



Product Data Sheet

Tracer[®] SC System Controller

Ordering number: BMSC000AAA01100

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
Remote access	<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.
Support for open standards	<ul style="list-style-type: none"> Tracer SC is based on an open standard platform, which provides the latest technology while integrating new and existing equipment and controls seamlessly — both Trane and non-Trane. Tracer SC natively communicates with BACnet[®] and LonTalk controllers and is listed as a BACnet Building Controller (B-BC) by BACnet Test Labs (BTL).
Support for Trane Air-Fi™ Wireless Systems	<ul style="list-style-type: none"> Trane Air-Fi Wireless brings maximum flexibility to a building automation system. Trane Air-Fi Wireless runs BACnet protocol over ZigBee building automation standards. Trane Air-Fi™ Wireless is the first HVAC manufacturer to be Zigbee Certified.
High performance building control	<ul style="list-style-type: none"> Factory-programmed and tested applications are designed to work together with factory-mounted unit controllers to ensure consistent high performance, which makes Tracer SC easy and cost-effective to install for on-time, on-budget project completion. Factory engineered applications include: Area, CPC, VAS, Scheduling and Trending (Data Logging). Tracer Graphical Programming (TGP2) is a powerful application that can be used to customize control for a given facility. Compared to online programming, TGP2 reduces complexity which simplifies fulfillment and service operation within a facility.
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 SC and one or more associated Base 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/LON (individual or any combination)	Up to 120 devices	Up to 120 devices

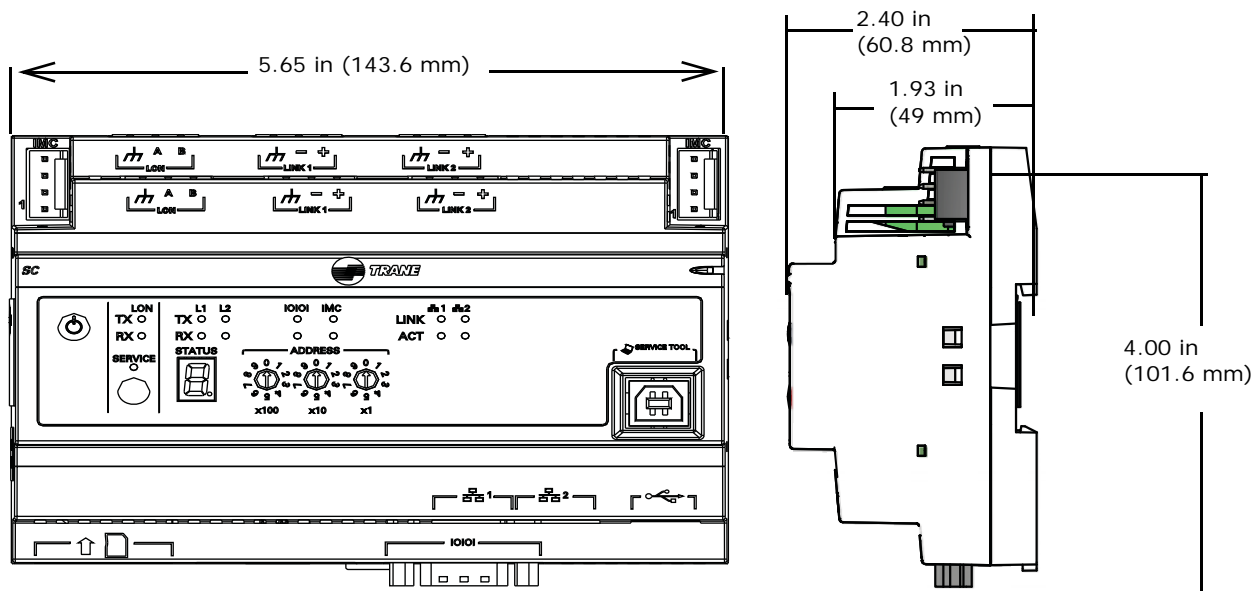
Controller Specifications

Client Software Requirements	
PC or Mac	Microsoft® Windows 7, 8: <ul style="list-style-type: none"> • Internet Explorer™ version 9.0 or higher • Mozilla Firefox® — latest version • Google Chrome™ — latest version Mac® OS : <ul style="list-style-type: none"> • Mozilla Firefox® — latest version • Google Chrome™ — latest version • Safari® — latest version
Tablet/Phone	iOS (iPad®/ iPhone®) — latest version: <ul style="list-style-type: none"> • Safari — latest version • Mozilla Firefox — latest version • Google Chrome — latest version Android — latest version <ul style="list-style-type: none"> • Google Chrome — latest version • Mozilla Firefox — latest version Windows Mobile – latest version <ul style="list-style-type: none"> • Stock browser only
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"> • Emissions EN61326:1998 Class B • Immunity EN61326:1998 • Commercial Safety EN61010-1:2001 <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 <p>BACnet (Per link/Per facility)</p> <ul style="list-style-type: none"> • 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 <p>LonTalk (Per link/Per facility)</p> <ul style="list-style-type: none"> • AH Series - 120/120 • CH Series - 120/120 • VV Series - 120/120 • ZN Series - 120/120 • MP503 - 120/120 • MP580 - 20/20 • Trane Communicating Thermostats - 120/120 • Non-Trane LON - 120/120 <p>Air-Fi Wireless (Per network/per facility)</p> <ul style="list-style-type: none"> • 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



Trane optimizes the performance of homes and buildings around the world. A business of Ingersoll Rand, the leader in creating and sustaining safe, comfortable and energy efficient environments, Trane offers a broad portfolio of advanced controls and HVAC systems, comprehensive building services, and parts. For more information, visit www.Trane.com.

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