



# Discover System 550

A user-friendly modular electronic control solution with integrated A2L refrigerant leak detection and mitigation, and optional cloud connectivity.

# Introducing System 550

## Every day, you face critical challenges



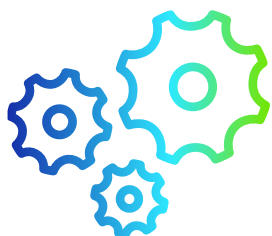
### New and evolving regulations

The pressure is on when it comes to meeting new government refrigerant regulations but finding the time, resources, and expertise to ensure compliance can be a challenge. System 550 is designed specifically to address and meet A2L refrigerant regulations through an advanced A2L refrigerant leak detection and mitigation solution.



### Multiple control parameters

Operating and maintaining multiple controllers is costly, time-consuming and inefficient, stretching your team and resources. PENN System 550 integrates multi-stage temperature, humidity and/or pressure control with A2L refrigerant leak detection and functionality into one efficient, easy-to-use system.



### Minimizing system downtime

Every minute your system isn't operating properly, it directly affects your bottom line and the quality and safety of your products. In short, you can't afford a system that doesn't perform. Designed with advanced features and system alerts to catch issues early, PENN System 550 provides unmatched performance, user-friendly operation, and reliability to reduce product loss and provide occupant comfort and productivity.

**Backed by more than 105 years of world-class, proven technology that meets the needs of critical applications, PENN offers a complete modular electronic controls solution.**



### **Multi-stage controller with A2L refrigerant leak detection and mitigation**

Comply with the newest A2L refrigeration regulations while fulfilling multiple control needs including temperature, humidity, and/or pressure.



### **A user-friendly and intuitive solution**

A simple menu makes it easy to configure a C550 control module to meet your application needs.



### **Cloud connectivity and system alerts**

Monitor your system remotely with alerts and change configuration settings with Controls System Cloud.



### **High performance and ensured reliability**

Maximize equipment uptime and optimize system efficiencies.





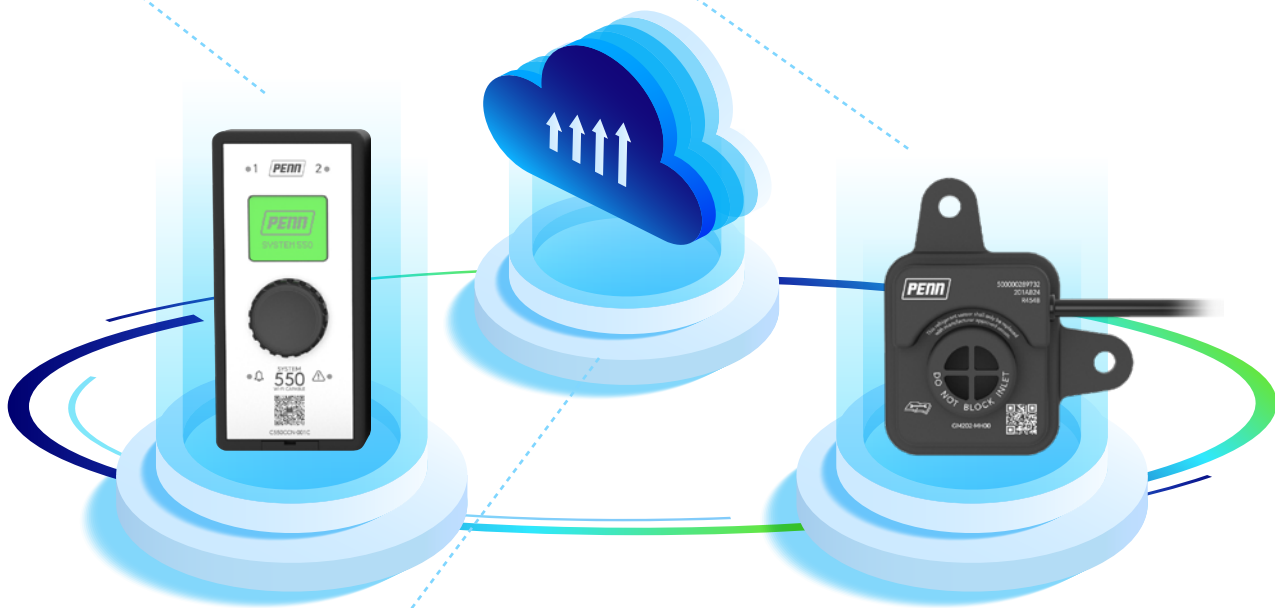
# Unlock System 550's full solution with our multistage controller and A2L refrigerant sensors — all connected through Controls System Cloud.

## Multi-stage controller

- Temperature, humidity, and/or pressure control supports a range of HVAC-R applications.
- Modular electronic control system allows up to 3 temperature, humidity and/or pressure sensors in any combination, along with 10 relay and/or analog outputs.
- Enables informed decision-making to optimize system up-time and occupant comfort and safety.

## A2L refrigerant leak detection and mitigation

- Plug-and-play A2L refrigerant leak sensing and mitigation control solution that gives you confidence in meeting regulation deadlines.
- Speed-of-sound A2L refrigerant sensor technology provides the fastest response time on the market <7 seconds (T25) and a warm-up time of <5 seconds, making it easy to meet international standards
- A2L refrigerant sensors communicates with the C550CCN control module via Modbus, making it easy to identify which sensor detected a refrigerant leak or a sensor fault.
- C550CCN control module supports up to 6 A2L refrigerant sensors.
- Modbus provides A2L sensor end-of-life notifications, preventing unnecessary system downtime.



## Controls System Cloud

- Provides remote monitoring of HVACR system health from any where in the world, along with the ability to change menu settings, and review and/or download trend data to assist with troubleshooting.
- System data can be used to prioritize and potentially eliminate the need for some service calls.
- Trend data can be used to pin-point system related issues, allowing preventive maintenance to be performed.
- Operates under the highest level of cybersecurity protocols to significantly reduce cyber-attack risks.

# High performance and ensured reliability

Designed for versatility, System 550 allows you to mix and match control and expansion modules with relay or analog outputs to meet your application needs.

## A user-friendly and intuitive solution

- **Full-character display** allows customizable naming of sensors and relay/analog outputs.
- **Quick access features** allows users to quickly review and change control set-point and differential values.
- Transfer and save configuration files without the need to power the device through the use of C550's USB-C port.
- Optional 2-way cloud connectivity, provides real-time system monitoring of all sensor values through alerts across multiple locations.
- Temperature, humidity, and/or pressure, and A2L refrigerant leak detection and mitigation provide tailored solutions to **reduce installation, commissioning and operating costs.**
- Accurate control of space temperature and humidity **extends the shelf life** of perishable goods.

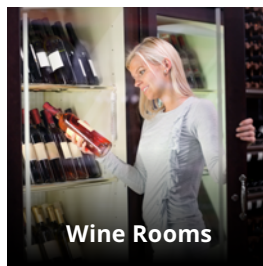
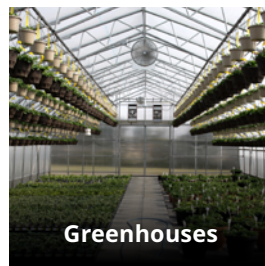
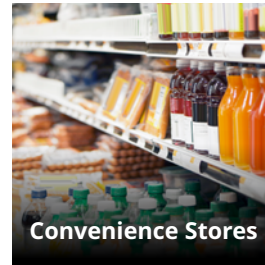
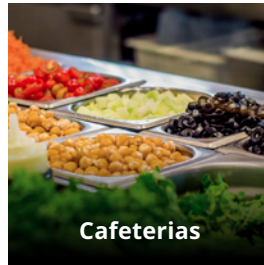
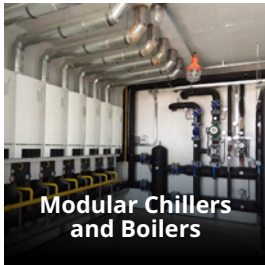


## A2L refrigerant leak detection and mitigation

- Quickly senses refrigerant leaks to **help keep occupants healthy and safe and reduce product loss.**
- A2L refrigerant sensor is fast and reliable, with a **15-year average lifespan.**
- Simplifies A2L refrigerant sensor ordering and installation with a standardized 1.5' cable and connector, and 3M, 5M, and 8M cable extensions and mating connectors are available.
- OEM-locked A2L refrigerant configuration **prevents field tampering** and assures HVAC-R equipment **complies with safety standards.**
- Test Mode allows users to confirm that A2L refrigerant mitigation functions are working properly.

System 550 is a powerful, multi-stage control solution that provides a combination of temperature, humidity and pressure control along with plug-and-play compliance for A2L refrigerant leak detection and mitigation.

We serve a wide range of industries and applications, supporting you every step of the way with control solutions for commercial refrigeration, air conditioning, and heating applications.



Put simply, when it comes to modular electronic controls, nothing matches the power, versatility, and value that System 550 provides.

Contact your Johnson Controls representative to learn more about System 550 or to get a demo. **Visit [penncontrols.com](https://penncontrols.com) to get started.**

#### About Johnson Controls:

At Johnson Controls, we transform the environments where people live, work, learn and play. As the global leader in smart, healthy and sustainable buildings, our mission is to reimagine the performance of buildings to serve people, places and the planet.

Building on a proud history of nearly 140 years of innovation, we deliver the blueprint of the future for industries such as healthcare, schools, data centres, airports, stadiums, manufacturing and beyond through OpenBlue, our comprehensive digital offering.

Today, with a global team of 100,000 experts in more than 150 countries, Johnson Controls offers the world's largest portfolio of building technology and software as well as service solutions from some of the most trusted names in the industry.