



Product Data Sheet

Tracer[®] SC System Controller

Ordering number: **BMSC000AAA011000**

The Trane[®] Tracer[®] SC building automation system is a complete building control solution that delivers high performance and efficiency, along with the reliability you would expect from Trane. Tracer SC coordinates equipment from your building's HVAC, lighting, and other systems and offers control with a simplified, Web-enabled user interface so you get easy and convenient access to your systems from virtually anywhere.



Features and Benefits

Feature	Benefit
Occupant comfort and energy savings	<ul style="list-style-type: none"> Tracer SC includes several factory engineered HVAC applications that have been developed by HVAC system experts and tested on tens of thousands of facilities to ensure that your facility operates at its peak performance. These applications provide consistent comfort and improved indoor air quality, while reducing energy requirements. For any building owner concerned with energy, indoor air quality, and the environment, Trane EarthWise™ Systems represent a design philosophy whose time has come. EarthWise Systems provide documented sustainability of high efficiency and low emissions over the entire lifetime of the building.
Access your facility from anywhere	<ul style="list-style-type: none"> Tracer SC is web-enabled and accessible from virtually any device with a web browser. All of the most popular device types, operating systems, and browsers are supported. The Tracer BAS Operator Suite is a mobile app that allows you to monitor and manage buildings from virtually anywhere, giving you greater freedom and constant peace of mind. TraneConnect™ provides an easy, secure option to connect remotely to a Tracer SC.
Support for open, standard protocols	<ul style="list-style-type: none"> Open, standard protocols are the key to enabling communication among Trane and non-Trane HVAC equipment, as well as other complementary facility systems. These protocols enable communication across systems and vendors to ensure that your building operates at its best on day one and beyond. Tracer SC natively communicates with BACnet®, Modbus, and LonTalk controllers and is listed as a BACnet Building Controller (B-BC) by BACnet Test Labs (BTL).
Support for Trane [®] Air-Fi™ wireless	<ul style="list-style-type: none"> Trane Air-Fi Wireless brings maximum flexibility to a building automation system. Trane technology helps prepare your facilities for the future of building information. Trane Air-Fi Wireless runs BACnet protocol over ZigBee building automation standards. Trane Air-Fi is the first HVAC manufacturer to be ZigBee Certified.
Easy to use	<ul style="list-style-type: none"> The Tracer SC user interface provides an easy way for building operators to set up, operate, and modify a building automation system.

⚠ SAFETY WARNING

Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.



Tracer SC Facilities

A Tracer SC facility is defined as one Application Tracer SC and one or more associated Base Tracer SCs. A single building or site can contain more than one facility. See the following table for device capability.

Device Capability

Communication Type	Single SC	Multi SC
Air-Fi™ Wireless	Up to 120 devices	Up to 240 devices
BACnet/MSTP	Up to 120 devices	Up to 240 devices
BACnet/IP	Up to 240 devices	Up to 240 devices
COMM 3/4	Up to 240 devices	Up to 240 devices
LON	Up to 120 devices	N/A
Modbus TCP	Up to 240 devices	N/A
Modbus RTU	Up to 60 devices	N/A

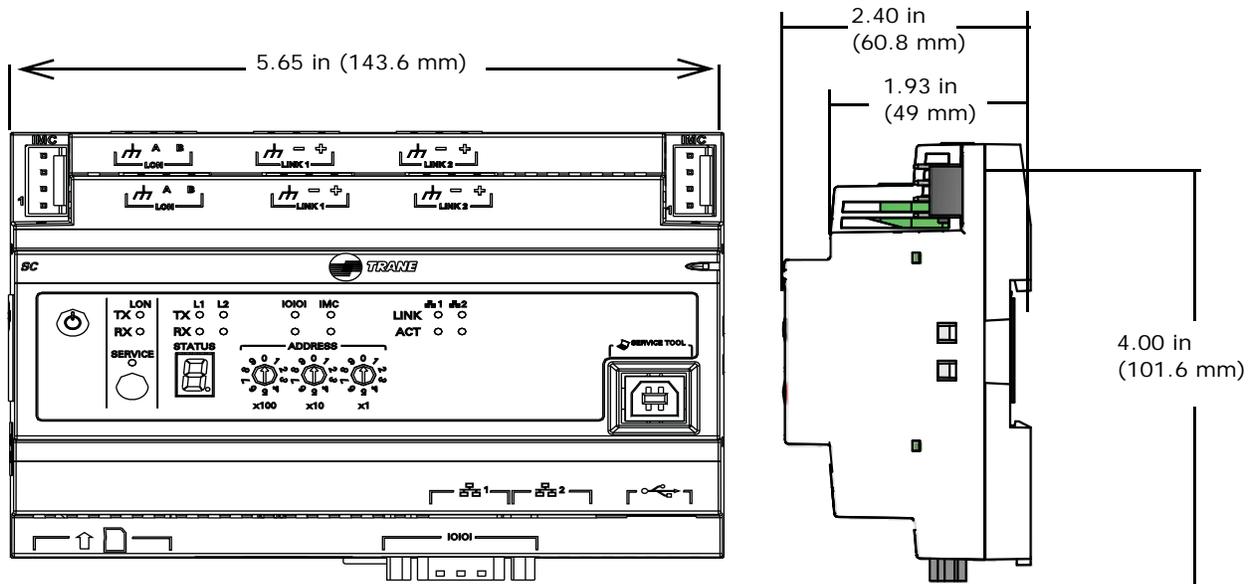
Controller Specifications

Client Software Requirements	
PC or Mac	Microsoft® Windows 7: <ul style="list-style-type: none"> • Internet Explorer™ version 11 • Mozilla Firefox® — most recent version • Google Chrome™ — most recent version Microsoft® Windows 10: <ul style="list-style-type: none"> • Internet Explore - no support • Microsoft Edge™ - latest version • Mozilla Firefox® — most recent version • Google Chrome™ — most recent version Apple® Mac OS 10.9/10.10: <ul style="list-style-type: none"> • Mozilla Firefox® — latest version • Google Chrome™ — latest version • Safari® — latest version
Tablet/Phone	iOS (iPad®/iPhone®) — 8, 9: <ul style="list-style-type: none"> • Safari — most recent version Android — 4.4+ <ul style="list-style-type: none"> • Google Chrome — version 45 or higher Microsoft® Windows 10: <ul style="list-style-type: none"> • Microsoft Edge™ - latest version
Tracer SC System Controller	
Concurrent Users	<ul style="list-style-type: none"> • Five
Supported Languages	Up to four languages are supported per Tracer SC. <ul style="list-style-type: none"> • English • Chinese (Simplified/Traditional) • French • French Canadian • Portuguese (Brazil) • German • Indonesian • Japanese • Korean • Spanish (Latin America) • Thai • Polish • Arabic
Power requirements	From PM014 Power Supply: 24 Vdc @ 0.3A; 14VA max (PM014 input VA)

Operating environment	<ul style="list-style-type: none"> • Temperature: From –40°F to 122°F (–40°C to 50°C) • Relative humidity: From 10% to 90%, non-condensing
Storage environment	<ul style="list-style-type: none"> • Temperature: From –40°F to 158°F (–40°C to 70°C) • Relative humidity: From 5% to 95%, non-condensing
Agency Listings	<p>UL:</p> <ul style="list-style-type: none"> • UL-864/UUKL listed (when installed and programmed in accordance with the Engineered Smoke Control System Application Guide, BAS-APG019-EN) • UL-916-PAZX – energy management • CUL-C22.2-signal devices – Canada <p>FCC:</p> <ul style="list-style-type: none"> • FCC part 15, Class A CE <p>CE:</p> <ul style="list-style-type: none"> • The European Union (EU) Declaration of Conformity is available from your local Trane® office. <p>ISO:</p> <ul style="list-style-type: none"> • 9001:2008
Processor	PowerPC405 Core
Memory	<ul style="list-style-type: none"> • FLASH 400 MB • SDRAM 256 MB
Battery	<ul style="list-style-type: none"> • No battery required. The clock is maintained for a minimum of three days by the super capacitor. All other programs are backed up by nonvolatile memory.
BACnet	<p>Tracer building automation systems communicates with BACnet devices that support:</p> <ul style="list-style-type: none"> • Communications based on the BACnet ASHRAE/ANSI 2012 standard • ENV-1805-1/ENV-13321-1 • 10BASE-T/100BASE-TX dedicated Ethernet (ISO/IEC 8802-3) or Transmission Control Protocol/Internet Protocol (TCP/IP) compatible network <p>Tracer SC is listed by BACnet Test Labs (BTL) as a BACnet Building Controller (B-BC). Listing information can be found at: http://www.bacnetinternational.net</p>
LonTalk	<p>Tracer building automation systems communicates with LonTalk devices that support:</p> <ul style="list-style-type: none"> • Communications based on the EIA-709.1 (LonTalk) standard • LonTalk standard network variable types (SNVTs) • FTT-10A or FT-X1 transceivers • Twisted-pair physical media (Level 4 wiring)
Protocol Communication	
Device Limits	<p>Tracer SC facility (Combination of all protocols)</p> <ul style="list-style-type: none"> • Up to 240 devices (Per link/Per facility) • Tracer UC200 Series - 60/240 • Tracer UC400 Series - 60/240 • Tracer UC600 Series- 10/20 • Tracer UC800 Series - 60/240 • BCI Series - 60/240 • Trane Communicating Thermostats - 60/120 • Non-Trane BACnet - 32/240 • AH Series - 120/120 • CH Series - 120/120 • VV Series - 120/120 • ZN Series - 120/120 • MP503 - 120/120 • MP580 - 20/20 • Modbus TCP - 240/NA • Modbus RTU - 60/NA • Trane Communicating Thermostats - 120/120 • Non-Trane LON - 120/120 • Air-Fi Wireless (Per network/per facility) • WCI - 30/240
Medium Enclosure (optional)	

NEMA Type	NEMA-1
Weight	14 lb. (6.5 kg)
Mounting	Wall-mounted with #10 (5 mm) screws and #10 wall anchors. Mounting surface must be able to support 60 lb. (28 kg)
Large Enclosure (optional)	
NEMA Type	NEMA-1
Weight	50 lb. (23.0 kg)
Mounting	Wall-mounted with #10 (5 mm) screws and #10 wall anchors. Mounting surface must be able to support 120 lb. (56 kg)

Tracer SC Dimensions



Ingersoll Rand (NYSE:IR) advances the quality of life by creating comfortable, sustainable and efficient environments. Our people and our family of brands—including Club Car®, Ingersoll Rand®, Thermo King® and Trane®—work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; and increase industrial productivity and efficiency. We are a global business committed to a world of sustainable progress and enduring results. For more information, visit www.ingersollrand.com.

Trane has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice.