Discover PENN System 550

System 550 empowers you to control what's most important with a reliable and easy-to-use solution.

This versatile, cloud-connected multi-stage controller maximizes equipment uptime, meets the latest A2L refrigeration regulations and provides user-friendly operation, all backed by PENN's trademark support and service.

Multi-stage controller with A2L refrigerant leak detection and mitigation.
Control temperature, humidity, and/or pressure across a wide range of HVAC-R applications and comply with A2L refrigerant and leak detection regulations.

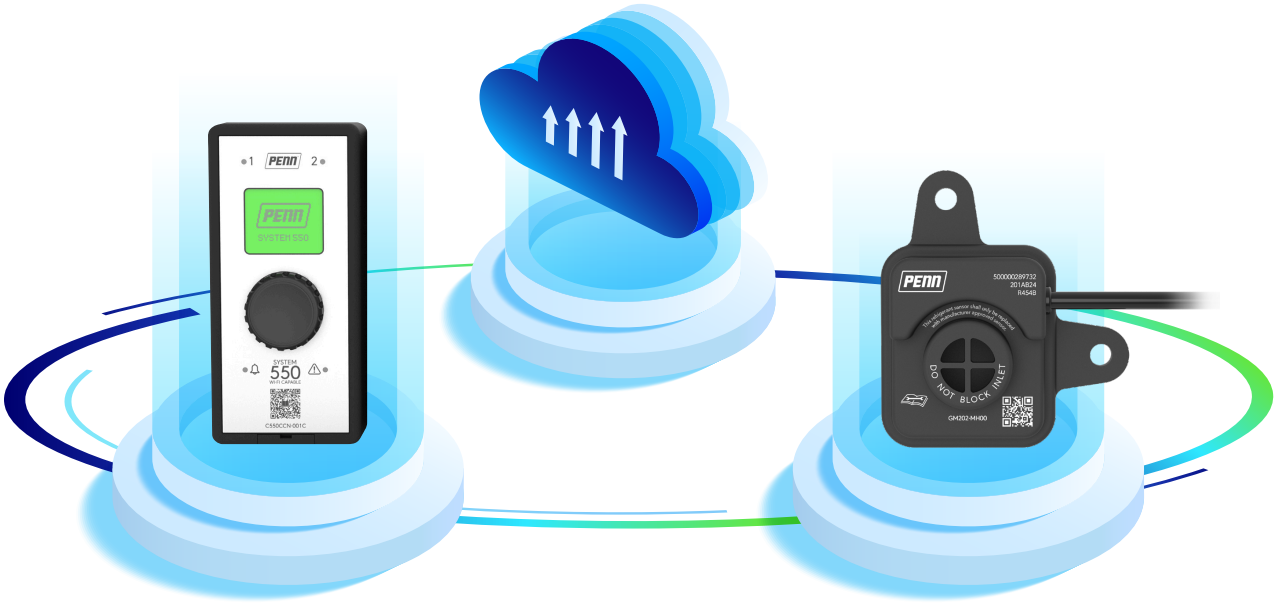
A user-friendly and intuitive solution.
Enable easy operation and an optimal user experience with features including a simplified menu to configure the control module.

Cloud connectivity and system alerts.
Remotely monitor sensor and output values, set-up alarms that can be received via text and/or email, and change configuration settings, all while using the highest cybersecurity protocols.

High performance and ensured reliability.
System 550 is designed for versatility to reduce installation and commissioning time, minimize operating costs, maximize system uptime and improve the overall user experience.

Easy transition from System 350 to System 550
C550A control modules provide only one sensor input (temperature, humidity or pressure) and include a guided menu to facilitate easy set-up and replacement of System 350 control modules.

Controls System Cloud



Cloud connectivity and system alerts

Controls System Cloud, wireless cloud connectivity, provides remote monitoring of HVACR system health from anywhere in the world. Always stay in the know with your system by receiving real-time alerts when issues arise.

Cloud connectivity capabilities

- 2-way cloud connectivity provides real-time system monitoring.
- Receive SMS and/or email alerts to advise service technicians when system-related issues occur and require attention.
- Remotely check operating conditions plus review and change controller settings, potentially eliminating service calls.
- Trend data can be used to pin-point system related issues, allowing preventive maintenance to be performed.

A trusted, cyber secure platform

- Uses the same cybersecurity encryption as a banking system.
- WiFi connection is securely established through Azure, a Microsoft Cloud Solution.
- Personal data is kept in a separate secure environment, minimizing the risk of compromised personal data.
- System 550 does not route data from one network to another, eliminating data leaks from the device to your WiFi network.

Cloud subscription

Connect your controller to the cloud through our optional cloud subscription. Controls System Cloud is configured to display all System 550 devices by location or enterprise. You choose which cloud subscription package works best for you and your application. The cloud license is renewed on an annual basis, and one license is required per device.

Number of cloud licenses	Subscription packages
1	Base
10	Silver
25	Gold
50	Platinum
100	Diamond

A2L refrigerant leak detection and mitigation sensor

The System 550 A2L refrigerant leak sensor uses speed of sound technology, bringing protection and peace of mind to your system's operation. The controller supports up to 6 A2L refrigerant sensors, communicated through Modbus for easy sensor identification if issues arise.

Learn more about the features and benefits of our A2L Refrigerant sensor.

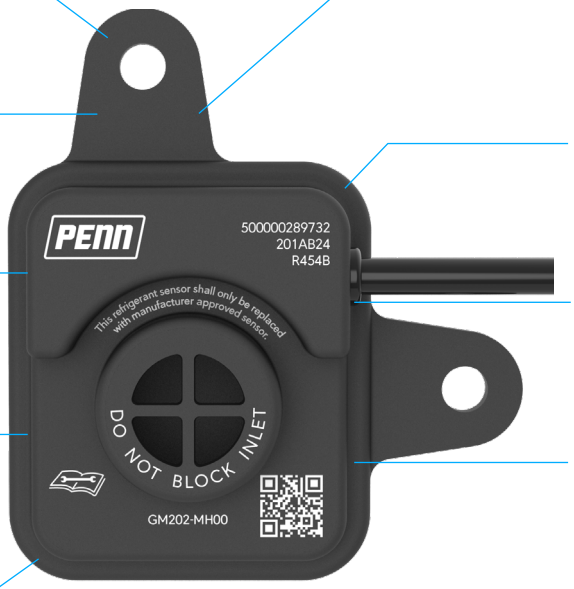
Longevity
15+ years, to withstand the extended lifetime of HVACR equipment.

No calibration needed
factory calibrated sensor that does not require field calibration or re-zeroing during its lifetime.

Modbus output
RS485 output provides diagnostic data including sensed A2L refrigerant LFL and remaining operational days.

Embedded self-diagnostics
Sensor self-diagnostics performed once per minute providing any fault alarms.

Immune to poisoning
Immune to sensor degradation even with continuous poisoning.



Highly accurate
Temperature and humidity compensation sensors present for high accuracy regardless of the environmental conditions.

Fast response time
Fast response (T25 < 7 sec) and warm-up time (<5 sec) to comply with international standards.

No false positives
No false positives from fouling gases as required by international standards.

Mechanical & environmental robustness
Robust package that performs flawlessly given the environmental conditions and requirements for commercial HVACR equipment.

Contact your Johnson Controls representative to learn more about System 550 or to get a demo.
Visit penncontrols.com to get started.