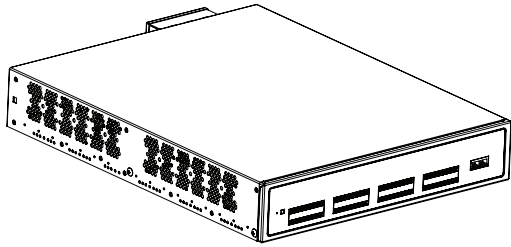


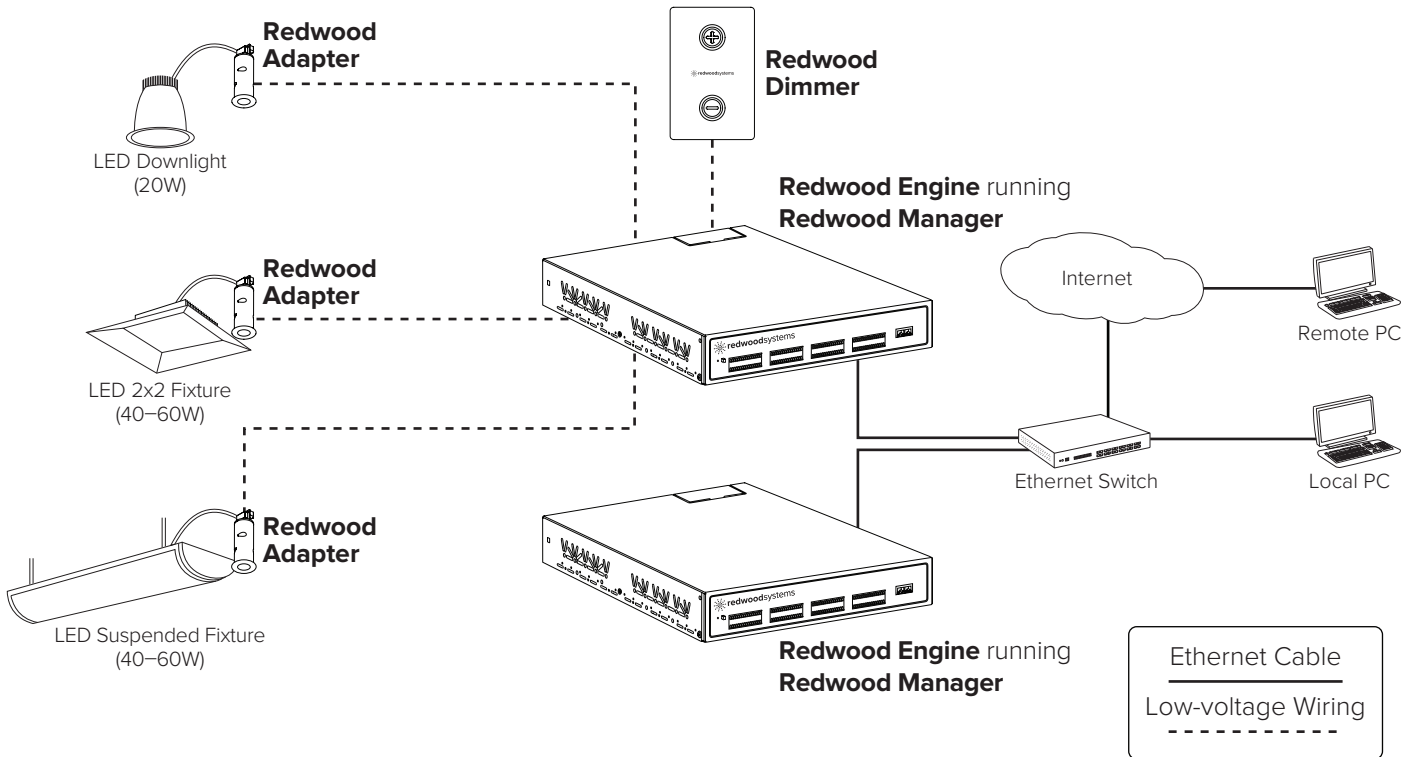
Redwood Engine



Redwood Engine

The Redwood Engine centralizes power conversion and control processing for LED lighting. It takes high-voltage AC power, converts it to low-voltage DC, and distributes it to all of the LED fixtures via Class 2, low-voltage cabling and the Redwood Adapters. Running the embedded Redwood Manager software, the Engine powers and communicates with Redwood Adapters and Redwood Dimmers. It is the “brains” behind the Redwood Platform and performs the sophisticated controls that significantly reduce energy consumption. Multiple Engines can be linked together to power and control hundreds or thousands of fixtures.

Redwood Platform Application Diagram



Project name

Project number

Date

Redwood Engine Specifications

MECHANICAL SPECIFICATIONS

- Dimensions: 17.4" W X 3.4" H (2RU) X 23.75" D
- Weight: 20lbs (9.07kg)
- For indoor use only
- Operating Temp: 0°C to 50°C
- Storage Temp: -20°C to 70°C
- Operating Humidity: 10% to 80% RH
- Storage Humidity: 5% to 95% RH
- Designed for rack or wall mount

ELECTRICAL INPUT SPECIFICATIONS

- AC Input: 120VAC/16A or 277VAC/7A, 50-60Hz
- Max Power Consumption: 1580W

LED DRIVER OUTPUT SPECIFICATIONS

- 64 individually controlled power and control channels
- Full-load driver efficiency: 81%
- Channel connections come in swappable banks of 8
- Constant current source
- Smooth dimming range from 5-100% of power
- Per channel DC output: 12-55VDC/ 75-500mA. Nominal 20W per channel
- Power transmitted via 18-24 AWG, field-terminated, 2 Conductor Unshielded cable
- Fully loaded Power Factor: 0.99

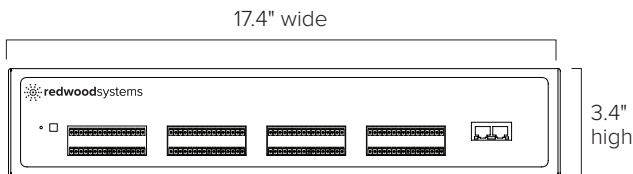
DATA SPECIFICATIONS

- 64 combined power and data channel ports
- Data provided through same 2 Conductor Unshielded cable that delivers power
- Two tri-mode Gigabit Ethernet ports
- Status LED for every channel
- Configurations stored in non-volatile memory

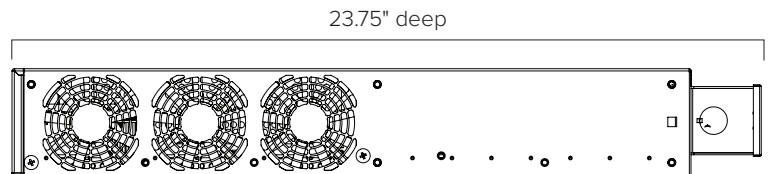
COMPLIANCE

- Class 2 electrical device
- Designed for California Title 24-2008 compliance
- UL8750 and UL60950
- FCC Class A Part 15
- RoHS compliant
- Made in the U.S.A.

Please consult with a Redwood representative for detailed project specification.



Front view



Side view

Part number

- RE64-1G - 120 (120VAC option)
- 277 (277VAC option)