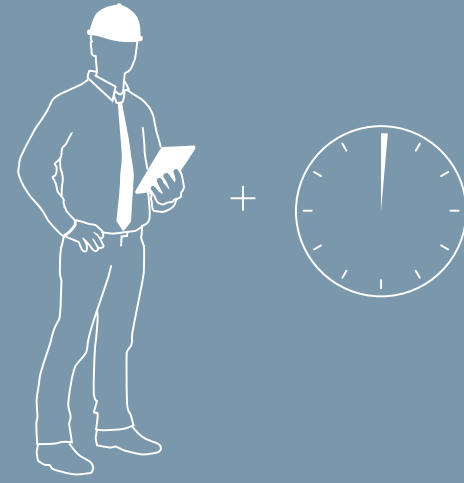
Bluetooth®

Wirelessly disconnect luminaries during service transfer or for non-payment
 Manage light output remotely and solve light trespass disputes (dimming)
 Increased customer satisfaction. Fewer disruptions & less maintenance. Safety!
 Dimming = even more energy savings (Oh! We weren't going to discuss that!)

ConnectLED App for Applie, Android & Windows (PC)



But with wireless controls utilities can save in labor and promote safety.



Types of Controls to Consider

Non-Networked

Evluma products w/ ConnectLED unique one-to-one BLE commuicaton built-in.
 Available at any time for use during luminaire ownership. 150ft range.

Networked: Luminaire + Node

Wireless network nodes plug into into NEMA C136.41 5/7-pin socket

Cellular Communication: 5-10 miles communication, easy to deploy, higher operating cost

Low Power WAN (LPWAN): incl ZigBee & 6LoWPAN protocols, mesh or star configuration, 300ft – 4,000ft, some 5+ miles

Power line carrier systems & hybrid PL/RF gateway

Node capabilities (vary)

Traditional photocontrols, GPS, on/off, 0-10 volt dimming, revenue grade power monitoring, DALI



POC PUD serviceman controlling an AreaMax from the ground with ConnectLED

Evluma Non-Networked + 5/7 pin socket + Node = Network - when YOU are ready!

End benefit to utility?

- Potential bolt-on to AMI systems, Asset Management & GIS Coordination
- Remote disconnect/connect has real value for service crew
- Outage reporting, dispatch planning, potential to meter lighting & de-couple rates
- Motion sensing and security camera options for members

