

EDGE[®]

THE NEXT GENERATION OF CONTROLLERS



THE LAST CONTROLLER YOU'LL EVER NEED

EDGE® is a single platform that is versatile and intuitive allowing it to handle all control applications. The unique design makes EDGE the only controller on the market that can be configured to match your operation's specific requirements. It is also flexible enough to be adapted to new construction or existing system upgrades. Throughout your animals' growth stages, you and EDGE are in control, managing and monitoring ventilation, cooling, heating, lighting, feeding and watering systems.



INFORMATION AT A GLANCE

Navigation is easy with the large, 15" color touchscreen. Everything is right in front of you for quick, easy navigation. The buttons are large enough to be touched even when wearing gloves. Color-coded notifications give you real-time status of your entire operation. Site-wide conditions can also be monitored from the touchscreen.



MULTI-LOCATION CONTROL

With EDGE, you have the power to control multiple buildings or rooms from a single controller using one interface. EDGE reduces management complexity and offers you considerable cost savings by eliminating the need to have a separate controller for each individual location. One EDGE System can easily do what up to 64 individual controllers used to do.



REMOTE CONNECTIVITY

Plug in an Ethernet cable and you are ready to take control of the system from the comfort of your truck, office, couch, and anywhere in between. The cloud-based architecture allows you to remotely connect via any web-enabled device – computer, tablet, smart phone – to monitor and analyze data in real-time or quickly respond to any issues. EDGE gives you the freedom to leave the farm while knowing you are only one touch or click away. If a problem occurs and an alarm is triggered, you will be immediately notified via text message or email, saving valuable time and money.



Patent Pending





CONFIGURATION WIZARD

The built-in Configuration Wizard is designed to guide you through the initial set-up by prompting you with questions about each of the specific applications that have been installed. Simply input the fans, inlets, temperature probes, and other equipment you have, where they are located, and the production type. Based on this information, EDGE will automatically configure run settings to operate at optimal conditions.

Because all AP/Cumberland-manufactured products come pre-loaded, the settings will self-populate automatically which saves you valuable set-up time. Following the initial set-up, you can always go back and modify the settings. Set-up is easy and intuitive to get you up and running in no time.

	[+] CFM caps		[+] BMS/StarT		[+] Fan		[+] Air speed		[+] Cooling load 1		
	Actual 4%		Rackwidth 60"		Subtotal Fan 1 375		Subtotal Fan 2 375		P-value		Ranking
	Min	Max	Start	End	Min				Min	Max	P-value
Stage 1	542	3227	88.0	---	72.4	25%	70%				
Stage 2	4712	4647	76.0	71.6	72.8	100%	100%	20%	70%		
Stage 3	7540	7540	76.0	71.6	---	100%	100%	100%	100%		

AUTO-CONFIGURATION

AUTO-ADJUST SETTINGS



VENTILATION BASED ON CFM PER HEAD

Determining the necessary ventilation typically requires producers using complicated calculations to convert CFM per head into ventilation stages. With EDGE in control, you can say goodbye to confusing formulas and arbitrary ventilation settings. Ensure you are accurately controlling the environment by inputting CFM per head values and the number of animals in a particular building. The revolutionary EDGE controller takes it from there, automatically determining the proper inlet settings and fan stages.

RELIABLE AND INTUITIVE

EDGE is designed with integrated diagnostics and a triple layer of protection making it the most reliable controller in the industry.



SELF-DIAGNOSTICS

Should anything go wrong, the built-in self-diagnostics make troubleshooting easy. Before you go flipping through a manual or calling tech support, self-diagnostics can identify a number of issues. The system can tell you when a sensor is disconnected or incorrectly wired, if a piece of equipment is drawing too much or too little current, or if internet connectivity is down. It will pinpoint exactly where the problem is and what you need to do to fix it.



FULL REDUNDANCY

Operate multiple locations with a single, main controller. Redundant power supplies and communication paths provide uninterrupted operation in the event of a power supply failure. For additional safety, add a second main controller to maintain operation should the primary main controller have an issue.



BACKUP MODE

Should the main controller fail due to lightning, faulty wiring, etc., or if both controllers in a redundant system fail, EDGE has a second level of safety built in to the system. In Backup Mode, the individual cards that are plugged into the expansion boxes in the system actually have intelligent processors built into them. When they are unable to communicate with the main controller(s), they take over and act as a mini stand-alone controller, continuing to read temperature probes and operate equipment appropriately. This allows the system to operate indefinitely without a main controller, which adds an additional layer of security and operational capacity on top of a redundant main controller.



FAIL SAFE MODE

In the rare event that a main controller malfunctions, and the even rarer event of a complete power loss to the controllers, EDGE has built in a third level of safety and security: fail safe relays. These relays have special contacts that allow “de-energize to trip” functionality, which means that in a total power loss, the system can drop curtains to ensure fresh air is available to the animals. Or in another scenario, if the controller loses power but power is still available, the fail safe relays can activate tunnel fans to keep air moving.

I had lightning hit my EDGE main controller. The redundancy protection automatically switched over to a slave and ran with no problem. Technical support was a huge advantage making the repairs quick and simple.

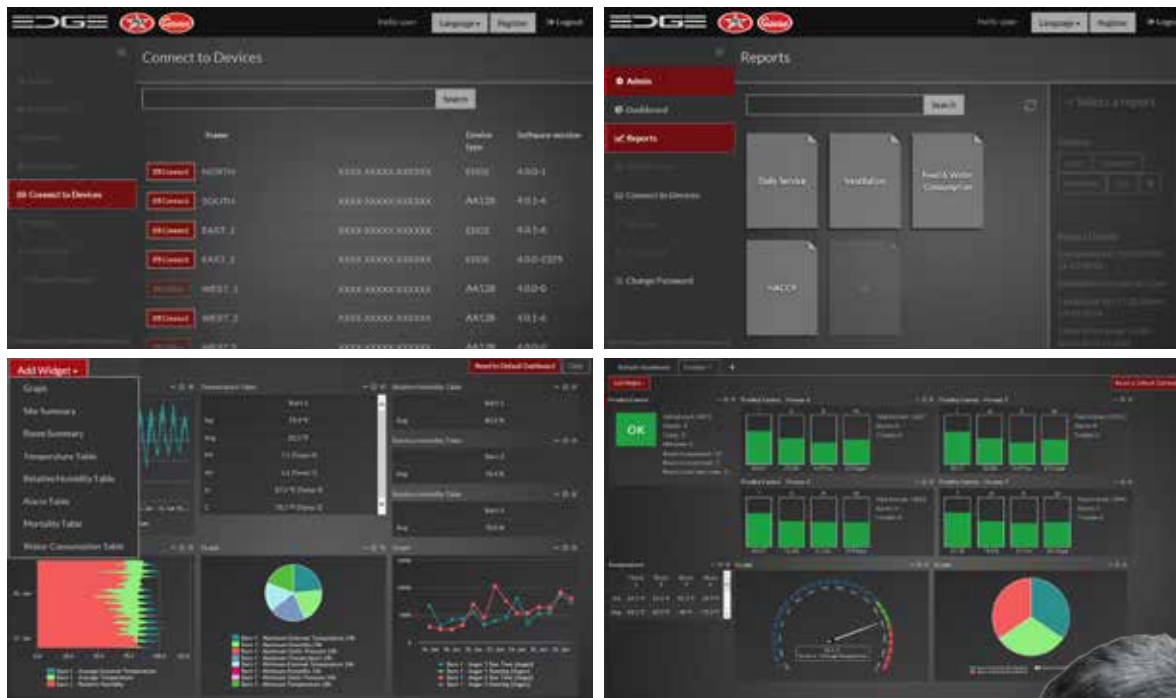
Kenneth Golden
Grower - Eva, Alabama





DATA ANALYSIS

Manage all of your production facilities at www.gsiedge.com. The data your system collects and generates is an extremely valuable business management tool. With the Data Analysis upgrade, you will be able to set production benchmarks, produce customized reports and graphs, view historical data and alarms, and ultimately discover those areas that are costing you money and resources.



Through GSIEDGE.com you can monitor and manage all aspects of your production process including ventilation, feed inventory and consumption, cooling, heating, lighting, animal weight and watering. GSIEDGE.com keeps you informed with real-time site information utilizing easy-to-read graphics and reports to quickly identify issues and optimize your farm's performance.



BUILT TO LAST, BUILT TO GROW



MODULAR ARCHITECTURE

Modular architecture allows the system to be built exactly to your needs. Whether you run a large operation with dozens of sites or a smaller facility with one or two buildings, EDGE scales with the appropriate number of inputs and outputs and becomes more economical as your operation expands.



The system's modular plug-and-play architecture consists of a main controller similar to an industrial tablet. Separate from the controller are two styles of expansion boxes that can each hold either three or six plug-in modules. Optional remote display boxes give producers the ability to view and modify control settings from any location regardless of where the main controller is located. Ready to expand? Add additional expansion boxes and you're ready to go.

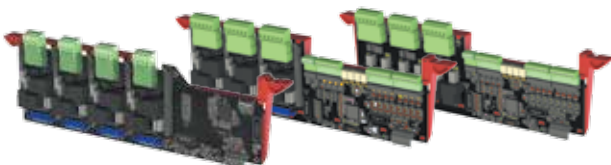


OPTIONAL REMOTE
DISPLAY



PLUG-IN MODULES

Similar to the input/output expansion slots in a computer, plug-in modules serve different functions, allowing you to customize the system based on your specific configuration. A positive retention system assures modules are fully seated to prevent installation errors. Once the module is plugged in, it identifies itself and tells the system its functionality. As you expand, or new technologies and applications are introduced, add new modules to reflect new functionality allowing you to integrate a wide variety of components into a single, efficient system.





MULTIPLE TYPES OF INPUTS

Want to measure inputs such as temperature, static pressure, humidity, wind speed, wind direction, precipitation, water meters or feeding run time? Now you can do all that with EDGE. How about incorporating bird weights and sensors for CO₂, feed usage, ammonia, effective environmental temperature (EET), inlet positions, tachometers or current transformers? It's all coming soon to EDGE. There is no limit to what EDGE can do for your operation.

Track growth in your poultry houses with the EDGE Bird Scale - record individual weights, track growth patterns and even drill down into individual groups, such as males and females.



Monitor your feed usage, track feed levels and automatically e-mail your feed mill when bins are getting low with the EDGE Bin Scale.



VARIABLE LIGHTING

Without the need for any other external power boxes, EDGE can dim any type of bulb, up to 8KW of lighting, with flicker free operation.



SECURE WIRE CONFIGURATION

The wire management system is designed for easy access, with the main high voltage wires physically separated from the low voltage wires.



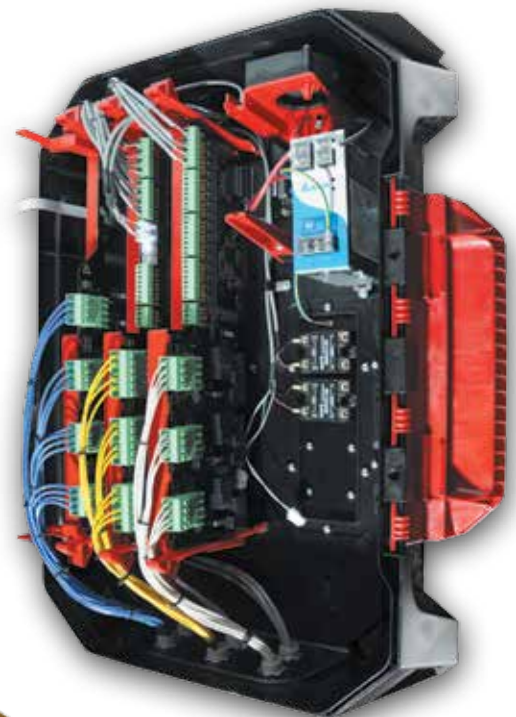
RUGGED FOR THE ENVIRONMENT

High humidity, wide temperature swings, and corrosive gases such as ammonia can wear down products, causing premature failure of equipment. Designed to tolerate temperatures from -20°C to +50°C (-4°F to +122°F), and a relative humidity range of 0-95%, EDGE performs in the toughest environments.

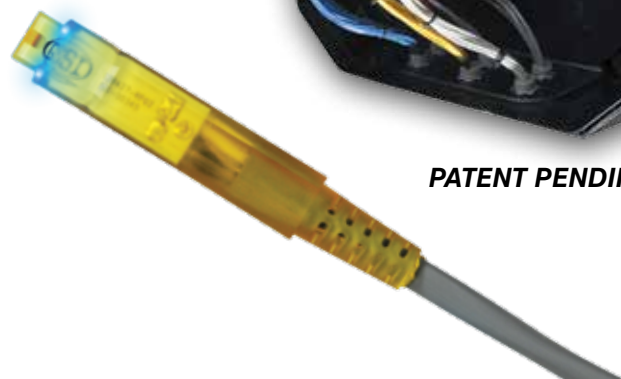


LED TEMPERATURE PROBES

We developed our patent pending LED temperature probes to simplify installation and take the hassle out of individually identifying the location of each probe.



PATENT PENDING



PROVEN & DEPENDABLE™



GLOBAL SUPPORT

MULTI-LANGUAGE SUPPORT

Switching between languages is as simple as using a button on the main screen. The system supports all major languages for the region in which it is installed so you can customize for global operations. This is ideal for integrators and multi-national corporations. Regardless of the language, you can train your employees on one system and it will work the same way anywhere in the world.

MULTI-REGION CERTIFICATES

As with languages, EDGE has the appropriate certifications for the regions in which it is sold so it can be deployed in all markets. For North America, EDGE is UL/CSA certified, and in the European Union, it is CE-approved.



SERVICE & SUPPORT

More than an equipment supplier, we're a team, working alongside producers for over 25 years providing equipment inspired by your needs and made to work as hard as you do. From feeding and ventilation to alarms and controls, we have what you need to maximize the growth potential of every animal and every aspect of your business. Whether you are building new or looking to retrofit your current facilities, AP/Cumberland has the proven and dependable solution to meet your needs.



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