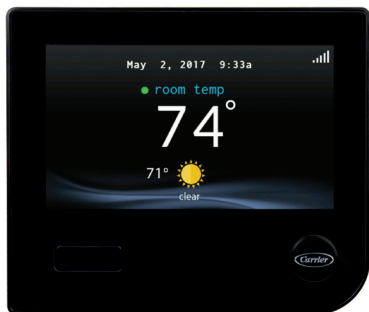CARRIER

turn to the experts™

Product Data

A170203

NOTE: Infinity® System Control compatible with Infinity® rated indoor equipment only.

US Patents: Carrier® U.S. Pat No. 7,243,004, Carrier® U.S. Pat No. 7,775,452, pointSET™ U.S. Pat No. 7,415,102

INFINITY SYSTEM

côr HOME AUTOMATION

WORKS WITH amazon alexa

INFINITY® SYSTEM CONTROL

Carrier 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 Control is the ultimate control center for all of your system components. When you add an Infinity® System Control to a compatible variable speed furnace, fan coil, Infinity® System split or package unit, or small packaged product, you will enjoy longer heating and cooling cycles at lower fan speeds for a more consistent temperature throughout your home. By adding a variable speed, multi-stage, or 2-stage outdoor unit, you will enjoy extra benefits which include better humidity and temperature control as well as a more energy efficient comfort system. When paired with Infinity® Zoning controls, the Infinity® System Control allows you to create up to 8 zones of customized comfort.

The Infinity® Zoning system does not require a bypass damper, leaving air temperature (LAT) sensor, or field-installed power transformer.

Always install the latest version of software to enable all features of the system.

Over-the-Air software updates for Wi-Fi models connected to the Infinity server are automatically downloaded. Software updates via MicroSD are available on HVACpartners, or at www.MyInfinityTouch.com.

INDUSTRY LEADING FEATURES/BENEFITS

Carrier's revolutionary Infinity® System Control is the smart control of the future. Its unique system self-configuration and diagnostics capabilities make installation and service fast and accurate, helping to avoid costly call-backs. The Infinity® System Control features a high resolution display, making it easier to read. Intuitive prompts let you program everything from humidity levels to fan speeds, giving you the ultimate control over your home comfort. Other features include:

— 4-wire installation from each major component in the system
— 2-wire connection to Infinity® System two or more stage outdoor equipment (including geothermal split units)
— Infinity® Zoning System compatibility
— Occupancy sensing to provide comfort when spaces are occupied and energy savings when they're not
— Intuitive on screen prompts for ease of installation and service
— *Ideal Humidity System™* settings are the default; no longer requiring increased system setup
— Complete integration of the temperature, humidity and ventilation in every season
— For Zoned Systems, auto mode selection to satisfy simultaneous heating and cooling demands in different zones via more aggressive Auto Changeover algorithm--installer must enable
— 7-day programmability with Lifestyle Comfort Profiles and Touch-N-Go® features; complies with California Title 24 programmability requirements
— Easy timed-override schedule
— Simplified vacation schedules
— Day-at-a-glance programming for simplified ease of use
— Programmable fan by period
— TrueSense™ Dirty Filter Detection
— Indoor Air Quality pop up service reminders
— General maintenance reminder messaging
— Wi-Fi® remote access capability
— Upload photo, dealer info, and software updates locally via MicroSD card. Software updates available automatically when connected to the Infinity web server
— Compatible with home automation through the SYSTXCCRCT01 or SYSTXCCRWF01 system access modules, or via the Côr Home Automation app or Amazon ™ Alexa ™ interface.
— Compatible with Infinity® System geothermal products (GC and GZ models). Energy Tracking feature for geothermal systems is available with Entering Water Temperature sensor installed in heat pump.

MODEL NUMBER NOMENCLATURE

```
  1   2   3   4   5   6   7   8   9  10  11  12  13  14
  S   Y   S   T   X   C   C   I   T   C   0   1   −   B
```

Product Type
Infinity® System

Brand / **Product**
CC = Carrier
XX or NN = No Brand

Model Type
ITC − Infinity® System Control with Wi−Fi

Packaged Quantity
01

Version
B

4.7-in
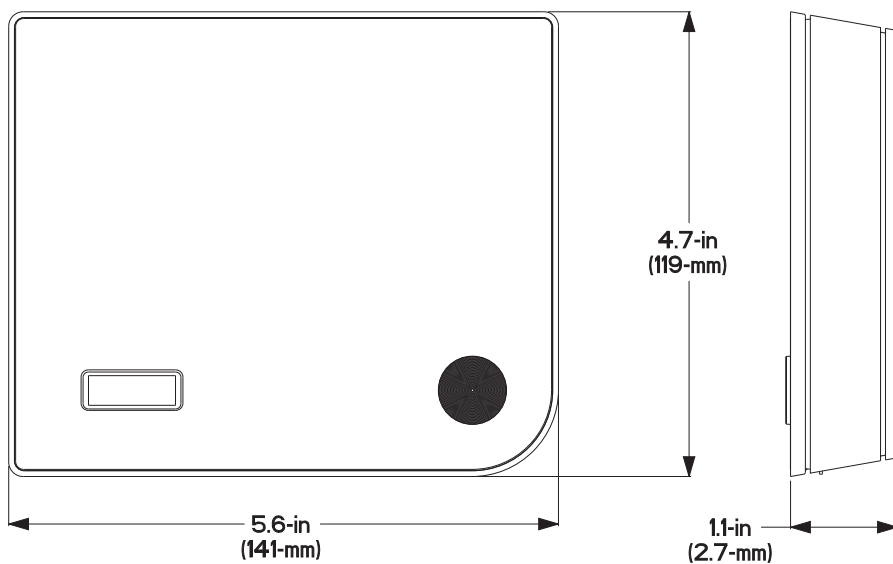(119-mm)

5.6-in
(141-mm)

1.1-in
(2.7-mm)

A170101

Fig. 1 − Unit Dimensions

PRODUCT DATA INFORMATION

Compatible Communicating Products

Compatible with most Infinity® System indoor and outdoor equipment built since 2004; see equipment specifications for details.

Home Automation System Interface

A cloud-to-cloud Open API (Application Program Interface) is available for the ITC and ITW model Infinity Touch and Infinity System Controls. See the Infinity Systems Open API Getting Started Guide available on www.HVACpartners.com or contact InfinityOpenAPI@carrier.utc.com for more information. The Infinity® System control may also connect to a variety of Home Automation systems using SAM modules. Note that not all Home Automation systems may be compatible. Reference the latest version of the Application Specification titled "SAM Remote Access Application Specification," available on HVACpartners.com to learn more about the latest Home Automation interfaces to the Infinity® systems. Work with the home automation supplier to see if the systems are compatible. If not, you may provide the "Infinity System Open API Getting Started Guide" or the "SAM Remote Access Application Specification" to the home automation supplier to develop an interface with the Infinity® System. Always be sure to obtain the latest version of the application specification from HVACpartners, as we continually update and add home automation interfaces.

NOTE: The ability to remotely access and adjust the settings of the Infinity® System Control with the MyInfinity web and mobile applications is dependent on the compatibility of the user's computer, home network and/or mobile device, the Infinity® System Control, and/or the MyInfinity web server or other system interfaces with, and the availability of, the user's internet service provider or mobile device carrier service. Carrier Corporation makes no representations or warranties, express or implied, including, to the extent permitted by applicable law, any implied warranty of merchantability or fitness for a particular purpose or use, about the compatibility of the user's computer, home network, and/or mobile device, with the Infinity® System Control, and/or the MyInfinity web server or other system interfaces, with, and the availability of, the user's internet service provider or mobile device carrier service, or that the ability to remotely access and adjust the settings of the Infinity® System Control will not be negatively affected by the network-related modifications, upgrades, or similar activity of the user's internet service provider or mobile device carrier service.

Physical Characteristics

Dimensions: See drawing

Appearance: Black glass front, silver plastic body

Electrical Characteristics/Communication

Input Volts/Amps 24VAC

Each device in the Infinity® System has a four-pin connector labeled ABCD. It is recommended that the following color code be used when wiring each device:

A — Green = Data A+

B — Yellow = Data B-

C — White = 24VAC (Com)

D — Red = 24VAC (Hot)

Always verify that the IDU and ODU are well-grounded, and that there are less than 10 volts AC/DC as measured between the cabinets of the IDU and ODU, while the equipment is operating at full capacity. If there is a larger voltage difference between the cabinets of the IDU and ODU, recheck the equipment grounding.

Environmental Requirements:

Operating Temperature/Relative Humidity:

User interface and all sensors: 32°F to 104°F / 0°C to 40°C, 95% RH non-condensing

Feature Specifications:

Temperature set point range: 50°F to 90°F / 10.0°C to 32.0°C

Separate heat and cool setpoints

Programming days: 7 day

Programming periods: Up to 5 periods per day

Advanced Smart Setback (with programming)

Touch-N-Go® feature

Occupancy Sensing

Non-Programmable (installer selectable)

Auto Changeover* (may be disabled)

Simultaneous Heat Cool Demand Algorithm for zoned systems

Programmable fan (installer selectable)

Humidity Sensor Offsets

Auto Changeover Timer (installer adjustable)

Smart Recovery (in heating and cooling)

Hold function

Copy functions: copy day of week; copy zones

Permanent memory

Humidity display and control

Temperature sensor offsets (indoor and outdoor)

TrueSense™ Dirty Filter Detection with compatible indoor equipment

* See Installation Instructions for details on Auto Changeover and Simultaneous Heat/Cool Demand Algorithm operation.

Wiring Requirements:

Power supply: 24VAC, 40 VA (minimum), 60 Hz, via indoor equipment ABCD Connector. Zoning systems with a large number of dampers, especially multiple dampers per zone, may require a separate, dedicated, field-installed 24VAC power supply. The SAM module requires an independent, isolated, field-supplied 24VAC power supply.

Wiring material: Standard thermostat wire 18 to 22 gauge. Use 18 AWG wiring for wire lengths over 25 feet. Shielded, twisted pair cable for te ABCD communication bus is optional, and may be helpful in electrically noisy environments, or for zoning systems with Smart Sensors.

NIM Requirements:

IDU	NON-COMMUNICATING ODU	NIM REQUIRED?
Furnace	1-stage A/C	No
Furnace	2-stage A/C	Yes
Furnace	1-stage HP	Yes
Furnace	2-stage HP	Yes
Fan Coil	1-stage A/C	No
Fan Coil	2-stage A/C	Yes
Fan Coil	1-stage HP	No
Fan Coil	2-stage HP	Yes

CONTROLS

DESCRIPTION	PART NO.
Infinity® System Control with Wi–Fi® Remote Access Capability	SYSTXCCITC01–B
Infinity® Network Interface Module (NIM)	SYSTXCCNIM01*

* Required for ventilator control
* Required for Hybrid Heat applications with non−communicating heat pumps
* Required for use with 2−stage (non−communicating) AC or HP

ZONING CONTROLS

DESCRIPTION	PART NO.
Infinity® Damper Control Module (4 Zone)	SYSTXCC4ZC01†
Infinity® Smart Sensor	SYSTXCCSMS01-B

*   NOTE: Each piece of the zoning equipment is purchased separately allowing for customization of the zoning application.
**Smart Sensor dimensions are 3.375 in. (85mm) side x 4 in. (101 mm) high
†   One Damper Control Module for up to 4 zones. A second Damper Control Module is required for zones 5–8.

OPTIONAL ACCESSORIES

DESCRIPTION	PART NO.
Infinity® Remote Room Sensor – Wired (RRS)	SYSTXCCRRS01*
Decorative Trim Plate – Silver (six pack)	SYSTXNNSBP06†
Decorative Trim Plate – White (six pack)	SYSTXNNWBP06†
Decorative Trim Plate – Black (six pack)	SYSTXNNBBP06†
Decorative Trim Plate – Gray (six pack)	SYSTXNNGBP06†
ABCD Equipment Communication Connector (Green Plug; 10 pack)	SYSTXGRPLG10
Outdoor Air Temperature Sensor	TSTATXXSEN01–B
Energy Tracking Kit (EWT) for GC and GZ Geothermal Heat Pumps	KHAGT0101KIT**
Wireless Access :Point (WAP)	SYSTXXXGWR01
Infinity® Remote Access Module, Broadband Cat−5 Wired (SAM)	SYSTXCCRCT01
Infinity® Remote Access Module, Broadband Wi−Fi® Wireless (SAM)	SYSTXCCRWF01
Accessory Power Transformer for SAM Modules**	SYSTXNNXFM01**

*   Not required, but may be used to remote sense indoor room temperature.

†   Backplate dimensions 6.83 in. (173.5 mm) wide X 5.97 in. (151.7 mm) high

** Available from RC/Totaline.

DAMPER ACCESSORIES & REPLACEMENT PARTS

DESCRIPTION	PART NO.
45º Actuator for round dampers	DAMPACT45DEG-R
90º Actuator for rectangular dampers	DAMPACT90DEG-R
Damper Control Module 1-amp Fuse	ATO1*

*Available from RC.

ROUND & RECTANGULAR DAMPERS

DESCRIPTION		PART NO.
Round Dampers	6 in.	DAMPRND06INC-B
	8 in.	DAMPRND08INC-B
	10 in.	DAMPRND10INC-B
	12 in.	DAMPRND12INC-B
	14 in.	DAMPRND14INC-B
	16 in.	DAMPRND16INC-B
Rectangular Dampers	8 in. X 10 in.	DAMPREC08X10-B
	8 in. X 14 in.	DAMPREC08X14-B
	8 in. X 18 in.	DAMPREC08X18-B
	8 in. X 24 in.	DAMPREC08X24-B
	10 in. X 10 in.	DAMPREC10X10-B
	10 in. X 14 in.	DAMPREC10X14-B
	10 in. X 18 in.	DAMPREC10X18-B
	10 in. X 24 in.	DAMPREC10X24-B

SLIP-IN DAMPERS

DESCRIPTION		PART NO.
Slip-In Dampers	Side mount, 8 X 8	DAMPSLS08X08-B
	Bottom mount, 8 X 8	DAMPSLB08X08-B
	Side mount, 8 X 10	DAMPSLS08X10-B
	Bottom mount, 8 X 10	DAMPSLB08X10-B
	Side mount, 8 X 12	DAMPSLS08X12-B
	Bottom mount, 8 X 12	DAMPSLB08X12-B
	Side mount, 8 X 14	DAMPSLS08X14-B
	Bottom mount, 8 X 14	DAMPSLB08X14-B
	Side mount, 8 X 16	DAMPSLS08X16-B
	Bottom mount, 8 X 16	DAMPSLB08X16-B
	Side mount, 8 X 18	DAMPSLS08x18-B
	Bottom mount, 8 X 18	DAMPSLB08X18-B
	Side mount, 8 X 20	DAMPSLS08X20-B
	Bottom mount, 8 X 20	DAMPSLB08X20-B
	Side mount, 8 X 22	DAMPSLS08X22-B
	Bottom mount, 8 X 22	DAMPSLB08X22-B
	Side mount, 8 X 24	DAMPSLS08X24-B
	Bottom mount, 8 X 24	DAMPSLB08X24-B
	Side mount, 10 X 10	DAMPSLS10X10-B
	Bottom mount, 10 X 10	DAMPSLB10X10-B
	Side mount, 10 X 12	DAMPSLS10X12-B
	Bottom mount, 10 X 12	DAMPSLB10X12-B
	Side mount, 10 X 14	DAMPSLS10X14-B
	Bottom mount, 10 X 14	DAMPSLB10X14-B
	Side mount, 10 X 16	DAMPSLS10X16-B
	Bottom mount, 10 X 16	DAMPSLB10X16-B
	Side mount, 10 X 18	DAMPSLS10X18-B
	Bottom mount, 10 X18	DAMPSLB10X18-B
	Side mount, 10 X 20	DAMPSLS10X20-B
	Bottom mount, 10 X 20	DAMPSLB10X20-B
	Side mount, 10 X 22	DAMPSLS10X22-B
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	Bottom mount, 12 X 16	DAMPSLB12X16-B
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	Side mount, 14 X 16	DAMPSLS14X16-B
	Bottom mount, 14 X 16	DAMPSLB14X16-B
	Side mount, 14 X 20	DAMPSLS14X20-B
	Bottom mount, 14 X 20	DAMPSLB14X20-B
	Side mount, 16 X 16	DAMPSLS16X16-B
	Bottom mount, 16 X 16	DAMPSLB16X16-B
	Bottom mount, 16 X 20	DAMPSLB16X20-B

Catalog No: SYSTXCCITC-02PD

Replaces: SYSTXCCITC-01PD