Room Control

LevNet RF™ Energy Harvesting Wireless Solutions

LevNet RF™ is Leviton's family of energy harvesting radio frequency products based on EnOcean's technology. EnOcean-based products, including the LevNet RF™ products, have three common features. They are:

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

Energy harvesting technology allows LevNet RF™ transmitters (i.e., occupancy sensors, switches, light sensors and hotel key card switches) to operate indefinitely 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 harvesting device. Operating in the 315 mHz band provides minimal competing traffic and greater transmission range than other technologies. With no additional or new wiring required, LevNet RF™ delivers easy-to-install energy harvesting lighting controls with little to no interruption to a customer's operations and without damage to the customer's property.

Product Overview

There are three 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, light sensor, switch leg, Vizia®-style remote switch, Decora® rocker switch remote, handheld remote, hotel key card and 3 x 3 remote switch (international) 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 basic and advanced wall switch, 3- and 5-wire relay, plug-in and thermostat styles.

— A TRANSCEIVER acts as both a transmitter (when it is generating an RF signal) and as a receiver (when it receives and processes an RF signal generated by a transmitter). The transceiver can also be used as a repeater where it utilizes the receiver and then retransmits the RF signal. Leviton offers room, shade, dimmer and 4- and 8-channel relay controllers.

— Accessories available for LevNet RF™ products include RS-232 serial box, signal strength meter, power packs and industrial wireless relay.

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 315 mHz band reduces interference and increases transmission range
- Range: 50 to 150 feet
- FCC Certified for Wireless Communication (U.S.), I.C. Certified (Canada)*
- Backed by a limited 5-year warranty

*Excludes WSD02-020.
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

LevNet RF™ Energy Harvesting Wireless System

Basic System Selection

STEP 1 Determine What LOADS You Want to Control: Lighting, HVAC, Lamp, TV, etc.

STEP 2 Pick the Appropriate RF RECEIVER and/or TRANSCEIVER

LevNet RF™ Wireless/ Wired-In Receivers

Receiving

LevNet RF™ Wireless/ Wired-In Transceivers

Receiving

Repeating

STEP 3 Pick the Appropriate Energy Harvesting Wireless RF Transmitter (Sensor or Switch)

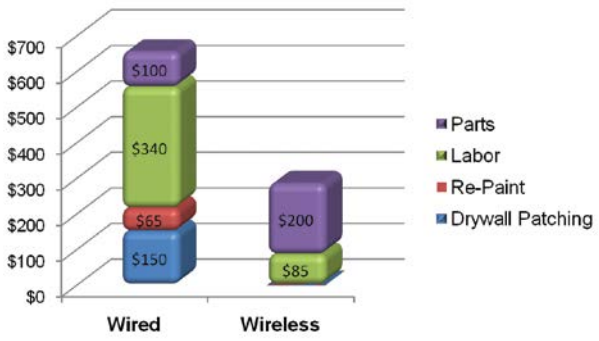
LevNet RF™ Sensor or Switch

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



LevNet RF™ Transmitters

Sensors				
	Ceiling Mount Occupancy Sensors			Wall Mount Occupancy Sensors
Cat. No.	**WSC04-IRW**	**WSC15-IRW**	**WSC04-I0W**	**WSWDR-I0W**
Coverage	450SF	1500SF	450SF	80 ft
Power Consumption	Zero			Zero
Photocell	—			—
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	4FC (40 LUX)			1.5FC (15 LUX)
Minimum Charge Time to Begin Operation	1 minute @ 20FC (200 LUX)			1 minute @ 1.5FC (15 LUX); 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	48 hours			48 hours
Additional Listings	CA Title 24 Compliant			—

	Window/Door Contact Sensors
Cat. No.	**WSR00-030**
Coverage	75 ft (typical)
Power Consumption	Zero
Photocell	—
Transmission	60 seconds (+/- 10 sec)
Minimum Light Required	4FC (40 LUX)
Minimum Charge Time to Begin Operation	<2.5 min @ 40FC (400 LUX), 77° F (25° C)
Maintain Charge Time	3 hours per 24 hours @ 20FC (200 LUX)
Operating Life at Full Charge	6 days if energy storage is fully charged


WSC04-IRW


WSWDR


WSR00