



# Self-powered, Wireless Remote Temperature Sensor

The Verve IRTS Remote Temperature Sensor employs wireless & energy harvesting technologies to detect and report changes in temperature of more than 0.5K (1° F). The sensor is self-powered by indoor light so there are no wires to run nor batteries to replace.

Reduce Utility Spending (literally, overnight) ..

without disturbing guest comfort

- ◆ Verve installations are fast-&-simple - Verve automated controls employ wireless and energy harvesting technologies that bypass the barriers inherent to traditional hardwired solutions. Rooms can be retrofitted in as little as 7 minutes (by hotel staff - pro electricians not typically req'd).
- ◆ **Self-powered!** No batteries / No line-power needed. Integrated solar cell harvests indoor light to power the device and eliminates the need for installing wires and replacing batteries.
- ◆ Internal tray for optional coin cell battery use in low-light rooms.



Wireless communications are based on the EnOcean standard & interoperable with the entire family of Verve & ZENO Controls.

## Payback Numbers from Verve-automated Hotels in the USA

Average Payback Period = 1.85 years\*

Average Energy Savings / Year (100-room hotel) = \$11,650\*

*ROI (return-on-investment) data & energy monitoring results are based on energy usage data collected from hotels employing occupancy detection sensing to achieve energy savings.*

**INSTALL ENERGY SAVINGS WITHOUT TAKING ROOMS OUT-OF-INVENTORY**

### 7-minute Guest Room Retrofits

-- Verve wireless retrofit kits ship pre-linked & pre-configured specific to hotel preferences.

-- Most Verve installations do not require professional electrical labor.



IRTS

\* Paybacks vary according to site-specific ROI impact variables:

>>> Cost of electricity, climate, local utility rebates, occupancy rates, HVAC system type, etc.

Verve Living Systems

(312) 874-6440


saveEnergy@verveLS.com



A registered brand of ZENO Controls, LLC

# Remote Temperature Sensor

## Specifications

Wireless Range	80ft. (25m, through 4 walls or ceilings)	
Wireless Communications	EnOcean 315 MHz EnOcean 902 MHz	
Temperature Range	0 - 40° C (32 - 104° F)	
Power Supply	Solar energy harvesting (power is generated by indoor light)	
Charge Time before Linking	4 minutes @ 200 lux	
Light Required to Maintain Operation	50 lux for 30 transmissions/hour 100 lux for 60 transmissions/hour	
Charge Time for Full Charge	20 hours @ 200 lux (after startup) 40 hours @ 200 lux (cold start)	
Operating Life in Darkness (after full charge)	4 days: heartbeat only 3 days @ 10 actuations/hour 5 years (w/ battery)	
EnOcean Equipment Profile (EEP)	A5-02-05	
Dimensions	3.125" L x 1.00" W x 0.75" H (80mm x 25mm x 19mm)	
Transmission Cycle	Wake-up cycle: 100s (fixed) Transmission if temperature change of > ±0.5K (±1F) detected Redundant retransmission, every 7-14th wake-up, affected at random	
Agency Certifications	902 MHz	Contains FCC: SZV-STM311U IC: 5713A-STM311U
	315 MHz	Contains: FCC: SZV-STM311C IC: 5713A-STM311C
Warranty	5 years	



multiple colors available

## Ordering Information

Model #	Description
IRTS-3	Verve Wireless Remote Temperature Sensor (315 MHz, white)
IRTS-9	Verve Wireless Remote Temperature Sensor (902 MHz, white)

## Pre-configured Kits

Sample Wireless Kits  
(go on-line for more configurations)



VPAC Plug-in AC Module +  
EOSW Motion Sensor +  
EDWS Entry Door Sensor +  
IRTS Remote Temperature Sensor



VHSM HVAC Setback Module +  
IKCS Hotel Keycard Switch +  
IRTS Remote Temperature Sensor

Forward Compatible

upgrade anytime with ZENO gateways,  
software &/or InnPoint® front-end.



## Verve Living Systems

(312) 874-6440

saveEnergy@verveLS.com

VerveLS.com