

# WIRELESS DEVICES



**Made in the U.S.A.**  
Meets the "Buy American" provisions of Section 1605 of the American Recovery and Reinvestment Act of 2009 (ARRA).

## Short Range Wireless Devices

- EnOcean® enabled wireless relay receivers work in conjunction with many switching devices that are EnOcean® enabled with 902 MHz transmitters.
- Wireless wall switches, occupancy sensors, thermostats, key card switches, patio and door switches are all devices which can activate the RIB® wireless control relays by using EnOcean's "energy harvesting" technology. Energy harvesting refers to the process by which energy is captured and stored, then used to transmit a wireless signal, which in turn is received by the RIB® wireless relay.



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No Wires. No Batteries. No Limits.

## WIRELESS CONTROL RELAYS

MODEL #	UL	COIL VOLTAGE		RELAYS	CONTACTS	REPEAT FUNCTION	DRY CONTACT INPUT	BALLAST SIZE ENCLOSURE	NOTES	SPEC PAGE
		AC/DC	AC							
RIBW01B-EN3	•		120	1	SPDT	•	•		NEW	156
RIBW208B-EN3	•		208	1	SPDT	•	•		NEW	156
RIBW240B-EN3	•		240	1	SPDT	•	•		NEW	156
RIBW277B-EN3	•		277	1	SPDT	•	•		NEW	156
RIBW24B-EN3	•	24		1	SPDT	•	•		NEW	156
RIBW01C-EN3	•		120	1	SPST	•		•	NEW	157
RIBW02C-EN3	•		208-277	1	SPST	•		•	NEW	157

## WIRELESS TRANSMITTERS

MODEL #	UL	POWER INPUT	ENOCEAN® ENERGY HARVESTING	FREQUENCY	COLOR	WIRELESS SWITCH COVER PLATE <sup>1</sup>	NOTES	SPEC PAGE
WWS-EN3		Self-Powered	•	902 MHz	White	WSTP-W	NEW	157
WDWS-EN3		Self-Powered	•	902 MHz	White		NEW	158

UL = UL Listed : UL916 Energy Management, UL864 Fire ; USA & Canada

<sup>1</sup> = Sold separately

\* For other loads, see data sheet.

# WIRELESS CONTROL RELAYS WITH TWO-WAY COMMUNICATION

## RIBW01B-EN3

Enclosed EnOcean® Enabled Wireless Relay Transceiver / Repeater 20 Amp SPDT, 120 Vac Power, with Dry Contact Input

## RIBW208B-EN3

Enclosed EnOcean® Enabled Wireless Relay Transceiver / Repeater 20 Amp SPDT, 208 Vac Power, with Dry Contact Input

## RIBW240B-EN3

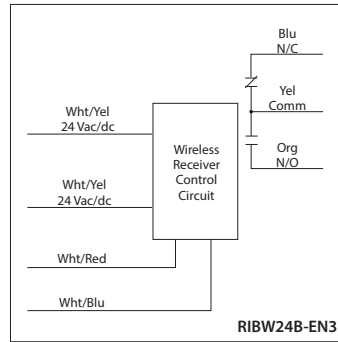
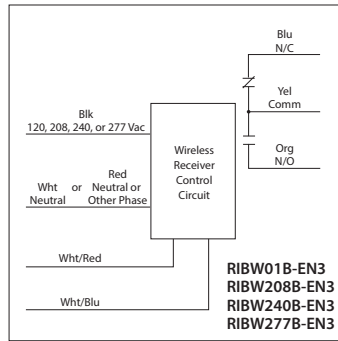
Enclosed EnOcean® Enabled Wireless Relay Transceiver / Repeater 20 Amp SPDT, 240 Vac Power, with Dry Contact Input

## RIBW277B-EN3

Enclosed EnOcean® Enabled Wireless Relay Transceiver / Repeater 20 Amp SPDT, 277 Vac Power, with Dry Contact Input

## RIBW24B-EN3

Enclosed EnOcean® Enabled Wireless Relay Transceiver / Repeater 20 Amp SPDT, 24 Vac/dc Power, with Dry Contact Input



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**RELAY HAS BUILT-IN REPEATER FUNCTION. RELAY RECEIVES SIGNAL FROM WIRELESS SWITCH TRANSMITTER AND REBROADCASTS THE SIGNAL TO THE NEXT RELAY RECEIVER.**

## SPECIFICATIONS

- # Relays & Contact Type:** One (1) SPDT Continuous Duty Coil
- Expected Relay Life:** 10 million cycles minimum mechanical
- Operating Temperature:** -30 to 140° F
- Humidity Range:** 5 to 95% (noncondensing)
- Red LED:** Relay Status / Learn Mode Status (Flashing)
- Dimensions:** 2.30" x 3.20" x 1.80" with .50" NPT Nipple
- Wires:** 16", 600V Rated
- Approvals:** UL Listed, UL916, C-UL, RoHS,
- Agency Compliance:** FCCID: SZV-TCM3200  
IC: 5713A-TCM3200
- Housing Rating:** UL Accepted for Use in Plenum, NEMA 1
- Gold Flash:** No
- Override Switch:** No
- Frequency:** 902 MHz
- Receiver Sensitivity:** -93 dBm typical
- Conducted Power:** 5 mW typical
- Built-in Switch Modes:** Alarm, Repeater, Delay, Rocker, Momentary, and Toggle

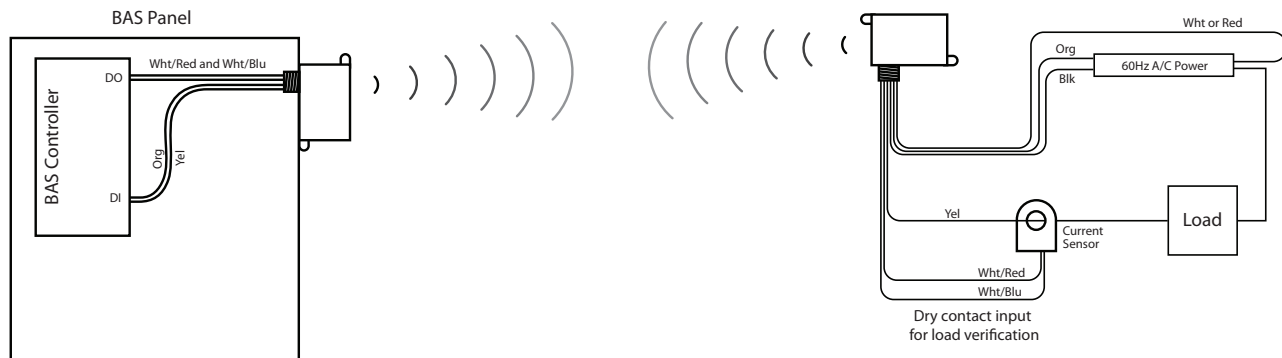
- Contact Ratings:**
  - 20 Amp Resistive @ 277 Vac
  - 20 Amp Ballast @ 277 Vac
  - 16 Amp Electronic Ballast @ 277 Vac (N/O)
  - 10 Amp Tungsten @ 120 Vac (N/O)
  - 770 VA Pilot Duty @ 120 Vac
  - 1,110 VA Pilot Duty @ 277 Vac
  - 2 HP @ 277 Vac
  - 1 HP @ 120 Vac

- Power Input Ratings:**
  - 73 mA @ 120 Vac ; 60 Hz (RIBW01B-EN3)
  - 80 mA @ 208 Vac ; 60 Hz (RIBW208B-EN3)
  - 80 mA @ 240 Vac ; 60 Hz (RIBW240B-EN3)
  - 80 mA @ 277 Vac ; 60 Hz (RIBW277B-EN3)
  - 139 mA @ 24 Vac (RIBW24B-EN3)
  - 69 mA @ 24 Vdc (RIBW24B-EN3)

- Notes:**
  - Compatible with EnOcean® 902 MHz Switches/Transmitters.
  - Typical range: 50-150 ft.
  - Open area transmission could be farther. Consult factory for more information.
  - Repeater function only rebroadcasts original EnOcean® transmission. Up to two repeaters can be used.
  - Version 1.5 firmware or later implements Functional Devices, Inc.'s EnOcean® Manufacturer ID of 0x055.
  - For setup instructions, see website for -EN3 Series Application Manual: [www.functionaldevices.com/pdf/bulletins/B1867\\_393231.pdf](http://www.functionaldevices.com/pdf/bulletins/B1867_393231.pdf) or scan QR code with your smart phone.



## APPLICATION FOR WIRELESS CONTROL & FEEDBACK IN A BUILDING AUTOMATION SYSTEM

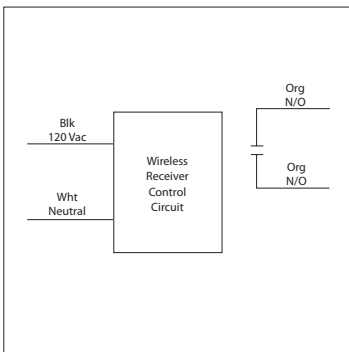


WIRELESS DEVICES

## WIRELESS CONTROL RELAYS WITH TWO-WAY COMMUNICATION

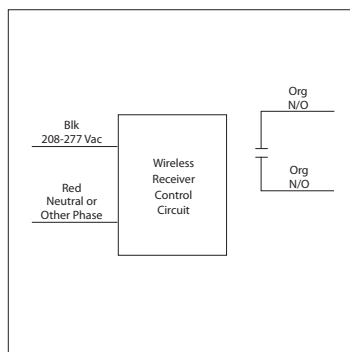
### RIBW01C-EN3

Enclosed EnOcean® Enabled Wireless Relay Receiver / Repeater 5 Amp SPST-N/O, 120 Vac Power Input



### RIBW02C-EN3

Enclosed EnOcean® Enabled Wireless Relay Receiver / Repeater 5 Amp SPST-N/O, 208-277 Vac Power Input



**SMALLER SIZE DESIGN TO FIT INSIDE BALLAST HOUSING OF FLUORESCENT LIGHT FIXTURE.**

## SPECIFICATIONS

**# Relays & Contact Type:** One (1) SPST Continuous Duty Coil  
**Expected Relay Life:** 10 million cycles minimum mechanical  
**Operating Temperature:** -30 to 140° F  
**Humidity Range:** 5 to 95% (noncondensing)  
**Red LED:** Relay Status / Learn Mode Status (Flashing)  
**Dimensions:** 4.60" x 1.20" x 1.70"  
**Wires:** 16", 600V Rated  
**Approvals:** UL Listed, UL916, C-UL  
**Agency Compliance:** FCCID: SZV-TCM3200  
 IC: 5713A-TCM3200  
**Gold Flash:** No  
**Override Switch:** No  
**Frequency:** 902 MHz  
**Receiver Sensitivity:** -93 dBm typical  
**Conducted Power:** 5 mW typical  
**Built-in Switch Modes:** Alarm, Repeater, Delay, Rocker, Momentary, and Toggle

**Contact Ratings:**  
 5 Amp Ballast @ 120/277 Vac  
 5 Amp Tungsten @ 120 Vac  
 5 Amp Electronic Ballast @ 120 Vac  
**Power Input Ratings:**  
 75 mA @ 120 Vac ; 60 Hz (RIBW01C-EN3)  
 100 mA @ 208-277 Vac ; 60 Hz (RIBW02C-EN3)

**Notes:**

- Compatible with EnOcean® 902 MHz Switches/Transmitters.
- Typical range: 50-150 ft.
- Open area transmission could be farther. Consult factory for more information.
- Repeater function only rebroadcasts original EnOcean® transmission. Up to two repeaters can be used.
- Version 1.5 firmware or later implements Functional Devices, Inc.'s EnOcean® Manufacturer ID of 0x055.
- For setup instructions, see website for -EN3 Series:  
[www.functionaldevices.com/pdf/bulletins/B1867\\_393231.pdf](http://www.functionaldevices.com/pdf/bulletins/B1867_393231.pdf) or scan QR code with your smart phone.



## WIRELESS ROCKER SWITCH TRANSMITTER & COVER PLATE

### WWS-EN3

EnOcean® Enabled Wireless Wall Switch Transmitter Switch, 902 MHz

Switch Colors Available:



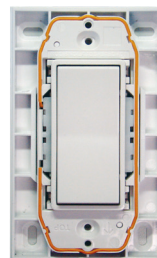
White

### WSTP-W

Cover Plate Colors Available:



White



## SPECIFICATIONS

**Operating Modes:** On/Off, Toggle, Scene control  
**Power Supply:** Powered by finger press (Electrodynamic Energy Harvester)  
**Frequency:** 902 MHz  
**Antenna:** Integrated antenna, 15cm  
**Transmission Power:** Max. 10mw EIRP  
**Energy Bowtravel/Operating Force:** 50,000 actuations tested to EN60669 / VDE 0632  
**Operating Temperature:** -25 to 65° C  
**Relative Humidity:** 5 to 92% (noncondensing)  
**Dimensions:** 2.75" x 4.50" x 0.62"  
**Weight:** 3 oz.  
**Agency Compliance:** FCCID: SZV-PTM 210U  
 IC: 5713A-PTM210U

**Notes:**

- Control one load or one group of loads with a single rocker style Wireless Switch Transmitter.
- Typical range: 50-150 ft.
- Open area transmission could be farther. Consult factory for more information.
- Switch cover plate sold separately.
- Do not use metal switch plate covers due to interference with wireless signal.
- Mount with screws or double sided tape.
- For use with EN3 Series Relays.
- EEP F6-02-02

## WDWS-EN3

EnOcean® Enabled Wireless Solar Door / Window Sensor, 902 MHz

### SPECIFICATIONS

- Charge Time before Linking:** 2.7 hours @ 10 lux  
3.7 minutes @ 200 lux
- Light Required to Sustain Operation:** 15 lux for 6 actuations/hour  
50 lux for 30 actuations/hour  
100 lux for 60 actuations/hour
- Charge Time for Full Charge:** 21 hours @ 200 lux (after startup)  
42 hours @ 200 lux (cold start)
- Operating Life in Darkness (after full charge):** 174 hours heartbeat only  
67 hours @ 10 actuations/hour  
10 hours @ 100 actuations/hour
- Maximum Sensor Gap:** 0.25" (6.4mm)
- Dimensions (Sensor):** 3.15" L x 0.83" W x 0.59" D (80mm x 21mm x 15mm)
- Dimensions (Magnet):** 3.15" L x 0.47" W x 0.50" D (80mm x 12mm x 13mm)
- Weight (Total):** 0.97 oz. (27.5 g)
- Environment:** Indoor use only  
32° to 131° F (0° to 55° C)  
5 to 95% relative humidity (noncondensing)
- Agency Compliance:** FCC ID: SZV-STM 320U  
IC: 5713A-STM 320U

#### Notes:

- Typical range: 80 ft.
  - Open area transmission could be farther. Consult factory for more information.
- Only for use with -EN3 Series relays.
- EEP D5-00-01



[www.functionaldevices.com/pdf/bulletins/B1877\\_393233.pdf](http://www.functionaldevices.com/pdf/bulletins/B1877_393233.pdf)  
or scan QR code with your smart phone.

