

Plug-in Wireless A/C Module



Specifications

Wireless Range	80ft. (25m, through 3 walls or ceilings)
Wireless Communications	EnOcean 315 MHz EnOcean 902 MHz
Power Supply Input Rating	120VAC 60 Hz
Output Ratings General Motor	15A 1800W, 1/2 HP
Memory	Stores up to 30 unique transmitters
Interoperable Products / EEPs (EnOcean Equipment Profiles)	[Product Name (EEP #)] Rocker Pad Switch (F6-02-02) Key Card Switch (F6-04-01) Door/Window Sensor (D5-00-01) Temperature Sensor, 0 - 40° C (A5-02-05) Occupancy Sensor (A5-07-01, A5-07-02, A5-07-03) Central Gateway (A5-38-08)
Operating Temperature	Indoor use only -13° to +140°F (-25° to +60°C)
Storage Temperature	-40° to +140°F (-40° to +60°C)
Dimensions	3.26 x 2.07 x 1.42 inches (82 x 53 x 36 mm)
User Interface	PC-based software user interface (requires EnOcean wireless USB connection)
Safety Approvals	ETL (USA): UL244A ETL (Canada): CSAc22.2#14-05
Agency Compliance	902 MHz Contains FCC: SZV-TCM2XXU IC: 5713A-TCM2XXU 315 MHz Contains FCC: SZV-TCM2XXU IC: 5713A-TCM2XXC
Warranty	5 years

Package Contents

- Plug-in A/C Module

Tools Required

- None

Product Description

The Verve Plug-in A/C Module is a simple way to save energy by switching Window A/C units between Comfort and Energy Savings Modes.

It is a 120V plug-in solution for automating shut-off when rooms are left unoccupied.

Features Include:

- Switches A/C Unit to setback mode to save energy
- Receives wireless messages from EnOcean-based devices to determine room occupancy
- Supports control of temperature setback range when combined with a remote temperature sensor (sold separately)
- Sends wireless messages to other controlled devices; configurable transceiver

1. Planning

Take a moment to plan for the module's successful operation and optimal communication with other system components.

- Always use a qualified installer
- Take care not to damage the radio antenna that runs in a groove on the front side of the module
- Consider the construction materials in the space and obstacles that may interfere with RF signals

2. Installing

The IPAC comes pre-linked and pre-configured. Simply plug the window A/C unit into the IPAC module and plug the IPAC module into a 120V power outlet.

3. Linking

Two or more compatible devices can be linked and configured to provide the desired control. There are two basic types of devices in the system; transmitters and transceivers.

- **Transmit-only:** Transmitters are simple energy-harvesting devices that send RF messages to communicate a condition, level, or state. Transmitters can only be linked to transceivers. Examples > Self-powered Light Switches, Occupancy Sensors
- **Transmit & Receive:** Transceivers are controlling devices that send as well as receive RF messages. They also process relevant control logic, and actuate the appropriate outputs (switching a light on or off for example). Transceivers can be linked with transmitters as well as other transceivers. A transceiver can have up to 30 devices linked to it. Examples > Relays, Gateways

The Plug-in A/C Module is a Transceiver (transmits & receives)

To link the occupancy sensor to a transceiver; the transceiver must first be powered, within wireless range of the controls it is to be linked to, and set to accept links.

Next, the desired transmitter, or another transceiver, is triggered to send a special link message. The awaiting transceiver receives and stores the link permanently so the devices can interact to provide a variety of intelligent control options.

About the Software Linking & Configuration Interface

In order to link the IPAC to sensors and switches and configure settable parameters; use the software provided by Verve. Refer to the IPAC Linking & Configuration Manual for instructions.

To restore factory defaults

Using the push buttons located on the IPAC Module to clear linked devices from memory and reset configuration settings to their factory defaults.

1. Press and hold the LNK button until the relay begins toggling ON & OFF (indicating controller is in Linking Mode).
2. Press and hold the CLR button ~3 seconds (when the CLR button is pressed, the relay toggling will pause. Hold the CLR button until the relay resumes toggling ON & OFF).
3. Wait for the module to stop toggling ON & OFF; indicating the module has exited Linking Mode (takes ~20 seconds).

Troubleshooting

Problem	Solution Checklist
The device does not power up	<ul style="list-style-type: none"> ▪ Check the wiring for errors ▪ Check the circuit breaker ▪ Use a voltage meter to confirm power
The device does not control linked load	<ul style="list-style-type: none"> ▪ Click the Set button to open/close the relay manually ▪ Turn off the power and then restore it
Cannot link other devices	<ul style="list-style-type: none"> ▪ Check if Accept Link option can be accessed ▪ Move closer to the device; it may be out of range ▪ Try linking a different device ▪ Check for environmental conditions that interfere with RF signals ▪ Verify the maximum number of devices (30) has not been exceeded
Cannot change settings on the device	<ul style="list-style-type: none"> ▪ Check if menu item can be accessed ▪ Check if changes can be saved
The device does not respond to wireless messages or selected settings	<ul style="list-style-type: none"> ▪ Check for environment or range issues ▪ Verify the device is linked ▪ Check if appropriate devices are linked according to good system planning ▪ Extend the antenna to amplify the range: remove it from the groove in the module, straighten it and slide it into the white antenna sleeve provided



Contains: FCC: SZV-TCM2XXU (900 MHz) IC: 5713A-TCM2XXU (900 MHz) FCC: SZV-TCM2XXC (315 MHz) IC: 5713A-TCM2XXC (315 MHz)

This device complies with part 15 of the FCC rules and Industry Canada ICES-003. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT! Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

IMPORTANT! Tous les changements ou modifications pas expressément approuvés par la partie responsable de la conformité ont pu vider l'autorité de l'utilisateur pour actionner cet équipement.