



# Embedded controls for light commercial rooftops

Save time and money with efficient controllers  
designed for a range of comfort applications

## Smart Equipment Controls

Smart Equipment is a sophisticated embedded controls platform that simplifies the connection between HVAC equipment and smart technology by offering seamless connectivity, fault detection, and the opportunity for advanced data analytics. This helps you set up units faster, and maximize control for greater efficiency, extended equipment life, and reduced operating costs while empowering you to monitor the reliability of your system.

## Faster Integration

HVAC units with Smart Equipment are autodetected without requiring programming tools, and enable seamless connection into Verasys Light Commercial Building Control Systems. Rooftops (3-25 Tons) with Smart Equipment integrate into other Johnson Controls manufactured BAS systems such as Metasys and Facility Explorer systems should you encounter them in the market. BACnet Automatic Discover support allows for easy integration into any BACnet BAS.

Users commission, configure, and access the Smart Equipment controller through the Mobile Access Portal (MAP) Gateway. This optional, pocket-sized, portable web-server automatically discovers all Smart Equipment connected units in the system allowing for faster equipment setup.

## Streaming Real Time Analytics At Your Fingertips

With the MAP, you can access units through any smart phone, tablet, or laptop. This offers building contractors easy availability to the powerful analytical tools that monitor equipment performance in their building, facility, or campus. When you bundle units with Smart Equipment with a controls system, you can connect data streams from equipment to the cloud to gain an unprecedented insight into your operations.

Smart equipment extends equipment life and minimizes downtime by giving you instant access to vital data on the performance of your HVAC equipment. A convenient onboard LED backlit display with pushbuttons, alarm notifications instead of codes, and trending info makes maintenance simple and intuitive for all equipment applications.

## Technology Facilitating Enhanced Efficiency and Comfort

We know that smart buildings demand smart controls and that every facility needs intelligent solutions. Rooftop HVAC units with embedded Smart Equipment controls offer building owners, engineers, and contractors a wide range of features and options for a variety of applications. Smart equipment enables many higher level equipment functions such as Modulating Heat, Single Zone VAV, and more.

Patented proportional adaptive control (P\_Adaptive) and pattern recognition adaptive control (PRAC) technologies provide continuous loop tuning which is ideal for new-construction applications in K-12 buildings, commercial spaces such as office blocks, and hotels. Over time the units collect information on how they are operating and learn to be more adaptive to the space. This creates more energy efficient operation and better comfort.





# Smart Equipment (SE) Controller

Forward-thinking technology for anyone who interacts with buildings

Equipment already has controls embedded by the manufacturer and can connect seamlessly to a controls systems.



The Smart Equipment (SE) Board is installed at the factory and "arrives alive" to the site to minimize any inconvenience to our customers or their contractors.



Smart Equipment™ identifies equipment from Johnson Controls with the advanced technology and smart devices already embedded.



The Johnson Controls Mobile Access Portal (MAP) Gateway allows you to commission, configure, and access the SE Board. This optional, pocket-sized, portable web server and Wi-Fi hotspot automatically discovers all devices connected to your system to give you faster setup and commissioning.



Access HVAC controls through any Wi-Fi-enabled phone, tablet, laptop, personal computer, or internet browser. This offers building owners, engineers, and contractors easy access to the powerful analytical tools that monitor equipment performance in their building, facility, or campus.



Convenient onboard, backlit local display with pushbuttons, and BACnet Automatic Discovery support for easy integration into any BACnet BAS.

## Everyday Thermostat Controller (ETC)

### Options you can control

We recognize that not all applications require the level of controls sophistication provided by Smart Equipment. Rooftops in the 3-12.5T range sometimes requires a controller that has basic functionality and a simple thermostat connection to get you on and off the job as quickly as possible.

The Everyday Thermostat Controller (ETC) is a thermostat-based unit controller that minimizes field complexity and startup time without compromising comfort.

These non-communicating controllers can provide adequate basic thermostat control for a large number of applications in the market.



Control board is manufactured to the same dimensions as the Smart Equipment (SE) Board, which simplifies any future upgrade.



ETC is easy to configure and commission, saving upfront costs and time on the site.



ETC supports 2-stage heating and cooling; standard safeties (HPS, LPS, Freezestat); 2-speed fan control; and basic troubleshooting (LEDs).



Compatible with any thermostat.



Easy-to-use controller offers great performance.



Technology brought to you by the same engineering team that developed our award-winning Smart Equipment (SE) Boards.



Optional factory control board is currently available on the Sun™ Core rooftop unit.



From basic to advanced applications, our field controllers save time and money without compromising comfort. For more information, visit: <http://www.luxaire.com/Commercial/Packaged-Cooling-and-Heating-Units>