Knowledge

Knowledge

Trane's ability to deliver:

- End-to-end reliability with tested, proven applications that are consistent and well-documented to reduce risk
- Factory mounted controls to ensure safe and efficient operation
- Support for the design of the system and the full life of the controls
- Full Intelligent Services toolset for ongoing optimization and energy savings
- Systems built on industry-standard open protocols

Experience

Experience

Controls designed to meet the needs of specific roles and personas providing optimized user-experiences.

Store Manager

Tracer 10" Display, Occupant Suite App, Tenant UI

- Set point changes
- Schedule overrides
- After-hours requests

Facility Manager

Tracer® Synchrony™, Operator Suite App

- Access to Building Automation System
- Single Building Controls

Maintenance Staff/Building Operator

Tracer® Ensemble™

- Access to Building Automation System
- Trends, alarms, energy optimization
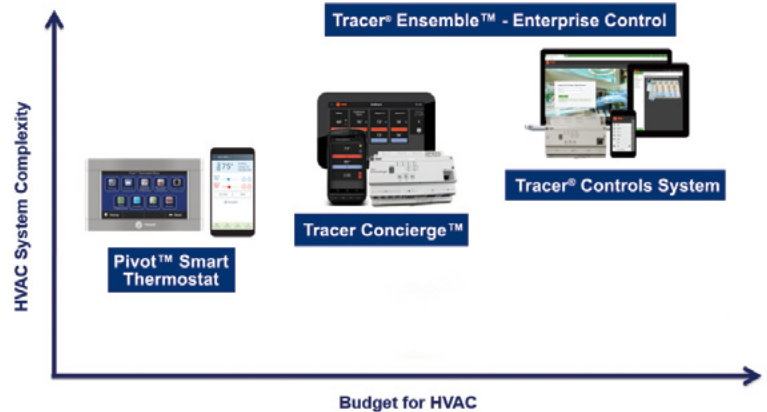- Multiple Building/Enterprise Solution

Performance

Performance

Scalable portfolio of building automation and building management solutions meeting the needs of a buildings that vary in size, type, and complexity.

- Wireless mesh technology delivers flexibility and reliability for the lifecycle of the building.
- Configurable and programmable controllers deliver performance and flexibility to meet a wide range of applications.
- Modular controller designs optimize the cost and delivery of the system; on time and on budget.

Portfolio Positioning

Tracer® Ensemble™ - Enterprise Control

Tracer® Controls System

Tracer Concierge™

Pivot™ Smart Thermostat

HVAC System Complexity

Budget for HVAC

Trane Building Automation Systems

Tracer® SC+
Scalable web-based building automation system solution.

Tracer Concierge™
Light commercial control system.

Pivot™ Smart Thermostat
Wi-Fi & Ethernet thermostat for light commercial applications.

Trane Air-Fi® Wireless

Wireless Sensors
Wireless sensing for temperature, humidity, CO_2 & occupancy using BACnet/Zigbee®. Specialty applications include: refrigerator and freezer monitoring using remote sensor range: -25^{0}C - 50^{0}C (-13^{0}F - 122^{0}F). Sensors available with or without displays and set point control.

Wireless Communications
Wireless system communications leverage Air-Fi Wireless technology to communicate between system and equipment controls.

Trane Equipment & Unit Controls

Airside Controllers (UC210, UC400, UC600)
UC210 and UC400: Configurable/ programmable BACnet terminal unit controllers for VAV boxes, fan coil units, unit heaters, unit ventilators, water source heat pumps, and blower coils. UC600: Fully programmable controller for commercial self-contained units, air handler control, central plants and custom equipment control.

Chiller Controllers (AdaptiView with UC800, CH530)
AdaptiView provides 12 in. and 7 in. operator displays to manage alarms, view data and make operational changes.

Symbio™ 800 Controller
IntelliPak® with Symbio™ 800, multiple protocol support and remote connectivity. Can integrate with BACnet MSTP, BACnet/IP, BACnet/ Zigbee, LonTalk® & Modbus® Protocols. Expandable I/O and programmability for custom applications.

BACnet Communication Interfaces (BCI-I, BCI-R, BCI-C)
Module that enables communication for air handlers, rooftop units and chillers on Trane and non-Trane BACnet MSTP networks. LCI-I, LCI-R and LCI-C modules are also available for LonTalk communication.

Expansion Modules (XM30, XM32, XM70, XM90)
Add inputs and outputs to SC+, UC210, UC400, UC600, and Symbio 800.

Communications Devices
Communication Bridges integrate legacy Trane Comm3/4 unit controllers and legacy non-Trane systems to BACnet I/P into Tracer.

Variable Frequency Drives
Complete range from 1-1/2 to 1350 HP, factory mounted or field installed for new or retrofit applications. BACnet MSTP, LonTalk and Modbus integration interfaces.

Power and Energy Meters
Easy to install, fully featured, flexible and cost effective power and energy monitoring devices.

Stand-alone controls
Programmable Zone Sensor for stand alone control of variable speed Trane equipment for RTUs with Reliatel®, and WSHPs, FCUs, BCs, and UVs with UC400s.

BACnet Communicating Thermostats
Communicating thermostats for controlling RTUs, water-sourced heat pumps and fan coils, and integration into Building Automation systems.

Equipment Displays

TD-5
View alarms, data, graphs and make operational changes on Trane equipment. 5 in. display for Reliatel controllers.

TD7
7 in. display has the added features of custom animated graphics and equipment scheduling for UC600, Symbio 800, and UC800 based air cooled chillers.

Trane Building Management Systems & User Interfaces

Tracer® Ensemble™
Enterprise level building management software for facility professionals.

Tracer® Synchrony™
Web-based software for building operators.

Tracer 10" Display
Occupant user interface for non-technical user.

Tracer Mobile Apps
Occupant Suite, Operator Suite

Trane Energy Management Systems and Services

Trane Intelligent Services
Aggregates data collected in a building. Provides tools to make real-time, near term, and long term decisions that maximize the way buildings are managed and maintained.

Building Performance
Identifies anomalies to improve comfort, reliability and energy savings.

Energy Performance
Uses utility data to identify areas where energy intensity can be reduced in the building.

Active Monitoring
Monitor, triage and dispatch services to respond to BAS alarms.

Energy Assessment
Helps customers visualize total energy usage from utility's interval smart meter data.

Secure Remote Access
Secure remote access to control systems; firewall friendly, built on IT standards.

TRANE®

Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit *trane.com* or *tranetechnologies.com.*