

ROOM CONTROL | LevNet RFTM

Room Control

LevNet RF™ Energy Harvesting Wireless Self-Powered Solutions

LevNet RF™ is Leviton's family of energy harvesting radio frequency products. LevNet RF™ products have three common features:

- Energy Harvesting Technology
- Wireless (Radio Frequency)
- Interoperable within an RF-Based Network

Self-powered technology allows LevNet RF™ transmitters (i.e., occupancy sensors and switches), to operate without external power or batteries. Self-powered transmitters receive power from the motion of a switch actuation, light on a solar cell or temperature differentials in the environment for a true zero-maintenance energy self-powered device. Operating in the 902 MHz band provides minimal competing traffic and greater transmission range than other technologies.

Product Overview

There are two main types of LevNet RF™ products:

- A TRANSMITTER, such as a switch, generates a wireless RF control signal (e.g., "ACTUATE RELAY"). All transmitters are self-powered products that can be located anywhere and send transmission signals. Transmitters are available in occupancy sensor, control extender, Decora® rocker station, and handheld remote varieties.
- A RECEIVER receives a control signal from a transmitter and performs the appropriate action (e.g., activate or deactivate the relay). All receivers are connected to a power source and a load that the receiver operates when the RF signal is received. Receivers are available in Decora® Rocker Wall Switch, Relay Power Pack, Receptacles and Area and Fixture Controller styles.

Features and Benefits

- Easy to install for new construction and retrofit applications, requiring minimal labor disruption to operations
- Requires no new wiring and installs in ¼ the time of hardwired sensors, translating into faster turnaround and reduced costs
- With no batteries to replace and no maintenance to perform, plus annual energy savings and rebates that can total up to 80% in reduced costs, LevNet RF™ revolutionizes efficiency and savings
- Lowest power consumption of any RF device with less than one Watt per device used annually, saving approximately 70% over other RF devices
- LevNet RF™ is the only energy harvesting wireless solution that fulfills LEED requirements to earn LEED points for both wireless control and no battery
- Operation at 902 MHz band reduces interference and increases transmission range
- Range: 50 to 150 feet
- Meets energy code requirements for CA Title 24 2013
- FCC Certified for Wireless Communication (U.S.), I.C. Certified (Canada)
- Backed by a limited 5-year warranty

NAFTA and Made in USA models available — visit www.leviton.com/NAFTA or www.leviton.com/USA

Visit www.leviton.com/levnetrf for more information



ROOM CONTROL | LevNet RF™ System Selection

LevNet RF™ Energy Harvesting Wireless System

Basic System Selection

Determine Which LOADS You Want to Control: Lighting, HVAC, Lamp, TV, etc.

STEP 2

Pick the Appropriate RF RECEIVER

LevNet RF™ Wireless/ Wired-In Receivers

Receiving

Pick the Appropriate Energy Harvesting Wireless RF Transmitter (Sensor or Switch)

LevNet RF™ Sensor or Switch

Transmitting

Tip A good way to visualize your wireless system is to imagine that the "wires" connecting each device are invisible wires or "unique addresses."

Wired vs. Wireless Cost

*Installation time per device: 45-50 minutes for hardwired vs. 10-15 minutes for wireless devices



ROOM CONTROL | LevNet RF™ Transmitters

LevNet RF™ Transmitters

Sensors			
	Ceiling Mount Occupancy Sensors	Wall Mount Occupancy Sensors	
Cat. No.	WSC12-M9N	WSWDR-H9W	
Coverage	1200SF	2200SF	
Power Consumption	Self-Powered	Self-Powered	
Transmission	60 seconds (+/- 10 sec)	30 minutes @ 0.5FC (5 LUX);	
		15 minutes @ 1.0FC (10 LUX);	
		30 seconds @ 20FC (200 LUX)	
Minimum Light Required	5FC (50 LUX)	1.5FC (15 LUX)	
Minimum Charge Time	1 minute @ 20FC (200 LUX)	1 minute @ 1.5FC (15 LUX);	
to Begin Operation		5 seconds @ 20FC (200 LUX)	
Maintain Charge Time	3 hours per 24 hours @ 20FC (200 LUX)	3 hours per 24 hours @ 20FC (200 LUX)	
Operating Life at Full Charge	80 hours	48 hours	
Additional Listings	Meets energy code requirements for CA Title 24 2013, FCC Certified for Wireless Communication (U.S.)		
	I.C. Certified (Canada)		





WSC12-M9N

Wall Stations — Controls Virtually Any On/Off Device				
	Single/Dual Rocker Decora® Wall Stations*		Handheld 4-Button Remote	
Cat. No.	WSS0S-S9x	WSS0S-D9x	WSS0S-R0W	
Buttons	2 Buttons	4 Buttons	4 Buttons	
	(1 Rocker)	(2 Rockers)	(2 Rockers)	
Output	Only limited by number of Receivers in range			
Channels				
Addressing	Factory set unique ID (1 of 4 billion)			

*Available in White (-W), Ivory (-I), Light Almond (-T), Gray (-G) and Ebony (-E).

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Note: Wall Stations are both switches and dimmers depending on the receiver they are paired to — see Wall Stations Data Sheet on Leviton.com/levnetrf for details





WSS0S-R9W