



*intellinox*



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**All of our energy.  
For less energy.**

At Intellinox, we believe that the greenest energy of all is energy that we don't use. We know that professional kitchen owners and chefs can achieve both unprecedented energy savings, all while providing a comfortable workplace for their teams.

This is why we created ECOAZUR<sup>®</sup>, the most efficient energy saving DCKV (Demand Control Kitchen Ventilation) system.





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## High-performance technology that taps into hidden opportunities.

Based on a survey conducted by the U.S Energy Information Agency, HVAC systems account for approximately 30% of total energy consumed in food service facilities. While many site-specific factors exist, a substantial part of this energy is specifically related to kitchen ventilation.

Paradoxically, professional kitchens tend to require a maximum ventilation for only short periods of time throughout a day. Important energy savings occur when ECOAZUR adjusts your kitchen ventilation to reflect the amount of cooking taking place under the hood.

With ECOAZUR's optical and temperature sensors, you can **save up to 97% on the electric consumption of fan motors and up to 70% on the treatment of replacement air**, such as heating, cooling and dehumidification.

What's more: adding dampers helps to control airflow for each hood independently, regardless of the number of hoods connected to an exhaust system, thus improving overall kitchen performance.



Take it to  
the blue level



## ecoAzur®

### IRIS BLEU® OPTICS

#### Defining the future of kitchen ventilation.

ECOAZUR's sophisticated blue light beam measures the emission of smoke, vapor or other cooking by-products and increases the exhaust rate only when necessary. The Iris Bleu is key to maintaining a safe and healthy working environment, as well as avoiding hood spills.

- Allows for the widest airflow modulation range
- Waterproof, impervious to grease (no air purge units)
- Requires little to no maintenance



### MODULATING DAMPERS

#### You can boost your energy efficiency with damper technology.

When multiple hoods share a common exhaust fan; the overall exhaust airflow will always be driven by the most demanding hood. ECOAZUR overcomes this common design constraint with its patent-pending modulating dampers. This technology independently controls the exhaust rate of each hood and generates outstanding energy savings.

- New or **retrofit applications**
- Installation requires no cleaning, cutting or welding duct work
- Quick reaction time (4 s)
- Open fail-safe position (fire, VFD in bypass)



### SECURED CLOUD PLATFORM

#### Stay in the driver's seat for your kitchen's ventilation.

An easy-to-use web platform informs your management team that maintenance and operations are aligned with your ROI target. Access in-depth analytics and reports to gain insight into how to optimize your ventilation and benchmark your kitchen's performance.

- Remote monitoring
- Remote assistance and fine-tuning
- Simple dashboard
- Email notification





# Demand control kitchen ventilation. Evolved.

## The ECOAZUR DCKV system



## Code compliance

### AGENCY LISTING

Conforms to the following ANSI/UL Standards (cETLus):

- UL 1978 – Standard for Safety Grease Ducts
- UL 710 – Exhaust Hoods for Commercial Cooking Equipment
- ULC S646 – Standard for Exhaust Hoods and Related Controls for Commercial and Institutional Kitchens.

Certified to the following CAN/CSA Standards (cETL):

- C22.2 No. 205 – Signal Equipment
- C22.2 No. 14 – Industrial Control Panels

Evaluated and found to comply with the component requirements for:

- UL 1978 – Standard for Safety Grease Ducts
- UL 710 – Exhaust Hoods for Commercial Cooking Equipment
- ULC S646 – Standard for Exhaust Hoods and Related Controls for Commercial and Institutional Kitchens.

Official EMC laboratory test reports support compliance with:

- Electromagnetic compatibility directive 2014/30/EU as part of the requirements leading to the CE marking of ECOAZUR system. Harmonized standards:
- EN61000-6-4 (2007) A1 (2011), EN61000-6-2 (2005)
- FCC part 15 subpart B
- ICES-003

### ENERGY AND GREEN BUILDING STANDARDS

Achieves exhaust airflow modulation required by multiple energy and green building standards, including:

- ASHRAE 90.1 (2019)
- ASHRAE 189.1 (2017)
- IECC (2018)

### SAFETY

- NFPA 96 (2017)
- IMC (2018); meets code requirements to automatically start fans when cooking operations occur





### Key factors to consider when investing in a DCKV

- The size of your kitchen ventilation system (airflow rate, fan motor size). Exhaust airflow greater than 3,000 CFM tend to justify investing on a DCKV.
- Hours of operation at reduced airflow. A kitchen operating for more than 12 hours per day will generally offer sufficient downtime periods to generate substantial energy savings.
- The climate of your facility. Affects the heating and cooling load of make-up air throughout the year.
- Utility rebates may reduce significantly the net cost of a DCKV.
- Costs (energy cost, purchase/installation/maintenance cost).
- Impact of installation and commissioning on your operations.
- Increased kitchen comfort (temperature, noise, air movement).
- The DCKV system sensor technology. Heat-only systems will generally save up to 20% of the exhaust airflow during cooking conditions, while Heat & Optic systems will allow saving up to 70%.
- A DCKV system cloud platform can add significant value (dashboard, notifications, remote assistance, analytics, benchmarking).

### Comparison ECOAZUR® vs competition

FEATURE	ECOAZUR	MARVEL	MELINK	CAPTIVE AIRE	TYPICAL HEAT-ONLY SYSTEMS
Temperature Sensors for measuring heat production	•	•	•	•	•
Optic Sensors for detecting smoke and steam	•	-	•	-	-
Blue light technology for providing the widest modulation under cooking conditions	•	-	-	-	-
Water proof Optic Sensors for easy and safe hood cleaning	•	-	-	-	-
Constant auto-calibration of Optic Sensors	•	-	•	-	-
Optic Sensor able to display fault with visual light	•	-	-	-	-
System able to be cycled on and off automatically via temperature	•	•	•	•	•
System able to be cycled on and off automatically via smoke and steam	•	-	•	-	-
Prep, Cooldown, and Idle modes to maximize energy savings	•	-	-	•	-
System keypad able to display any faults	•	•	•	•	-
Able to provide modulating dampers for multiple hoods on same fan	•	•	-	-	-
Able to provide retro-fit system in existing facilities regardless of hood manufacturer, including modulating dampers	•	-	-	-	-
Cloud platform for remote access and performance analysis	•	•	•	•	•



**Benefit from a worldwide network  
of certified ECOAZUR dealers.**

We have partnered with leading distributors from across the globe for any new installation or retrofit of our ECOAZUR solutions. Along with our partners, we offer turnkey services, including site audits, free energy-saving analyses and remote monitoring of your intelligent kitchen ventilation system.

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418 407-0674  
1 833 ECOAZUR  
[info@intellinox.com](mailto:info@intellinox.com)