

## CRD 3000 Control Router Device

Extends LONWORKS®  
Based Street Light  
Networks

Extend the reach of your managed street lighting system with Echelon's Control Router Device (CRD 3000), a Power Line (PL) to RF communication device. The CRD 3000 brings a PL/RF hybrid energy control solution to street lights for better performance, higher reliability, and lower costs.



The CRD 3000 is an optional component in LONWORKS based street lighting networks that:

- Increases the number of lights per SmartServer
- Decreases the number of paid wide-area communications points
- Provides reliable communications in even the most demanding physical environment

### FEATURES

#### Easy Installation

- Mounts on existing ANSI Standard twist lock photo cell sockets of street light fixtures.
- LED indicators provide visual indication and status of RF network instantly and automatically.



#### Bridges Power Line and RF Networks

- Brings many segments to one SmartServer for reducing hardware and WAN network operating costs.

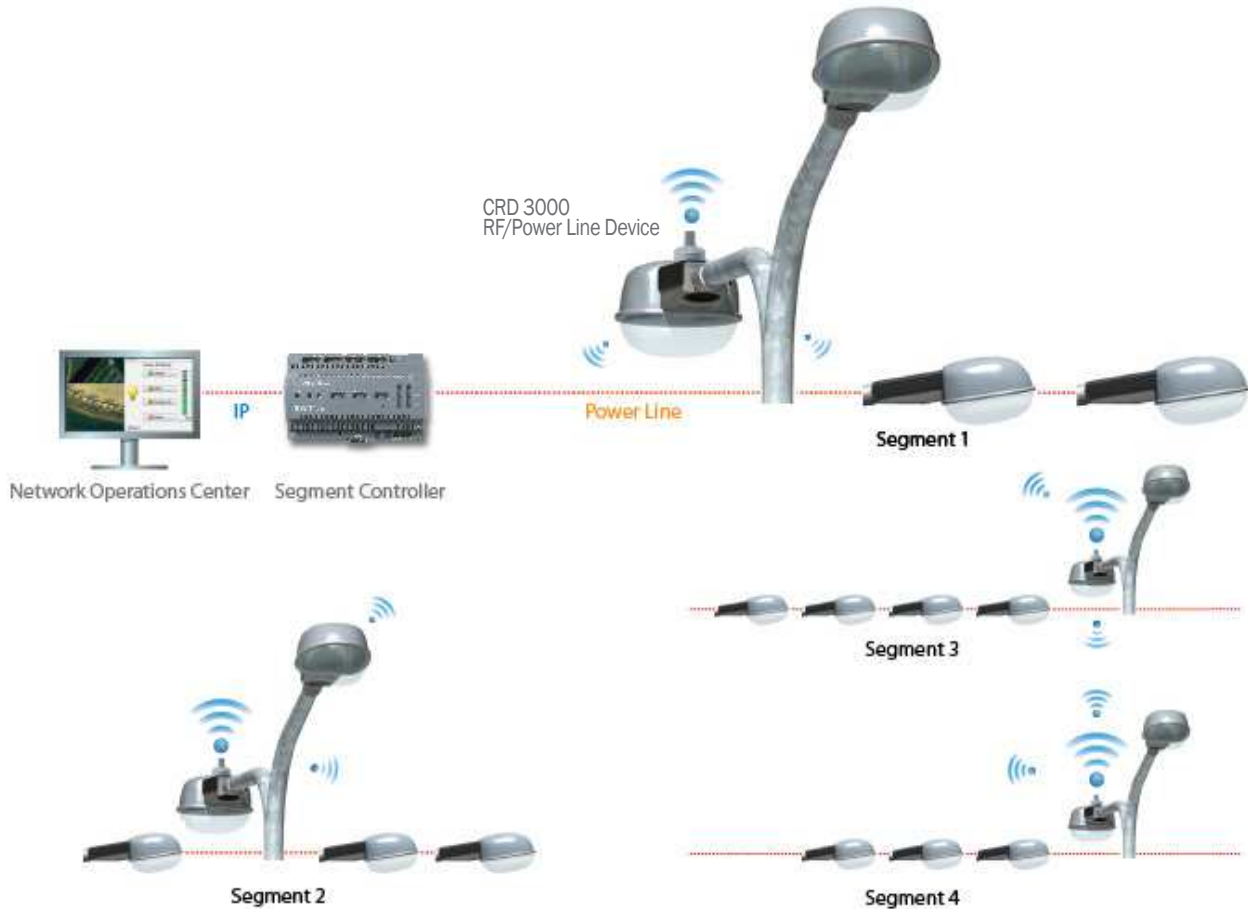
#### Communication

- Supports ANSI/CEA 709.2 and ISO/IEC 14908-3 Power Line communication
- RF channel complies with the IEEE 802.15.4 standard – 2.4 GHz non-licensed worldwide band

### DESCRIPTION

The CRD 3000 is a PL/RF communications device for LONWORKS based street lighting networks. The CRD 3000 bridge allows solution providers to offer customers managed lighting solutions that utilize an PL/RF hybrid meshed architecture to overcome demanding physical environment such as tall buildings, trees, and construction projects. Echelon's CRD 3000 installs in existing ANSI compliant pole top sockets. The CRD 3000 installs without software tools, using simple, on/off indicator lights to tell installers that reliable RF communications have been established within seconds of installation. As an integral infrastructure device, no changes are required to existing maintenance, management, and visualization software for LONWORKS based street lighting networks utilizing the SLB.

## CRD 3000 Network Architecture



### Photo Cell Socket

Mounting bracket for non-photo cell socket fixtures



### SPECIFICATIONS

#### Model Number

76520R

#### Input Voltage Range

120 to 277 VAC +/- 10% - Single phase

#### Input Frequency

50 or 60Hz

#### RF Frequency

2.4 GHz

#### Power Line communication frequency

Dual frequency  
115kbps and 132kbps

#### RF power

10 mW

#### Operating Temperature

-40°C to 85°C @ full load

#### Storage Temperature

-40°C to +85°C

#### Operating Humidity

0-90% RH @ 50°C (non condensing)

#### Storage Humidity

0-95% RH max @ 50°C (non condensing)

#### Vibration

5Hz - 7.5Hz @ 0.5" D.A., 5.5Hz-200Hz  
@ 1.5G

#### Shock

30g @ 11ms; 100g @ 3ms (half sine)

#### EMC

FCC Part 15 Class B

#### Agency Listing

UL 60950, cUL C22.2 No. 60950-00, CE

#### RoHs Compliant

Yes

#### Weight

190 grams

#### Power Plug

Meet NEMA socket standard BS5972

#### IP rating

IP 66 for outdoor applications

#### Size (Diameter x Height)

(105 x 115) mm