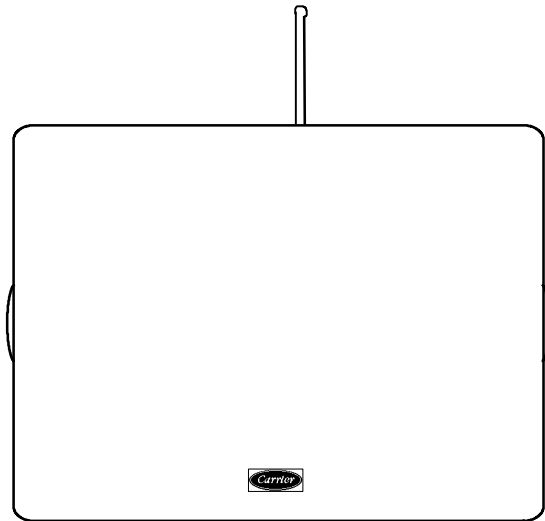**Carrier**

turn to the experts®

# Product Data



A08444

## INFINITY® REMOTE ACCESS MODULE

Carrier® Corporation specializes in creating a customized home comfort system tailored to your needs with our broad selection of residential heating and cooling products. The Infinity® System Wi-Fi Broadband Remote Access Module (Wi-Fi B-SAM), part number SYSTXCCRCT01, adds further convenience, ease of use, and peace of mind to the power of the Infinity Control for the owner of this leading residential HVAC system.

For previous generation Infinity systems using the UID/UIZ wall controls, the Wi-Fi B-SAM allows the user to access a system with up to 8 zones of comfort* via the Internet from a remote location outside the home, at any time. The user will be able to both monitor and modify settings through the Internet, alongside checking indoor temperature, outdoor temperature (when an outdoor air temperature sensor is installed), and indoor humidity. The Wi-Fi B-SAM requires connection through a high-speed/broadband Internet-connected router, as well as registration on the www.MyInfinity.Carrier.com website. There may be a fee charged for remote access. See Computer Requirements, below, and the SAM Installation Instructions, available on www.HVACpartners.com, for more information.

Remote access and Internet connection of the newer generation Infinity® Touch systems is provided through the Wi-Fi versions of those products. The Wi-Fi B-SAM does not provide remote access via the Internet for the newer Infinity Touch systems.

* Zoned applications require Infinity Zone Control, p/n: SYSTXCCUIZ01 with version 14 operating system, or higher.

## INDUSTRY LEADING FEATURES / BENEFITS

The Wi-Fi B-SAM uses state of the art technology to control previous generation Infinity Systems (utilizing UID/UIZ wall controls) via the Internet. The system also offers enhanced peace of mind through email of routine and urgent maintenance notifications.

— Internet access into your Infinity UID/UIZ System
— Check your system status and change settings from anywhere
— Intuitive web navigation for non-technical customers
— Easy to program schedules with day and week-at-a-glance programming
— Override your system schedule when away from home
— Schedule a future vacation setting
— Emails for routine maintenance reminders
— Emails for urgent service reminders
— Dealer can diagnose a system problem remotely

In addition, the SAM provides the following features for both previous generation Infinity UID/UIZ systems, and newer generation Infinity Touch systems:

— One Wi-Fi B-SAM can handle up to two Infinity Systems
— 3-wire installation into the Infinity System communication bus
— Optional sensing port for float switches, alarms, etc., with alerts via email, for systems with remote access registration
— Optional Home Automation system interface capabilities through the included EIA RS-232 port. Communicate information through an open ASCII protocol.

# MODEL NUMBER NOMENCLATURE

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|----|----|----|
| **S** | **Y** | **S** | **T** | **X** | **C** | **C** | **R** | **W** | **F** | **0** | **1** |

**Product Type**

SYSTX = Infinity System

**Brand**

CC = Carrier

**Package Qty**

01

**Connection**

RWF = Wi−Fi (Wireless) Broadband

**INFINITY® SYSTEM**
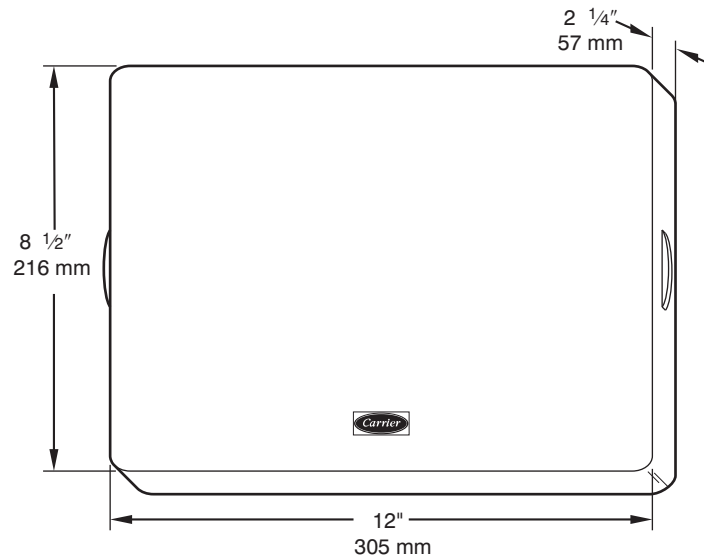


A07285

# PRODUCT DATA INFORMATION

## Applications

See the detailed application information provided in the latest version of the Installation Instructions and the SAM Remote Access Application Specification BEFORE selecting the Wi-Fi B-SAM for any application.

The Wi-Fi B-SAM is used differently for previous generation Infinity systems using the UID/UIZ wall controls, versus the newer Infinity® Touch systems.

*For previous generation systems using the UID, UIZ wall controls*, the Wi-Fi B-SAM connects to a network router and allows remote connectivity for up to two Infinity systems within the same building. The Infinity system owner as well as authorized dealer can monitor and control the system via the Internet. The Wi-Fi B-SAM communicates through the homeowner's cable or DSL Internet service. Broadband Internet service with a network router is required. The Wi-Fi B-SAM is not compatible with dial-up Internet service. The SAM also provides an interface to Home Automation systems, utilizing either the RS-232 serial port connection, or the webpage function, available on the Local Area Network (LAN) within the home or building.

*The newer Infinity Touch* systems utilize the SAM for ONLY interface to Home Automation systems, utilizing the RS-232 serial port connection. The Touch control DOES NOT support the SAM web page on the LAN, nor connection to the LAN or Internet through the Wi-Fi B-SAM. Use the Wi-Fi versions of the Infinity Touch wall controls when connection to the Internet is desired.

**NOTE**: The SAM is designed for operation with the previous generation UID/UIZ wall control systems. As such, it will operate "as-is" with the newer Infinity Touch systems. Some features of the RS-232/ASCII home automation interface will NOT be available with the newer Infinity Touch systems. See the latest version of the SAM Remote Access Application Specification, available on HVACpartners, for more details on the home automation interface.

## Computer Requirements *(previous generation UID/UIZ systems, only)*

The Wi-Fi B-SAM uses a web-based application to control and monitor the Infinity System. This application will work with any PC operating system (Microsoft, Apple, Linux). The web-based application is optimized for use with Microsoft's Internet Explorer version 6 and above. Other web browsers are compatible with some possible screen formatting issues. For more information on the web-based application, visit www.MyInfinity.Carrier.com.

## Compatible Products

Requires User Interface SYSTXCCUID01 (version 14 or higher) or User Interface SYSTXCCUIZ01 (version 14 or higher) for zoned applications. The Wi-Fi B-SAM provides both remote access through the Internet, and interface to home automation systems through the RS-232 communication port.

The Wi-Fi B-SAM may be used with Infinity Touch model SYSTXCCITW01, SYSTXCCITC01 and SYSTXCCITN01 wall controls, with software Version 08 or later, for home automation interface applications through the RS-232 communication port, only. The Wi-Fi B-SAM does NOT provide remote Internet access for these systems. Remote access is provided with the Wi-Fi versions of these products.

## Remote Access Communication via the Internet *(previous generation UID/UIZ systems, only)*

The model SYSTXCCRCT01 Wi-Fi B-SAM communicates to Carrier's servers through the homeowner's Internet service provider. The Wi-Fi B-SAM is connected to the homeowner's router through its built-in wireless IEEE 802.11b wireless network connection.

Each Wi-Fi B-SAM has a specific serial number and MAC address. These numbers identify a profiled Infinity System when logging into www.MyInfinity.Carrier.com for the first time. See Fig. 1 for number location.

## Home Automation Application

YOUR USE OF THE ASCII/RS-232 COMMUNICATION PORT ("ASCII PORT") IS AT YOUR SOLE RISK. ANY DATA OR INFORMATION DOWNLOADED OR OTHERWISE OBTAINED THROUGH THE USE OF THE ASCII PORT IS ACCESSED AT YOUR OWN DISCRETION AND RISK. YOU WILL BE SOLELY RESPONSIBLE FOR ANY MALFUNCTION OF, DAMAGE TO, OR INCOMPATIBILITY WITH YOUR COMPUTER SYSTEM, THE INFINITY SYSTEM, ANY THIRD PARTY DEVICE, OR OTHER HARDWARE, FIRMWARE OR SOFTWARE THAT RESULTS FROM YOUR USE OF THE ASCII PORT AND THE SAM REMOTE ACCESS APPLICATION SPECIFICATION.

CARRIER CORPORATION AND ITS SUBSIDIARIES, AFFILIATES, OFFICERS, EMPLOYEES, AGENTS, PARTNERS AND LICENSORS:

    a. EXPRESSLY DISCLAIM ALL WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, IN-CLUDING, BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARICULAR PURPOSE AND NON-IN-FRINGEMENT. NO ADVICE OR INFORMATION, WHETHER ORAL OR WRITTEN, OBTAINED BY YOU FROM CARRIER SHALL CREATE ANY WAR-RANTY;

    b. MAKE NO WARRANTY THAT (i) THE ASCII PORT WILL BE ERROR-FREE; (ii) THE QUALITY OF ANY INFORMATION OR OTHER MATERIAL OBTAINED BY YOU WILL MEET YOUR EXPECTATIONS; AND (iii) ANY ERRORS WILL BE CORRECTED; AND

    c. SHALL NOT BE LIABLE TO YOU FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, CONSEQUEN-TIAL OR EXEMPLARY DAMAGES, INCLUDING, BUT NOT LIMITED TO, (i) DAMAGES FOR LOSS OF PROFITS, GOODWILL, USE, DATA OR OTHER IN-TANGIBLE LOSSES (EVEN IF CARRIER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAM-AGES), RESULTING FROM USE, OR INABILITY TO USE THE ASCII PORT; (ii) MALFUNCTION OF, DAM-AGE TO, OR INCOMPATIBILITY WITH ANY HARD-WARE FIRMWARE OR SOFTWARE; OR (iii) ANY OTHER MATTER RELATING TO THE ASCII PORT, THIS SPECIFICATION OR THE PROOCOL.

Interface between the Infinity system and a home automation system is accomplished through the RS-232 communication port of the System Access Module (part number SYSTXCCRCT01), in conjunction with third-party software/hardware. Developing and supporting the home automation interface is the responsibility of the third-party home automation supplier. Refer to the latest version of the SAM Remote Access Application Specification, available through www.HVACpartners.com, for more information. The copyrighted application specification may be given to any home automation supplier to aid in their development of the interface between their system and the Infinity system.

## Physical Characteristics

    Dimensions: See drawing

    Appearance: Plastic, white colored, textured

## Electrical Characteristics

Input power: 24VAC, 40VA provided via an independent power source. An accessory 24VAC transformer is available to order through Replacement Components (SYSTXNNXFM01). DO NOT power the SAM through the Infinity system power supply.

The Remote Access Module utilizes a three-wire (ABC) connection to the Infinity System communication bus. There are ABC communication ports to support two Infinity systems provided. It is recommended that the following color code be used when wiring:

    A - Green = Data A

    B - Yellow = Data B

    C - White = 24VAC (Common)

**NOTE**: The D wire (24vac power) from the communication bus should NOT be connected to the SAM.

The detailed RS-232 communication port specifications are provided in the latest version of the SAM Remote Access Application Specification, available on www.HVACpartners.com. In general, the SAM has a female, DB-9 connector that contains standard +/-9V EIA RS-232 RxD, TxD, and GND connections. The SAM is configured as a subset DCE (Data Circuit-terminating Equipment) device.

## Wiring Requirements

**Input power:** 24VAC, 40VA provided via an independent power source. An accessory 24VAC transformer is available to order through Replacement Components (SYSTXNNXFM01). The power supply is wired into the 24VAC+ and 24VAC- terminals on the Wi-Fi B-SAM. DO NOT connect the power supply to the 3-wire communication connection (ABC) or connect to any other ABC(D) terminal on the Infinity system.

**Infinity System Connection:** Wire the ABC communication port(s) to the Infinity system communication bus(es). DO NOT connect the (D) wire from the Infinity system to the SAM. See Installation Instructions for details.

**Wiring material**:  Standard thermostat wire,18 to 20 AWG.

## Environmental Requirements

**Operating Temperature/Relative Humidity**

Remote Access Module: 32F / 0C to 104F / 40C, 95% rh, non-condensing

**Storage Temperature/Relative Humidity**

Remote Access Module: -40F / -40C to 134F / 57C, 95% rh, non-condensing

# EQUIPMENT

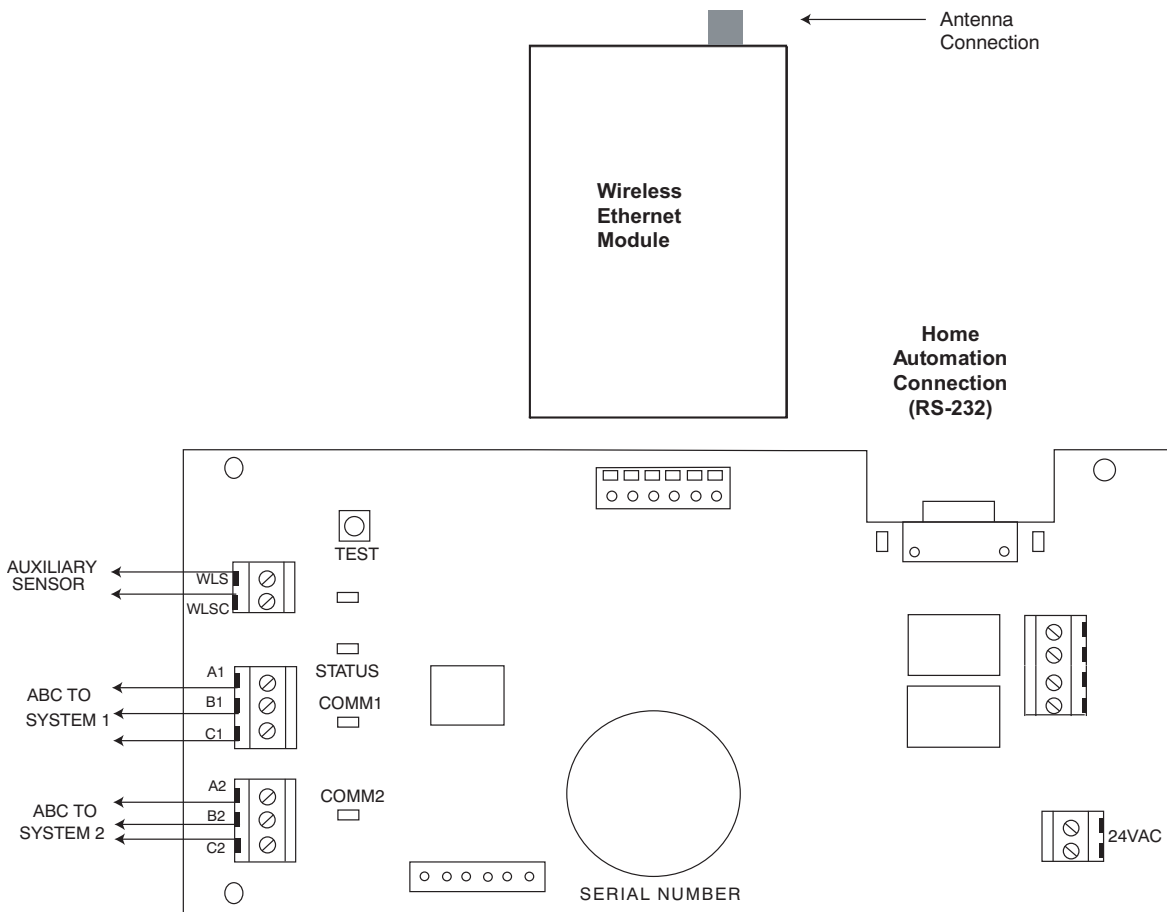| DESCRIPTION | ORDERING NUMBER |
|---|---|
| Remote Access Module Wi−Fi Connection | SYSTXCCRWF01 |



**Fig. 1 - Wi-Fi Module Control Board**

A06513