Product Specifications

V6 SERIES DEMAND CONTROL KITCHEN VENTILATION SYSTEM

ecoAzur®

intellinox

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

TABLE OF CONTENTS

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

INTRODUCTION

The purpose of these Product Specifications is to present to the reader the ECOAZUR® V6 DCKV (Demand Control Kitchen Ventilation) system and products along with its essential features and capacities. Additionally, this document provides required information to determine optimal quantities and dimensions for specific items.

Should the need for further information arise, the following reference materials are available:

- ECOAZUR® User's Manual (E6UM-EN) - Operation and maintenance manual
- ECOAZUR® Installation Manual (E6IM-EN) - Guidelines for mechanical installation
- ECOAZUR® Programming Manual (E6PM-EN) - Instructions for parameter setup and advanced troubleshooting
- ECOAZUR® Electrical Diagrams - Project-specific wiring instructions

The ECOAZUR® control system interfaces with third-party devices, such as Variable Frequency Drives, Electronically Commutated Motors, fans, hood fire suppression systems, cooking appliance shutoff devices, and other equipment. It is recommended to consult the manufacturer's specific documentation and instructions for the safe and proper operation and maintenance of these devices.

ABBREVIATIONS

The following abbreviations are used throughout this document:

BMS: Building Management System
CS: Current Switch
DCKV: Demand Control Kitchen Ventilation
ECM: Electronically Commutated Motor
HC: ECOAZUR® Hood Controller
IB: ECOAZUR® Iris Bleu® Optic Sensor
KP: ECOAZUR® Keypad
MD: ECOAZUR® Modulating Damper (exhaust duct)
NC: ECOAZUR® Network Cable
PS: ECOAZUR® Power Supply
PT: ECOAZUR® Pressure Transmitter
RS: ECOAZUR® Room Sensor
RTU: Roof Top Unit
SC: ECOAZUR® System Controller
TT: ECOAZUR® Temperature Transmitter
VB: Variable air volume Box (supply duct)
VFD: Variable Frequency Drive

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

EQUIPMENT DESCRIPTION

The ECOAZUR® Demand Control Kitchen Ventilation control system is a sophisticated solution designed to optimize the performance of commercial, institutional and industrial kitchens. Its primary purpose is to accurately measure cooking activity and adjust the exhaust and supply airflow accordingly, ensuring a comfortable and safe environment while minimizing energy consumption. The system is specifically engineered for installation in grease hoods (Type 1), ensuring that stringent industry standards such as NFPA 96 and UL 710 are met.

ECOAZUR® offers exceptional safety and convenience with its ability to control hood lights, manage cooking appliance electrical shutoff devices, and integrate off override key switch stations. The system may also be interlocked to respond to dangerous gas concentrations when linked to third-party gas monitors such as CO or natural gas sensors. Moreover, ECOAZUR® has the capability to integrate a wide range of ambient transmitters, including temperature, humidity, VOC, and CO_2 sensors, allowing for highly accurate monitoring and control of the kitchen environment. This enables optimal comfort and energy efficiency while providing a safe and healthy atmosphere for the kitchen staff.

The ECOAZUR® DCKV control system is composed of various essential components:

- **System Controller (SC).** At the heart of the system is the SC, which serves as the central processor of the system, orchestrating the functions of the other components.
- **Keypad (KP) or Touch Screen**. The KP or Touch Screen provides a user-friendly interface for controlling and monitoring the system.
- **Temperature Transmitter (TT).** The TT is an important component that senses the hood temperature in the hood canopy or collar.
- **IRIS BLEU® (IB).** The IB is a sophisticated optic sensor that operates in a pair of emitter and receptor to detect smoke and vapor in the hood canopy. It provides valuable information, particularly when the ventilation system is operating at lower airflow rates. With a unique detection capability, the IB is an essential component of the ECOAZUR® system, allowing it to achieve energy efficiency safely.
- **Network Cables (NC).** The NC network cables are designed with characteristics specific to the ECOAZUR® system and hood environment. They greatly facilitate the system's wiring, ensuring seamless communication and coordination among the various elements of the system. This helps streamline the installation process and optimize the system's overall performance.

The ECOAZUR® DCKV control system can be customized to meet the specific needs of your kitchen with the addition of the following components:

- **Hood Controller (HC).** The HC is a control unit that can be mounted on a hood to enhance the capabilities of the SC and to reduce the total V6NC cable length required on site. Essentially, an HC acts as a hub by relaying information from other intelligent devices such as HCs, KPs, sensors and dampers.
- **Lite Keypad (Lite KP).** A Lite KP is a simplified version of the KP keypad, without a display. It enables

the user to control a specific hood or a set of hoods within the ECOAZUR® system.

- **Current Switch (CS).** The CS serves as an alternative method for monitoring the operation of a fan and/or detecting the operation of a kitchen appliance.
- **Room Sensors (RS).** RS sensors refer to a collection of various sensors that can measure a range of parameters such as ambient temperature, humidity, VOC (volatile organic compounds), CO (carbon monoxide), CO_2 (carbon dioxide), and CH_4 (natural gas or methane).
- **Modulating Damper (MD).** The MD is a motorized damper installed in the exhaust collar or duct of a hood, used to regulate the airflow of a specific hood or hood section. It is listed for use in grease hood and grease duct applications and features a patented retractable design that facilitates safe and easy installation in retrofit applications.
- **Pressure Transmitter (PT).** The PT is a device designed to measure pressure in different parts of the ventilation system. Various PT models can measure pressure in the supply duct, exhaust duct, and behind the hood filters.
- **Power Supply (PS).** The PS is a power supply panel that provides power to the HCs that support MDs and/or VBs.

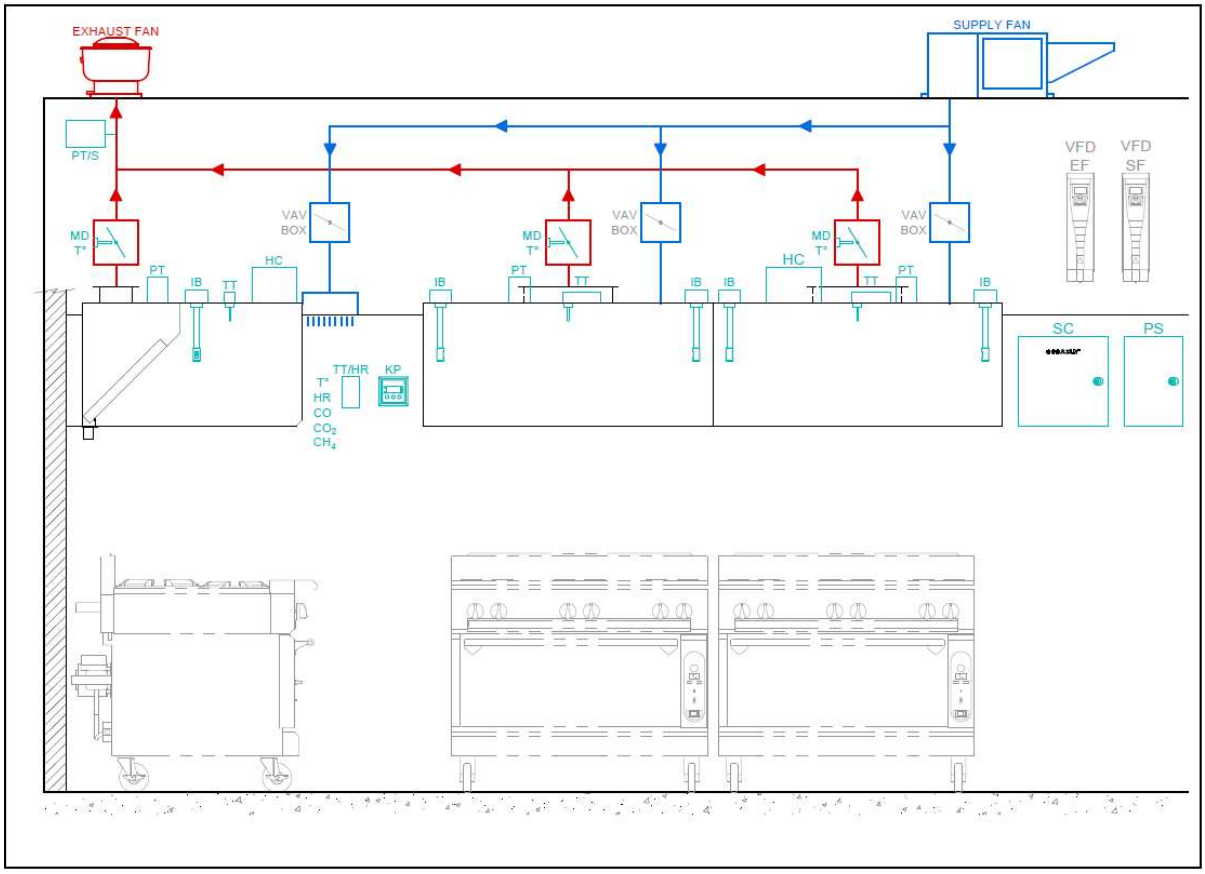


Figure 1 – ECOAZUR® COMPONENTS

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

COMPLIANCE

The ECOAZUR® V6 system complies with the IMC (International Mechanical Code), NEC (National Electric Code), CEC (Canadian Electrical Code), and NFPA 96.

The system conforms to the following:

- UL 710 - Exhaust Hoods for Commercial Cooking Equipment
- CAN/ULC-S646 - Standard for Exhaust Hoods and Related Controls for Commercial and Institutional Cooking Equipment
- UL 1978 - Grease Ducts
- NSF/ANSI 2 - Food Equipment
- CE Directive 2006/42/EC - Machinery
- CE Directive 2014/30/EU - Electromagnetic compatibility
- CE Directive 2011/65/EU, 2015/863 - RoHS
- EN 60204-1 - Electrical equipment of machines, Part 1: General requirements
    - *Provisions for compliance:* The final assembler of the ECOAZUR® system is responsible for installing:
        - A supply disconnecting device
        - Branch circuit protection
- EN 61000-6-2 (2019) - Generic standards - Immunity for Industrial Environments
- EN 61000-6-4 (2019) - Generic standards - Standard for Industrial Environments
- Electromagnetic Compatibility Regulations 2016 No. 1091Dfdfdf
- FCC part 15 subpart B
- ICES-003

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

ENVIRONMENTAL SPECIFICATIONS

Attribute	Value
Temperature & Rel. Humidity (Operating)	Component specific
Temperature & Rel. Humidity (Storage & Transportation)	-40 to 60°C (-40 to 140°F) 10 to 90%RH, non-condensing, indoor location
Shock	Not allowed
Free Fall	Not allowed
Emissions	EN 61000-6-3
Electrostatic Discharge Immunity	IEC 61000-4-2: Contact: ±4kV Air: ±2kV, ±4kV, ±8kV
Radiated Electromagnetic Field Immunity	IEC 61000-4-3: 80 to 1,000MHz: 10V/m 1 to 6GHz: 3V/m
Electric Fast Transient Immunity	IEC 61000-4-4: Power: ±2kV @ 5kHz I/O Ports: ±1kV @ 5kHz Communication Ports: ±1kV @ 5kHz
Surge Immunity	IEC 61000-4-5: Power: ±2kV L-PE / ±1 kV L-L I/O Ports: N/A Communication Ports: N/A
Conducted Immunity	IEC 61000-4-6: Power: 10V I/O Ports: 10V Communication Ports: 10V
Power Frequency Magnetic Field Immunity	IEC 61000-4-8: Continuous Field: 100A/m (60s) 50Hz & 60Hz

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

SYSTEM SPECIFICATIONS

System Controller M/N	V6SC-100 ECOAZUR Lite	V6SC-2xx (-3xx, -4xx)[1] ECOAZUR		
Application	3 short hoods or less, without mod. dampers	Small, medium, large kitchens, with or without modulating dampers and VAV boxes		
Ventilation Equipment	Up to 2 hardwired VFDs/ECMs or 4 Modbus RTU VFDs. A combined total of 4 Exhaust/Supply fans	Up to 8 hardwired VFDs/ECMs or 8 Modbus RTU VFDs (compatible profiles only). A combined total of 40 Exhaust/Supply fans, Modulating Dampers and VAV boxes.		
Hood Network Size	Max. 8 intelligent hood devices, no HC, no I/O extension	Max. 100 intelligent hood devices		
I/O Extension	N/A	V6SC-210, -250 (-310, -350, -410, -450) panels include the I/O extension		
Control Method	Temperature differential (Hood-Room), IRIS BLEU® Optical Detection, Dishwasher Status			
Communication[2]	BACnet/IP: BMS Modbus TCP: BMS (available with version 6.0.11 or later) 3 Modbus RTU comm. bus (2 slaves: BMS, HMI, 1 master: VFD & sensors)			
Connectivity	Ethernet, Wi-Fi, Wi-Fi Access Point			
Cooking Appliance Shutoff Device Integration	Electric gas valve and contactor supported for USA and Canada only (has not been evaluated for European Directive (EU) 2016/426)			
Cloud[3]:	Cloud Basic package: Lite dashboard, remote configuration (3 years included) Premium package: Energy Dashboard, remote configuration, notifications (SaaS soon available)			
User interface	1 Keypad	Multiple Keypads (max. of one per Hood Controller)		
Time Scheduling	Embedded Real Time Clock, SNTP Server synchronization, daylight saving mode			
Schedules	8 Weekly Schedules			
Zones / Rooms	1 Zone / 1 Room	Up to 4 Zones (air balancing) Up to 16 Rooms (room temp. sensors)		
Enclosure Material	V6SC-100 Painted Carbon Steel w/ elect. knockouts	V6SC-2xx Stainless Steel w/ elect. knockouts	V6SC-3xx Painted Carbon Steel	V6SC-4xx Stainless Steel
Enclosure Ratings	UL Type 1, IP 30	UL Type 1, IP30	UL Type 4, IP66 (indoor use only)	UL Type 4X, IP66 (indoor use only)
Electrical Rating Supply #1: Controls	115VAC/230VAC, 50/60Hz. External 15A/13A branch circuit breaker and disconnect device required.			
Electrical Rating Supply #2: Hood Lights	115VAC/230VAC, 50/60Hz. External 15A/13A branch circuit breaker and disconnect device required.			
Enclosure Dimensions H x W x D	406mm (16”) x 406mm (16”) x 152mm (6”)		406mm (16”) x 406mm (16”) x 172mm (6.8”)	
Power Supply Panels	Not supported	Supports up to 2 Power Supply Panels (24 VDC, 4A, up to 10 circuits)		
Agency Listing	cULus, CE, NSF, FCC			

[1] V6SC-3xx and V6SC-4xx are available upon request (nonstock items).

[2] BMS communication is supervisory only.

[3] Cloud Services not available in all countries, internet connection not included.

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

SYSTEM DESIGN RULES

For all systems, the following rules apply:

- Max. 4 Hood Controllers per System Controller hood network port (HN1 through HN8)
- Max. 1 Keypad per Hood Controller
- Max. 2 Power Supply panels per system
- Max. 11W per Modulating Dampers (MD)
- Max. 5W per VAV Box (VB)

When using Power Supply panels, each low-voltage circuits (24 VDC, 4A) has the following load limits:

- Max. 3 MDs, if up to 6 VBs
- Max. 4 MDs, if up to 4 VBs
- Max. 5 MDs, if up to 2 VBs
- Max. 6 MDs, if no VB

Additionally, each Power Supply panel low-voltage circuits (24 VDC, 4A) supports:

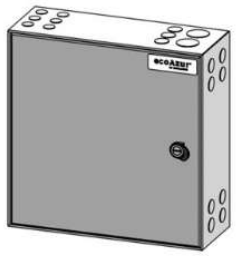
- Max. 4 Hood Controllers fully loaded with sensors
- A combined total of 250mA for external devices connected to 24 VDC auxiliary terminals ("24A" terminals on all HCs powered by the same low-voltage circuit)

When a fan speed is controlled based on a pressure feedback signal (PID loop), the Pressure Transmitter must be connected directly to the System Controller (port HN1 through HN8).

For more information concerning the ECOAZUR® system design rules, contact your Authorized Service Center.

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6SC-100 ECOAZUR® Lite System Controller



The System Controller (SC) is the central processor of the ECOAZUR® system and is responsible for controlling the kitchen ventilation, the hood lighting, and the cooking appliance shutoff devices. The system is designed to meet the requirements of NFPA 96, IMC, NEC, and CEC. The Lite System Controller is optimal for kitchens with up to 3 hoods with individual fans, and does not support Hood Controllers, Modulating Dampers and BMS communication.

System Capacity. Up to 8 intelligent hood sensors and keypads (RJ45) ● Up to 4 thermistor temp. probes (hardwired) ● Up to 4 ventilation equipment ● Up to 4 Modbus RTU VFDs/ECMs, or up to 2 hardwired VFDs/ECMs

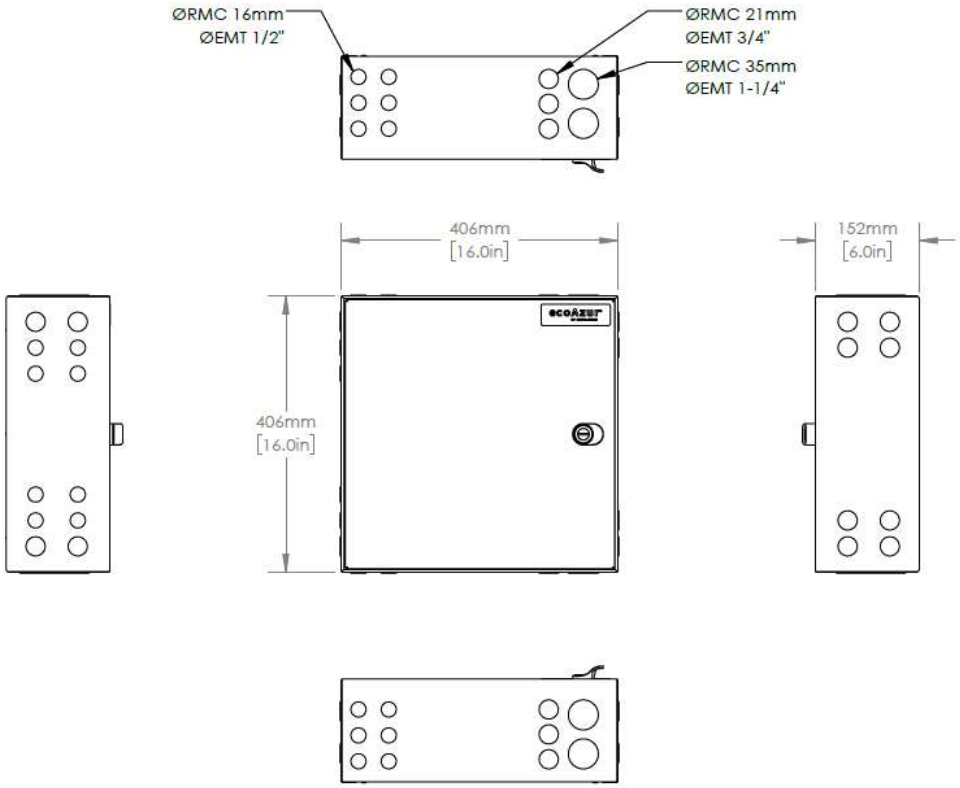
Key Features. Automatic start/stop of ventilation ● Dynamic adjustment of exhaust and supply airflow ● Accurate measurement of cooking activity based on temperature differential and smoke/vapor detection ● Hood Network comprised of intelligent devices with plug & play connections ● Time Scheduling ● Cloud-ready (Wi-Fi or Ethernet) ● On-board web server for system configuration (Wi-Fi Access Point or Ethernet) ● Interlocks (Fire Override, Bypass Override, Off Override) ● Fan status monitoring ● Integration of cooking appliance shutoff devices (USA & Canada only)

Supply 1	Function: DCKV controls†. 115/230 VAC, 1 PH, 50-60 HZ, 5.0/4.0A, with onboard 15A fuse
Supply 2	Function: Hood lights†. 115/230 VAC, 1 PH, 50/60 HZ, 10A, with onboard 15A fuse
Load 1	Function: Hood lights. 115/230 VAC, 1PH, 50/60 HZ, 10A
I/O (dedicated)	3 digital inputs, dry contact, for “Fire Override”, “Bypass Override” and “Off Override”, 24V DC sourcing
	3 digital outputs, for Cooking Appliance Shutoff devices: Gas Valve, Contactor, Shunt Trip Breaker, 3A max. (3 digital outputs combined), 115/230 VAC sourcing output (“Supply 1” voltage source)
I/O (configurable)	4 temperature inputs, 10k thermistor (Type III)
	2 analog inputs, 0-10V
	2 analog outputs, 0-10V
	4 digital inputs, dry contact, 24 VDC sourcing
	2 digital outputs, 24V DC sourcing, 100mA max.
	1 relay output, 250 VAC max., 10A max.
Terminals	12-18 AWG (0.75-4.0mm²), 0.5Nm (4.4lb-in), copper conductors only
Power Supply Panels	Does not support Power Supply Panels (V6PS-xxx)
Hood Network	8 communication ports (RJ45) for hood network devices, individual nonreplaceable fuses
Serial Comm.	2 Modbus RTU communication channels: S1: Not available, S2: Master (HMI, Ambient sensors), S3: VFDs, ECMs
Ethernet	1 RJ45 Ethernet port. Internet (INTELLINOX® Cloud Interface)
Wi-Fi	Wi-Fi Access Point (AP) – Wi-Fi capable devices (laptop, tablet or cell.) Wi-Fi Connection to the internet (INTELLINOX® Cloud Interface)
Cloud	Cloud-ready. SC to be connected to the internet via Ethernet or Wi-Fi. Internet access not included
Web Server	Embedded Web Server, accessible via Ethernet or Wi-Fi Access Point
Time Scheduling	Real-Time Clock, 8 weekly schedules
Battery	Battery CR2032 (for RTC only)
Configuration	Web based (via Web Server or INTELLINOX® Cloud Interface)
Operating Conditions	Temperature: 5 to 40°C (41 to 104°F) Humidity: 10 to 90%RH, non-condensing, indoor location

† Use a dedicated branch circuit to connect the System Controller's main power. Maximum branch circuit protection 15A.

Enclosure	Material: Carbon steel, Light Gray powder coating, 1.6mm (0.06in) thick
	Mounting: wall-mount
	Protection: UL Type 1, IP30
	Knockouts: (20) RMC 16mm, EMT 1/2”, (18) RMC 21mm, EMT 3/4”, (4) RMC 35mm, EMT 1-1/4”
Dimensions	406mm (16”) H x 406mm (16”) W x 152mm (6”) D
Weight	10.6kg (23.2lb)
Agency Listings	Refer to the Compliance section

Dimensional Drawing



Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6SC-200, -220 & -240 ECOAZUR® System Controller

The System Controller (SC) is the central processor of the ECOAZUR® system and is responsible for controlling the kitchen ventilation, the hood lighting, and the cooking appliance shutoff devices. The system is designed to meet the requirements of NFPA 96, IMC, NEC, and CEC. When used with Modulating Dampers, at least one Power Supply panel is required in addition to the SC.

System Capacity. Up to 100 intelligent devices (sensors, keypads, hood controllers & dampers) ● Up to 4 thermistor temp. probes (hardwired) ● Up to 40 ventilation equipment ● Up to 16 Modbus RTU VFDs/ECMs, or up to 2 hardwired VFDs/ECMs

Key Features. Automatic start/stop of ventilation ● Dynamic adjustment of exhaust and supply airflow ● Accurate measurement of cooking activity based on temperature differential and smoke/vapor detection ● Hood Network comprised of intelligent devices with plug & play connections ● Time Scheduling ● BMS integration (BACnet/IP, Modbus RTU) ● Cloud-ready (Wi-Fi or Ethernet) ● On-board web server for system configuration (Wi-Fi Access Point or Ethernet) ● Interlocks (Fire Override, Bypass Override, Off Override) ● Fan status monitoring ● Integration of cooking appliance shutoff devices (USA & Canada only) ● Keypad or 7" HMI door options

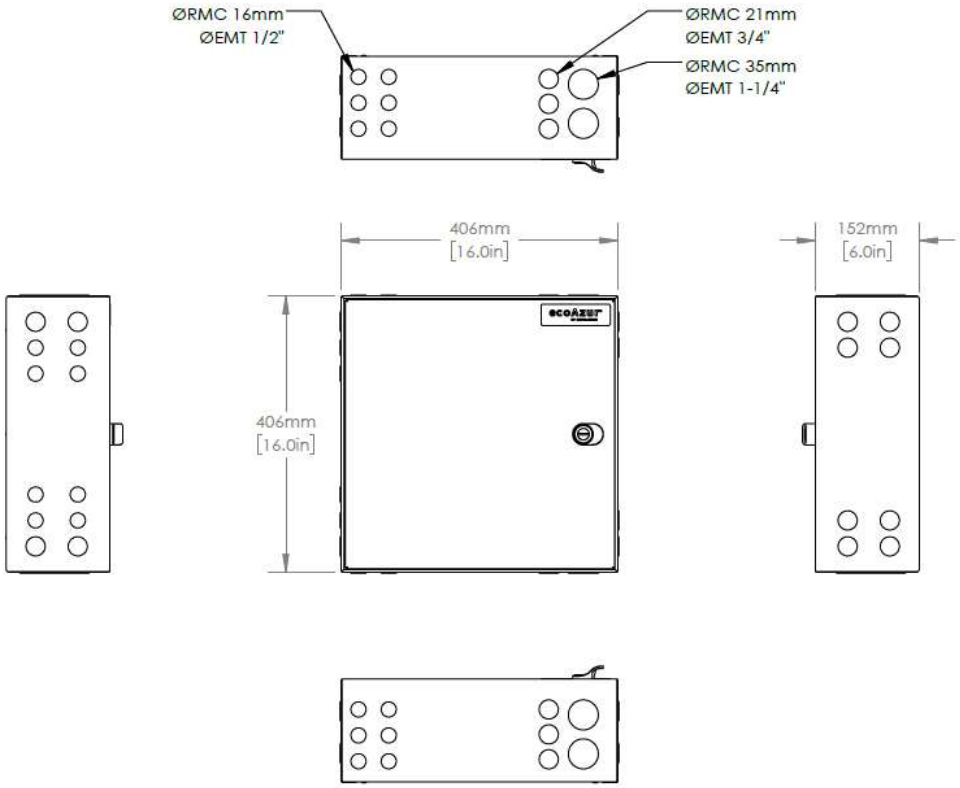
Supply 1	Function: DCKV controls†. 115/230 VAC, 1 PH, 50-60 HZ, 11.0/7.0A, with onboard 15A fuse
Supply 2	Function: Hood lights†. 115/230 VAC, 1 PH, 50/60 HZ, 10A, with onboard 15A fuse
Load 1	Function: Hood lights. 115/230 VAC, 1PH, 50/60 HZ, 10A
I/O (dedicated)	3 digital inputs, dry contact, for "Fire Override", "Bypass Override" and "Off Override", 24V DC sourcing
	3 digital outputs, for Cooking Appliance Shutoff devices: Gas Valve, Contactor, Shunt Trip Breaker, 3A max. (3 digital outputs combined), 115/230 VAC sourcing output ("Supply 1" voltage source)
I/O (configurable)	4 temperature inputs, 10k thermistor (Type III)
	2 analog inputs, 0-10V
	2 analog outputs, 0-10V
	4 digital inputs, dry contact, 24 VDC sourcing
	2 digital outputs, 24V DC sourcing, 100mA max.
	1 relay output, 250 VAC max., 10A max.
Terminals	12-18 AWG (0.75-4.0mm²), 0.5Nm (4.4lb-in), copper conductors only
Power Supply Panels	Does not support Power Supply Panels (V6PS-xxx)
Hood Network	8 communication ports (RJ45) for hood network devices, individual nonreplaceable fuses
Serial Comm.	3 Modbus RTU communication channels: S1: Slave (BMS), S2: Master (HMI, Ambient sensors), S3: VFDs, ECMs
Ethernet	1 RJ45 Ethernet port. Internet (INTELLINOX® Cloud Interface) and/or BMS (BACnet/IP)
Wi-Fi	Wi-Fi Access Point (AP) – Wi-Fi capable devices (laptop, tablet or cell.) connection to the SC Web Server Wi-Fi Connection to the internet (INTELLINOX® Cloud Interface)
Cloud	Cloud-ready. SC to be connected to the internet via Ethernet or Wi-Fi. Internet access not included
Web Server	Embedded Web Server, accessible via Ethernet or Wi-Fi Access Point
Time Scheduling	Real-Time Clock, 8 weekly schedules
Battery	Battery CR2032 (for RTC only)
Configuration	Web based (via Web Server or INTELLINOX® Cloud Interface)
Operating Conditions	Temperature: 5 to 40°C (41 to 104°F) Humidity: 10 to 90%RH, non-condensing, indoor location

† Use a dedicated branch circuit to connect the System Controller's main power. Maximum branch circuit protection 15A.

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

Enclosure	Material: 304 Stainless Steel, 1.6mm (0.06in) thick
	Mounting: wall-mount
	Protection: UL Type 1, IP30
	Knockouts: (20) RMC 16mm, EMT 1/2”, (18) RMC 21mm, EMT 3/4”, (4) RMC 35mm, EMT 1-1/4”
Dimensions	406mm (16”) H x 406mm (16”) W x 152mm (6”) D
Weight	10.6kg (23.2lb)
Agency Listings	Refer to the Compliance section

Dimensional Drawing



Product Numbering

System Controller	Standard	Keypad on door	HMI on door
	V6SC-200	V6SC-220	V6SC-240

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6SC-210, -230 & -250 ECOAZUR® System Controller, I/O Extension

The System Controller (SC) is the central processor of the ECOAZUR® system and is responsible for controlling the kitchen ventilation, the hood lighting, and the cooking appliance shutoff devices. The system is designed to meet the requirements of NFPA 96, IMC, NEC, and CEC. When used with Modulating Dampers, at least one Power Supply panel is required in addition to the SC.

System Capacity. Up to 100 intelligent devices (sensors, keypads, hood controllers & dampers) ● Up to 4 thermistor temp. probes (hardwired) ● Up to 40 ventilation equipment ● Up to 16 Modbus RTU VFDs/ECMs, or up to 8 hardwired VFDs/ECMs

Key Features. Automatic start/stop of ventilation ● Dynamic adjustment of exhaust and supply airflow ● Accurate measurement of cooking activity based on temperature differential and smoke/vapor detection ● Hood Network comprised of intelligent devices with plug & play connections ● Time Scheduling ● BMS integration (BACnet/IP, Modbus RTU) ● Cloud-ready (Wi-Fi or Ethernet) ● On-board web server for system configuration (Wi-Fi AP or Ethernet) ● Interlocks (Fire Override, Bypass Override, Off Override) ● Fan status monitoring ● Integration of cooking appliance shutoff devices (USA & Canada only) ● Keypad or 7" HMI door options

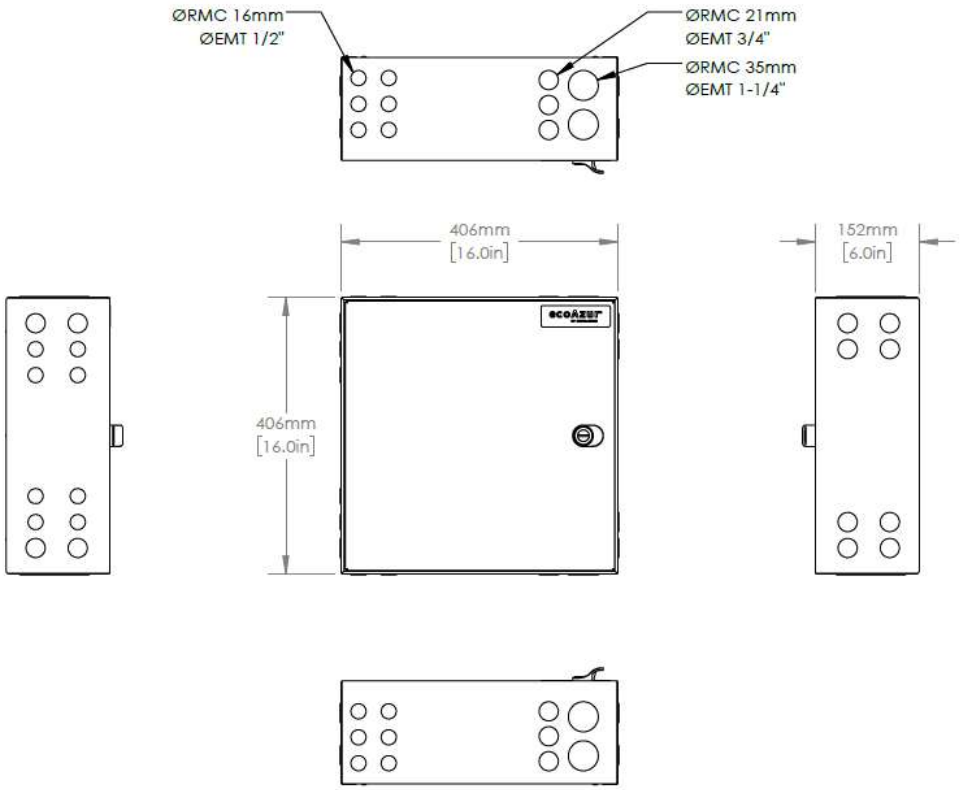
Supply 1	Function: DCKV controls†. 115/230 VAC, 1 PH, 50-60 HZ, 11.0/7.0A, with onboard 15A fuse
Supply 2	Function: Hood lights†. 115/230 VAC, 1 PH, 50/60 HZ, 10A, with onboard 15A fuse
Load 1	Function: Hood lights. 115/230 VAC, 1PH, 50/60 HZ, 10A
I/O (dedicated)	3 digital inputs, dry contact, for "Fire Override", "Bypass Override" and "Off Override", 24V DC sourcing
	3 digital outputs, for Cooking Appliance Shutoff devices: Gas Valve, Contactor, Shunt Trip Breaker, 3A max. (3 digital outputs combined), 115/230 VAC sourcing output ("Supply 1" voltage source)
I/O (configurable)	4 temperature inputs, 10k thermistor (Type III)
	4 analog inputs, 0-10V
	8 analog outputs, 0-10V
	8 digital inputs, dry contact, 24 VDC sourcing
	2 digital outputs, 24 VDC sourcing, 100mA max.
	1 relay output, 250 VAC max., 10A max.
	6 relay outputs, 24 VDC max., 5A max.
Terminals	12-18 AWG (0.75-4.0mm²), 0.5Nm (4.4lb-in), copper conductors only
Power Supply Panels	Support up to 2 Power Supply Panels (V6PS-2xx)
Hood Network	8 communication ports (RJ45) for hood network devices, individual nonreplaceable fuses
Serial Comm.	3 Modbus RTU communication channels: S1: Slave (BMS), S2: Master (HMI, Ambient sensors), S3: VFDs, ECMs
Ethernet	1 RJ45 Ethernet port. Internet (INTELLINOX® Cloud Interface) and/or BMS (BACnet/IP)
Wi-Fi	Wi-Fi Access Point (AP) – Wi-Fi capable devices (laptop, tablet or cell.) connection to the SC Web Server Wi-Fi Connection to the internet (INTELLINOX® Cloud Interface)
Cloud	Cloud-ready. SC to be connected to the internet via Ethernet or Wi-Fi. Internet access not included
Web Server	Embedded Web Server, accessible via Ethernet or Wi-Fi Access Point
Time Scheduling	Real-Time Clock, 8 weekly schedules
Battery	Battery CR2032 (for RTC only)
Configuration	Web based (via Web Server or INTELLINOX® Cloud Interface)
Operating Conditions	Temperature: 5 to 40°C (41 to 104°F) Humidity: 10 to 90%RH, non-condensing, indoor location

† Use a dedicated branch circuit to connect the System Controller's main power. Maximum branch circuit protection 15A.

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

Enclosure	Material: 304 Stainless Steel, 1.6mm (0.06in) thick
	Mounting: wall-mount
	Protection: UL Type 1, IP30
	Knockouts: (20) RMC 16mm, EMT 1/2”, (18) RMC 21mm, EMT 3/4”, (4) RMC 35mm, EMT 1-1/4”
Door Options	Keypad Recessed (see V6KP-100) or 7” HMI
Dimensions	406mm (16”) H x 406mm (16”) W x 152mm (6”) D
Weight	10.8kg (23.7lb)
Agency Listings	Refer to the Compliance section

Dimensional Drawing



Product Numbering

System Controller	Standard	Keypad on door	HMI on door
w/ Extension	V6SC-210	V6SC-230	V6SC-250

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6SC-300 ECOAZUR® System Controller, UL Type 4

The System Controller (SC) is the central processor of the ECOAZUR® system and is responsible for controlling the kitchen ventilation, the hood lighting, and the cooking appliance shutoff devices. The system is designed to meet the requirements of NFPA 96, IMC, NEC, and CEC. When used with Modulating Dampers, at least one Power Supply panel is required in addition to the SC.

System Capacity. Up to 100 intelligent devices (sensors, keypads, hood controllers & dampers) ● Up to 4 thermistor temp. probes (hardwired) ● Up to 40 ventilation equipment ● Up to 16 Modbus RTU VFDs/ECMs, or up to 8 hardwired VFDs/ECMs

Key Features. Automatic start/stop of ventilation ● Dynamic adjustment of exhaust and supply airflow ● Accurate measurement of cooking activity based on temperature differential and smoke/vapor detection ● Hood Network comprised of intelligent devices with plug & play connections ● Time Scheduling ● BMS integration (BACnet/IP, Modbus RTU) ● Cloud-ready (Wi-Fi or Ethernet) ● On-board web server for system configuration (Wi-Fi Access Point or Ethernet) ● Interlocks (Fire Override, Bypass Override, Off Override) ● Fan status monitoring ● Integration of cooking appliance shutoff devices (USA & Canada only)

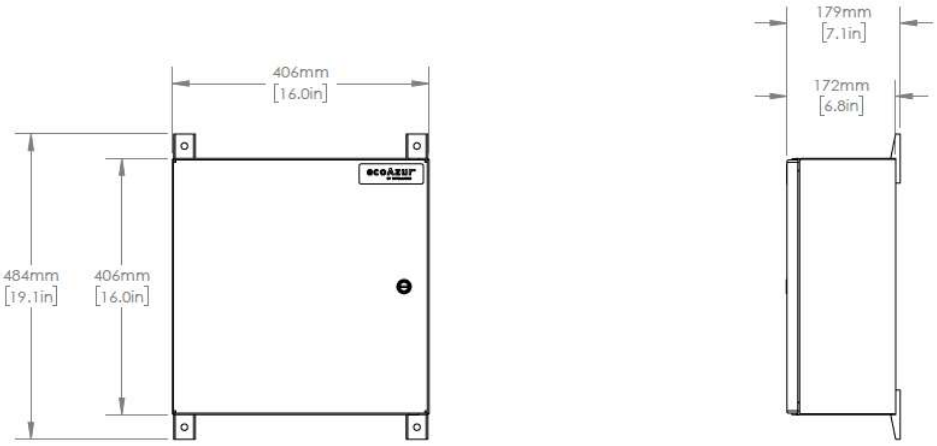
Supply 1	Function: DCKV controls†. 115/230 VAC, 1 PH, 50-60 HZ, 11.0/7.0A, with onboard 15A fuse
Supply 2	Function: Hood lights†. 115/230 VAC, 1 PH, 50/60 HZ, 10A, with onboard 15A fuse
Load 1	Function: Hood lights. 115/230 VAC, 1PH, 50/60 HZ, 10A
I/O (dedicated)	3 digital inputs, dry contact, for “Fire Override”, “Bypass Override” and “Off Override”, 24V DC sourcing
	3 digital outputs, for Cooking Appliance Shutoff devices: Gas Valve, Contactor, Shunt Trip Breaker, 3A max. (3 digital outputs combined), 115/230 VAC sourcing output (“Supply 1” voltage source)
I/O (configurable)	4 temperature inputs, 10k thermistor (Type III)
	2 analog inputs, 0-10V
	2 analog outputs, 0-10V
	4 digital inputs, dry contact, 24 VDC sourcing
	2 digital outputs, 24V DC sourcing, 100mA max.
	1 relay output, 250 VAC max., 10A max.
Terminals	12-18 AWG (0.75-4.0mm²), 0.5Nm (4.4lb-in), copper conductors only
Power Supply Panels	Does not support Power Supply Panels (V6PS-xxx)
Hood Network	8 communication ports (RJ45) for hood network devices, individual nonreplaceable fuses
Serial Comm.	3 Modbus RTU communication channels: S1: Slave (BMS), S2: Master (HMI, Ambient sensors), S3: VFDs, ECMs
Ethernet	1 RJ45 Ethernet port. Internet (INTELLINOX® Cloud Interface) and/or BMS (BACnet/IP)
Wi-Fi	Wi-Fi Access Point (AP) – Wi-Fi capable devices (laptop, tablet or cell.) connection to the SC Web Server Wi-Fi Connection to the internet (INTELLINOX® Cloud Interface)
Cloud	Cloud-ready. SC to be connected to the internet via Ethernet or Wi-Fi. Internet access not included
Web Server	Embedded Web Server, accessible via Ethernet or Wi-Fi Access Point
Time Scheduling	Real-Time Clock, 8 weekly schedules
Battery	Battery CR2032 (for RTC only)
Configuration	Web based (via Web Server or INTELLINOX® Cloud Interface)
Operating Conditions	Temperature: 5 to 40°C (41 to 104°F) Humidity: 10 to 90%RH, non-condensing, indoor location

† Use a dedicated branch circuit to connect the System Controller's main power. Maximum branch circuit protection 15A.

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

Enclosure	Material: Carbon Steel, with RAL 7035 Lt. Gray powder coating, 1.6mm (0.06in) thick
	Mounting: wall-mount
	Protection: UL Type 4, IP66
Dimensions	406mm (16”) H x 406mm (16”) W x 172mm (6.8”) D
Weight	11.2kg (24.6lb)
Agency Listings	Refer to the Compliance section

Dimensional Drawing



Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6SC-310 ECOAZUR® System Controller, I/O Extension, UL Type 4

The System Controller (SC) is the central processor of the ECOAZUR® system and is responsible for controlling the kitchen ventilation, the hood lighting, and the cooking appliance shutoff devices. The system is designed to meet the requirements of NFPA 96, IMC, NEC, and CEC. When used with Modulating Dampers, at least one Power Supply panel is required in addition to the SC.

System Capacity. Up to 100 intelligent devices (sensors, keypads, hood controllers & dampers) ● Up to 4 thermistor temp. probes (hardwired) ● Up to 40 ventilation equipment ● Up to 16 Modbus RTU VFDs/ECMs, or up to 8 hardwired VFDs/ECMs

Key Features. Automatic start/stop of ventilation ● Dynamic adjustment of exhaust and supply airflow ● Accurate measurement of cooking activity based on temperature differential and smoke/vapor detection ● Hood Network comprised of intelligent devices with plug & play connections ● Time Scheduling ● BMS integration (BACnet/IP, Modbus RTU) ● Cloud-ready (Wi-Fi or Ethernet) ● On-board web server for system configuration (Wi-Fi Access Point or Ethernet) ● Interlocks (Fire Override, Bypass Override, Off Override) ● Fan status monitoring ● Integration of cooking appliance shutoff devices (USA & Canada only)

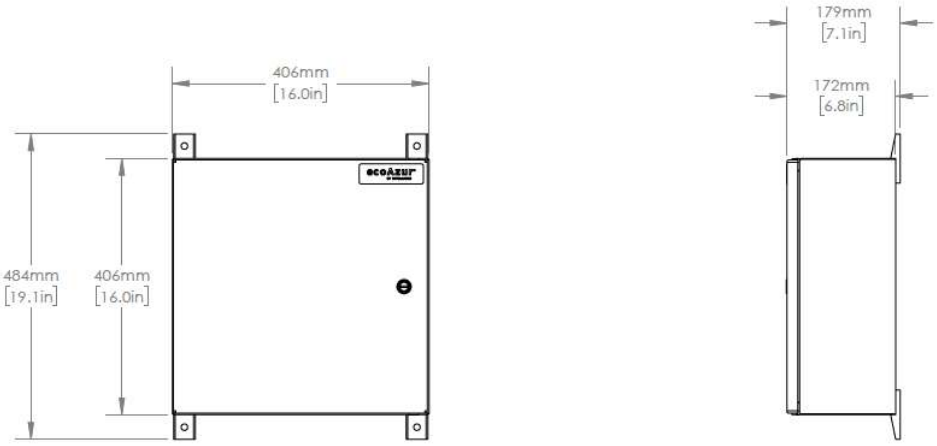
Supply 1	Function: DCKV controls†. 115/230 VAC, 1 PH, 50-60 HZ, 11.0/7.0A, with onboard 15A fuse
Supply 2	Function: Hood lights†. 115/230 VAC, 1 PH, 50/60 HZ, 10A, with onboard 15A fuse
Load 1	Function: Hood lights. 115/230 VAC, 1PH, 50/60 HZ, 10A
I/O (dedicated)	3 digital inputs, dry contact, for “Fire Override”, “Bypass Override” and “Off Override”, 24V DC sourcing
	3 digital outputs, for Cooking Appliance Shutoff devices: Gas Valve, Contactor, Shunt Trip Breaker, 3A max. (3 digital outputs combined), 115/230 VAC sourcing output (“Supply 1” voltage source)
I/O (configurable)	4 temperature inputs, 10k thermistor (Type III)
	4 analog inputs, 0-10V
	8 analog outputs, 0-10V
	8 digital inputs, dry contact, 24 VDC sourcing
	2 digital outputs, 24 VDC sourcing, 100mA max.
	1 relay output, 250 VAC max., 10A max.
	6 relay outputs, 24 VDC max., 5A max.
Terminals	12-18 AWG (0.75-4.0mm²), 0.5Nm (4.4lb-in), copper conductors only
Power Supply Panels	Support up to 2 Power Supply Panels (V6PS-3xx)
Hood Network	8 communication ports (RJ45) for hood network devices, individual nonreplaceable fuses
Serial Comm.	3 Modbus RTU communication channels: S1: Slave (BMS), S2: Master (HMI, Ambient sensors), S3: VFDs, ECMs
Ethernet	1 RJ45 Ethernet port. Internet (INTELLINOX® Cloud Interface) and/or BMS (BACnet/IP)
Wi-Fi	Wi-Fi Access Point (AP) – Wi-Fi capable devices (laptop, tablet or cell.) connection to the SC Web Server Wi-Fi Connection to the internet (INTELLINOX® Cloud Interface)
Cloud	Cloud-ready. SC to be connected to the internet via Ethernet or Wi-Fi. Internet access not included
Web Server	Embedded Web Server, accessible via Ethernet or Wi-Fi Access Point
Time Scheduling	Real-Time Clock, 8 weekly schedules
Battery	Battery CR2032 (for RTC only)
Configuration	Web based (via Web Server or INTELLINOX® Cloud Interface)
Operating Conditions	Temperature: 5 to 40°C (41 to 104°F) Humidity: 10 to 90%RH, non-condensing, indoor location

† Use a dedicated branch circuit to connect the System Controller's main power. Maximum branch circuit protection 15A.

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

Enclosure	Material: Carbon Steel, with RAL 7035 Lt. Gray powder coating, 1.6mm (0.06in) thick
	Mounting: wall-mount
	Protection: UL Type 4, IP66
Dimensions	406mm (16”) H x 406mm (16”) W x 172mm (6.8”) D
Weight	11.4kg (25.1lb)
Agency Listings	Refer to the Compliance section

Dimensional Drawing



Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6SC-410 ECOAZUR® Industrial System Controller, I/O Extension, UL Type 4X

The System Controller (SC) is the central processor of the ECOAZUR® system and is responsible for controlling the kitchen ventilation, the hood lighting, and the cooking appliance shutoff devices. The system is designed to meet the requirements of NFPA 96, IMC, NEC, and CEC. With its industrial design, it may be located in an area requiring washdown cleaning. When used with Modulating Dampers, at least one Power Supply panel is required in addition to the SC.

System Capacity. Up to 100 intelligent devices (sensors, keypads, hood controllers & dampers) ● Up to 4 thermistor temp. probes (hardwired) ● Up to 40 ventilation equipment ● Up to 16 Modbus RTU VFDs/ECMs, or up to 8 hardwired VFDs/ECMs

Key Features. Automatic start/stop of ventilation ● Dynamic adjustment of exhaust and supply airflow ● Accurate measurement of cooking activity based on temperature differential and smoke/vapor detection ● Hood Network comprised of intelligent devices with plug & play connections ● Time Scheduling ● BMS integration (BACnet/IP, Modbus RTU) ● Cloud-ready (Wi-Fi or Ethernet) ● On-board web server for system configuration (Wi-Fi Access Point or Ethernet) ● Interlocks (Fire Override, Bypass Override, Off Override) ● Fan status monitoring ● Integration of cooking appliance shutoff devices (USA & Canada only)

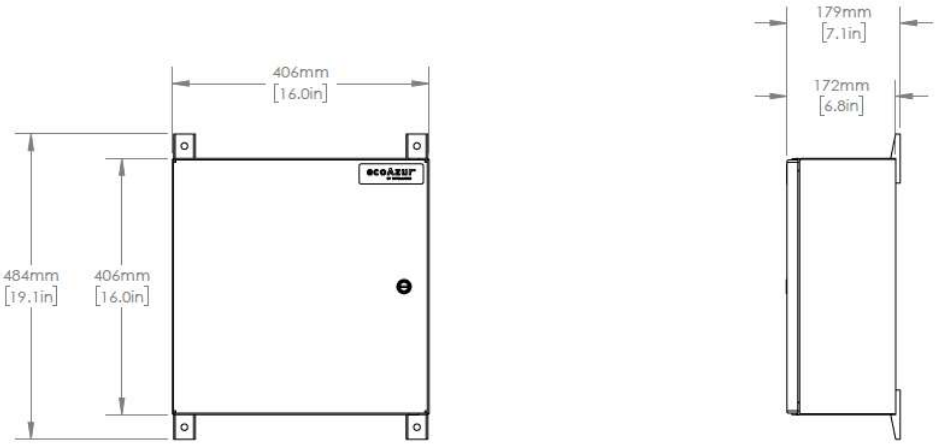
Supply 1	Function: DCKV controls†. 115/230 VAC, 1 PH, 50-60 HZ, 11.0/7.0A, with onboard 15A fuse
Supply 2	Function: Hood lights†. 115/230 VAC, 1 PH, 50/60 HZ, 10A, with onboard 15A fuse
Load 1	Function: Hood lights. 115/230 VAC, 1PH, 50/60 HZ, 10A
I/O (dedicated)	3 digital inputs, dry contact, for “Fire Override”, “Bypass Override” and “Off Override”, 24V DC sourcing
	3 digital outputs, for Cooking Appliance Shutoff devices: Gas Valve, Contactor, Shunt Trip Breaker, 3A max. (3 digital outputs combined), 115/230 VAC sourcing output (“Supply 1” voltage source)
I/O (configurable)	4 temperature inputs, 10k thermistor (Type III)
	4 analog inputs, 0-10V
	8 analog outputs, 0-10V
	8 digital inputs, dry contact, 24 VDC sourcing
	2 digital outputs, 24 VDC sourcing, 100mA max.
	1 relay output, 250 VAC max., 10A max.
	6 relay outputs, 24 VDC max., 5A max.
Terminals	12-18 AWG (0.75-4.0mm²), 0.5Nm (4.4lb-in), copper conductors only
Power Supply Panels	Support up to 2 Power Supply Panels (V6PS-4xx)
Hood Network	8 communication ports (RJ45) for hood network devices, individual nonreplaceable fuses
Serial Comm.	3 Modbus RTU communication channels: S1: Slave (BMS), S2: Master (HMI, Ambient sensors), S3: VFDs, ECMs
Ethernet	1 RJ45 Ethernet port. Internet (INTELLINOX® Cloud Interface) and/or BMS (BACnet/IP)
Wi-Fi	Wi-Fi Access Point (AP) – Wi-Fi capable devices (laptop, tablet or cell.) connection to the SC Web Server Wi-Fi Connection to the internet (INTELLINOX® Cloud Interface)
Cloud	Cloud-ready. SC to be connected to the internet via Ethernet or Wi-Fi. Internet access not included
Web Server	Embedded Web Server, accessible via Ethernet or Wi-Fi Access Point
Time Scheduling	Real-Time Clock, 8 weekly schedules
Battery	Battery CR2032 (for RTC only)
Configuration	Web based (via Web Server or INTELLINOX® Cloud Interface)
Operating Conditions	Temperature: 5 to 40°C (41 to 104°F) Humidity: 10 to 90%RH, non-condensing, indoor location

† Use a dedicated branch circuit to connect the System Controller's main power. Maximum branch circuit protection 15A.

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

Enclosure	Material: 304 Stainless steel, 1.6mm (0.06in) thick
	Mounting: wall-mount
	Protection: UL Type 4X, IP66 – indoor use only
Dimensions	406mm (16”) H x 406mm (16”) W x 172mm (6.8”) D
Weight	11.7kg (25.8lb)
Agency Listings	Refer to the Compliance section

Dimensional Drawing



Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6PS-210 & -220 ECOAZUR® Power Supply, UL Type 1

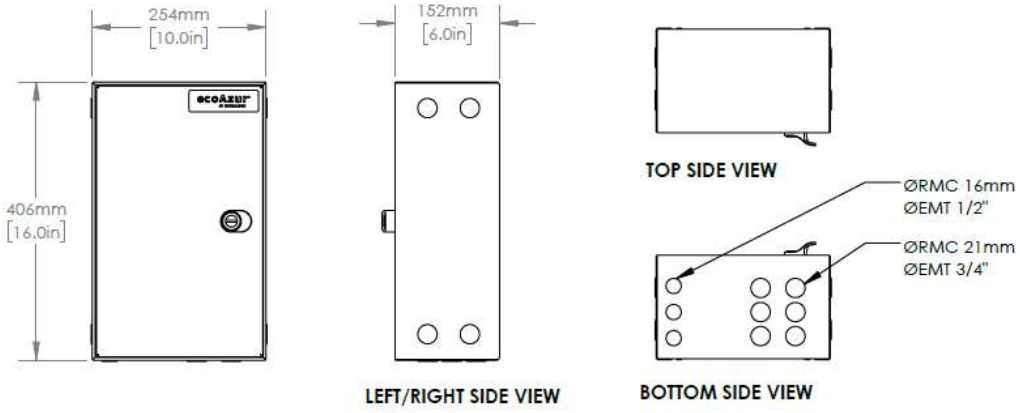
A Power Supply (PS) panel is required when the ECOAZUR® DCKV system involves exhaust Modulating Dampers (MDs) and/or supply air VAV Boxes (VBs). Powered by a System Controller (SC) equipped with an I/O extension, the PS converts 115/230 VAC to multiple low-voltage supply circuits (24 VDC, 4 Amp). Low-voltage circuits are responsible for providing power to Hood Controllers supporting MDs or VBs.

The PS is typically located in proximity to either the SC or the HCs it powers.

Key Features. NEC Class 2 rated supply circuits ● Compatible with V6HC-2XX series HCs

Supply	115/230 VAC, 1 PH, 50-60 HZ, supplied by System Controller	
Supply Terminals	12-14 AWG (2.5-4.0mm²), 0.8Nm (7.1lb-in)	
Load	**2 Circuits**	24 VDC, NEC Class 2, 4 A Circuits
	5 Circuits	24 VDC, NEC Class 2, 4 A Circuits
Load Terminals	16-18 AWG (0.75-1.5mm²), 0.5Nm (4.4lb-in), copper conductors only	
Operating Conditions	Temperature: 5 to 40°C (41 to 104°F) Humidity: 10 to 90%RH, non-condensing, indoor location	
Enclosure	Material: 304 Stainless Steel, 1.6mm (0.06in) thick	
	Mounting: wall-mount	
	Protection: UL Type 1, IP30	
	Knockouts: (3) RMC 16mm, EMT 1/2”, (14) RMC 21mm, EMT 3/4”	
Dimensions	406mm (16”) H x 254mm (10”) W x 152mm (6”) D	
Weight	**2 Circuits**	7.1kg (15.6lb)
	5 Circuits	9.2kg (20.3lb)
Agency Listings	Refer to the Compliance section	

Dimensional Drawing



Product Numbering

Power Supply,	2 Circuits	5 Circuits
UL Type 1	V6PS-210	V6PS-220

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6PS-310 & -320 ECOAZUR® Power Supply, UL Type 4

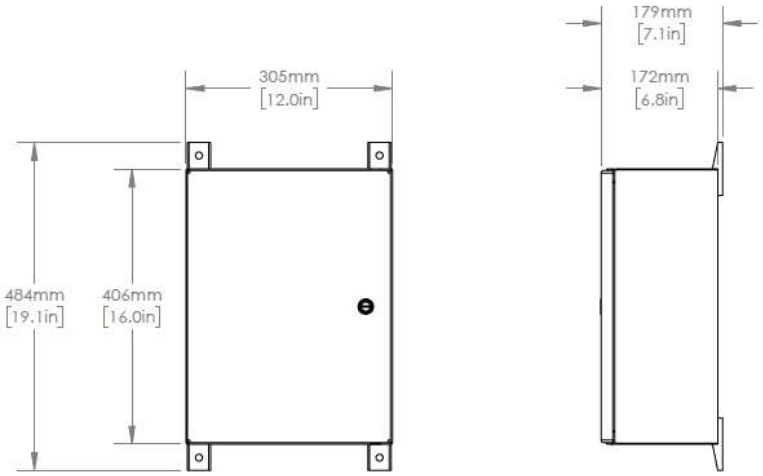
A Power Supply (PS) panel is required when the ECOAZUR® DCKV system involves exhaust Modulating Dampers (MDs) and/or supply air VAV Boxes (VBs). Powered by a System Controller (SC) equipped with an I/O extension, the PS converts 115/230 VAC to multiple low-voltage supply circuits (24 VDC, 4 Amp). Low-voltage circuits are responsible for providing power to Hood Controllers supporting MDs or VBs.

The PS is typically located in proximity to either the SC or the HCs it powers.

Key Features. NEC Class 2 rated supply circuits ● Compatible with V6HC-2XX series HCs

Supply	115/230 VAC, 1 PH, 50-60 HZ, supplied by System Controller	
Supply Terminals	12-14 AWG (2.5-4.0mm²), 0.8Nm (7.1lb-in)	
Load	**2 Circuits**	24 VDC, NEC Class 2, 4 A Circuits
	5 Circuits	24 VDC, NEC Class 2, 4 A Circuits
Load Terminals	16-18 AWG (0.75-1.5mm²), 0.5Nm (4.4lb-in), copper conductors only	
Operating Conditions	Temperature: 5 to 40°C (41 to 104°F)	
	Humidity: 10 to 90%RH, non-condensing, indoor location	
Enclosure	Material: Carbon steel, with RAL 7035 Lt. Gray powder coating, 1.6mm (0.06in) thick	
	Mounting: wall-mount	
	Protection: UL Type 4, IP66	
Dimensions	406mm (16”) H x 254mm (10”) W x 172mm (6.8”) D	
Weight	**2 Circuits**	8.8kg (19.4lb)
	5 Circuits	10.9kg (24.0lb)
Agency Listings	Refer to the Compliance section	

Dimensional Drawing



Product Numbering

Power Supply,	2 Circuits	5 Circuits
UL Type 4	V6PS-310	V6PS-320

Specifications are subject to change as updates are completed

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

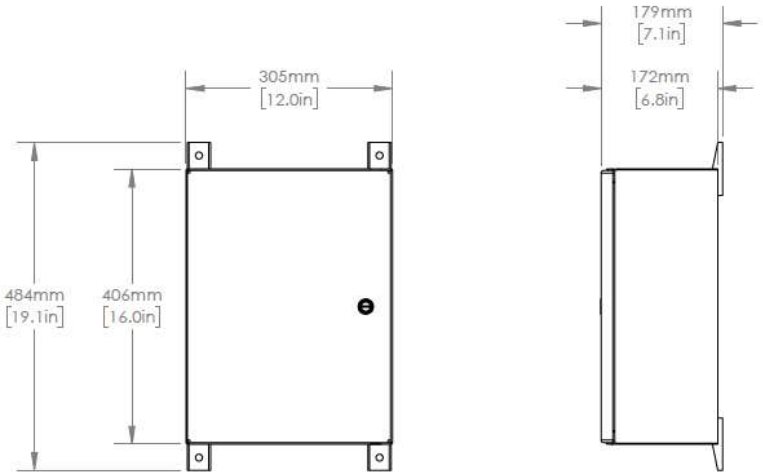
V6PS-410 & -420 ECOAZUR® Industrial Power Supply, UL Type 4X

When Modulating Dampers are present, in systems with multiple hoods connected to a single exhaust fan, the Power Supply panel is used to provide extra power to Hood Controllers connected to exhaust and supply dampers. With its industrial design, it may be located in an area requiring washdown cleaning.

Product Capacity. Up to 5 independent circuits (24 VDC, Class 2) ● Supports up to 20 Modulating Dampers

Supply	115/230 VAC, 1 PH, 50-60 HZ, supplied by System Controller	
Supply Terminals	12-14 AWG (2.5-4.0mm²), 0.8Nm (7.1lb-in)	
Load	**2 Circuits**	24 VDC, NEC Class 2, 4 A Circuits
	5 Circuits	24 VDC, NEC Class 2, 4 A Circuits
Load Terminals	16-18 AWG (0.75-1.5mm²), 0.5Nm (4.4lb-in), copper conductors only	
Operating Conditions	Temperature: 5 to 40°C (41 to 104°F)	
	Humidity: 10 to 90%RH, non-condensing, indoor location	
Enclosure	Material: 304 Stainless steel, 1.6mm (0.06in) thick	
	Mounting: wall-mount	
	Protection: UL Type 4X, IP66 – indoor use only	
Dimensions	406mm (16”) H x 254mm (10”) W x 172mm (6.8”) D	
Weight	**2 Circuits**	9.2kg (20.2lb)
	5 Circuits	11.3kg (24.9lb)
Agency Listings	Refer to the Compliance section	

Dimensional Drawing



Product Numbering

Power Supply, UL Type 4X	**2 Circuits**	**5 Circuits**
	V6PS-410	V6PS-420

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

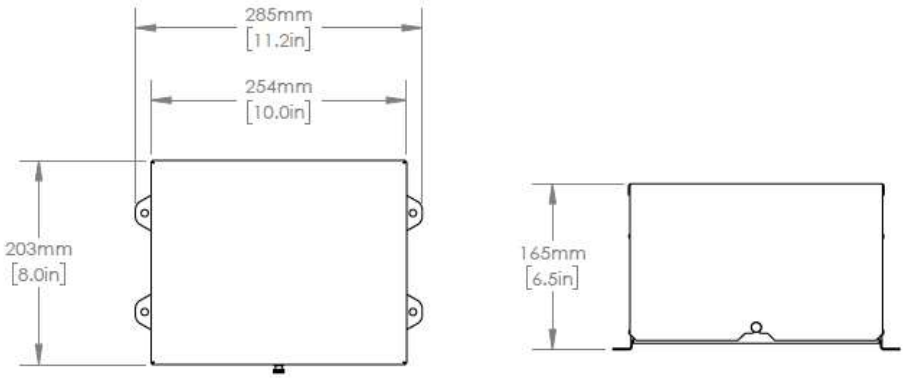
V6HC-100 ECOAZUR® Hood Controller

The Hood Controller (HC) acts as a hub, relaying hood sensor information to the System Controller. Positioned atop a hood, the HC significantly reduces the number of cables between the hoods and the SC, thereby minimizing overall installation time and costs.

Key Features. Supports 8 ECOAZUR® intelligent devices (TT, IB, PT, KP, HC) ● Plug & play (RJ45) network ports ● Diagnostic LEDs for 24V and for communication status ● Thermistor input for room temp. ● Digital input for monitoring of external equipment such as a dishwasher ● Storage space for coiling excess cable ● Brackets for mounting on top of the hood (welded studs)

Power Supply	24 VDC, NEC Class 2 power source, through network cable
Power Consumption	0.6W
I/O	1 temperature input, 10k thermistor (Type III)
(configurable)	1 digital input, dry contact, 24 VDC sourcing
Hood Network	8 RJ45 comm. ports dedicated to ECOAZUR® intelligent devices (TT, IB, PT, KP & HC), excluding MDs & VBs
	1 RJ45 uplink communication port, connects to ECOAZUR® SC or parent HC
Operating Conditions	Temperature: 5 to 55°C (41 to 131°F) Humidity: 10 to 90%RH, non-condensing, indoor location
Material	Enclosure: Galvanized steel, 1.3mm (0.05”) thick
Knockout(s)	12 knockouts, RMC 21mm, EMT 3/4”
	3 knockouts, RMC 35 mm, EMT 1-1/4”
Dimensions	285mm (11.2”) W x 203mm (8”) D x 165mm (6.5”) H
Weight	3.0kg (6.6lb)
Agency Listings	Refer to the Compliance section

Dimensional Drawing



Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

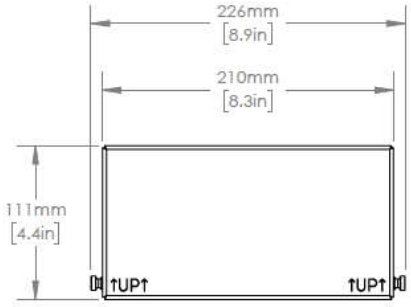
V6HC-110 ECOAZUR® Hood Controller, rod mount

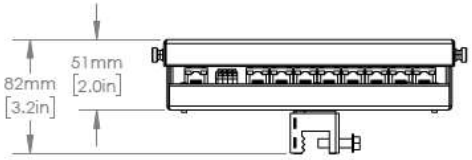
The Hood Controller (HC) acts as a hub, relaying hood sensor information to the System Controller. Positioned atop a hood, the HC significantly reduces the number of cables between the hoods and the SC, thereby minimizing overall installation time and costs.

Key Features. Supports 8 ECOAZUR® intelligent devices (TT, IB, PT, KP, HC) ● Plug & play (RJ45) network ports ● Diagnostic LEDs for 24V and for communication status ● Thermistor input for room temp. ● Digital input for monitoring of external equipment such as a dishwasher ● Storage space for coiling excess cable ● Brackets for mounting on a threaded rod

Power Supply	24 VDC, NEC Class 2 power source, through network cable
Power Consumption	0.6W
I/O	1 temperature input, 10k thermistor (Type III)
(configurable)	1 digital input, dry contact, 24 VDC sourcing
Hood Network	8 RJ45 comm. ports dedicated to ECOAZUR® intelligent devices (TT, IB, PT, KP & HC), excluding MDs & VBs
	1 RJ45 uplink communication port, connects to ECOAZUR® SC or parent HC
Operating Conditions	Temperature: 5 to 55°C (41 to 131°F) Humidity: 10 to 90%RH, non-condensing, indoor location
Material	Enclosure: Galvanized steel, 1.3mm (0.05”) thick
Dimensions	226mm (8.9”) W x 111mm (4.4”) D x 82mm (3.2”) H
Weight	0.9kg (2.0lb)
Agency Listings	Refer to the Compliance section

Dimensional Drawing





Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6HC-200 ECOAZUR® Hood Controller, supports MDs

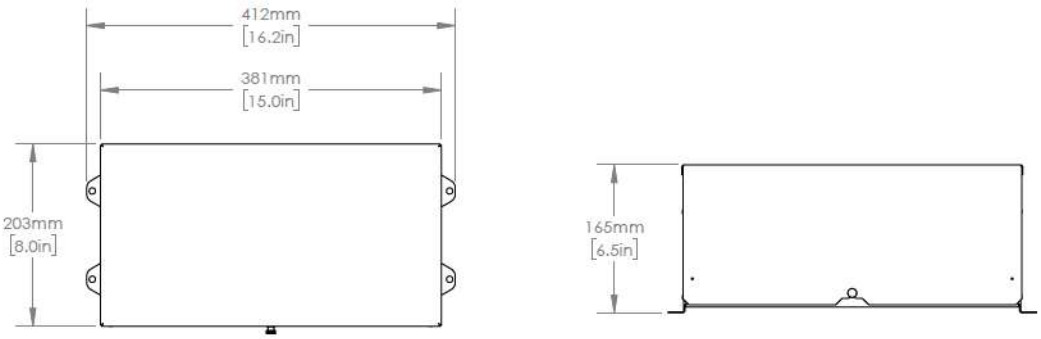
The Hood Controller (HC) acts as a hub, relaying hood sensor information to the System Controller. Positioned atop a hood, the HC significantly reduces the number of cables between the hoods and the SC, thereby minimizing overall installation time and costs.

The V6HC-200 series also supports connections for 4 Modulating Dampers (MDs), thus requires low-voltage power from an ECOAZUR® Power Supply panel.

Key Features. Supports 8 ECOAZUR® intelligent devices (TT, IB, PT, KP, HC) and 4 MDs ● Plug & play (RJ45) network ports ● Diagnostic LEDs for 24V and for communication status ● Thermistor input for room temp. ● Digital input for monitoring of external equipment such as a dishwasher ● Storage space for coiling excess cable ● Brackets for mounting on top of the hood (welded studs)

Power Supply	24 VDC, NEC Class 2 power source, supplied by ECOAZUR® Power Supply panel (PS)
Power Consumption	0.8W
I/O (configurable)	1 temperature input, 10k thermistor (Type III)
	1 digital input, dry contact, 24 VDC sourcing
	1 digital output, 24V DC sourcing, 100mA max.
	1 analog output, 0-10V
Terminals	16-18 AWG (0.75-1.5mm²), 0.5Nm (4.4lb-in), copper conductors only
Hood Network	8 RJ45 comm. ports dedicated for ECOAZUR® intelligent devices (TT, IB, PT, KP & HC), excluding MDs & VBs
	4 RJ45 communication ports dedicated for ECOAZUR® MDs
	1 RJ45 uplink communication port, connects to ECOAZUR® SC or parent HC
Operating Conditions	Temperature: 5 to 55°C (41 to 131°F) Humidity: 10 to 90%RH, non-condensing, indoor location
Material	Enclosure: Galvanized steel, 1.3mm (0.05”) thick
Knockout(s)	14 knockouts, RMC 21mm, EMT 3/4”
	3 knockouts, RMC 35 mm, EMT 1-1/4”
Dimensions	412mm (16.2”) W x 203mm (8”) D x 165mm (6.5”) H
Weight	4.3kg (9.5lb)
Agency Listings	Refer to the Compliance section

Dimensional Drawing



Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6HC-210 ECOAZUR® Hood Controller, supports 3 MDs & 1 VB

c UL us LISTED CE

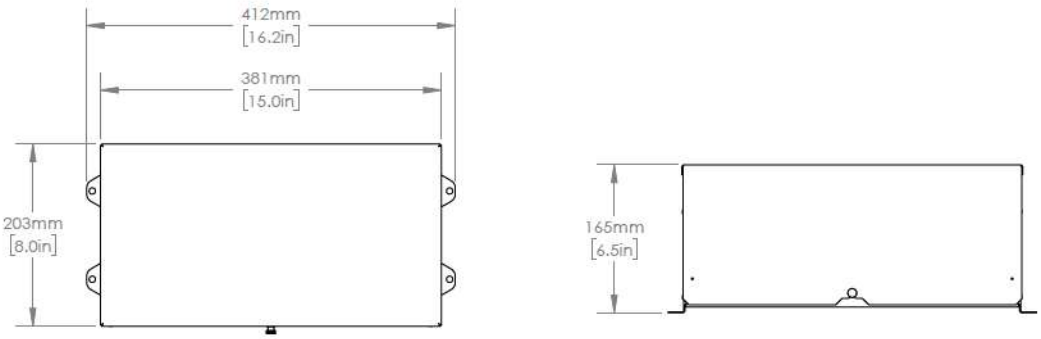
The Hood Controller (HC) acts as a hub, relaying hood sensor information to the System Controller. Positioned atop a hood, the HC significantly reduces the number of cables between the hoods and the SC, thereby minimizing overall installation time and costs.

The V6HC-210 series also supports connections for 3 Modulating Dampers (MDs) and 1 supply air VAV box (VB), thus requires low-voltage power from an ECOAZUR® Power Supply panel.

Key Features. Supports 8 ECOAZUR® intelligent devices (TT, IB, PT, KP, HC), 3 MDs, 1 VB ● Plug & play (RJ45) network ports ● Diagnostic LEDs for 24V and for communication status ● Thermistor input for room temp. ● Digital input for monitoring of external equipment such as a dishwasher ● Storage space for coiling excess cable ● Brackets for mounting on top of the hood (welded studs)

Power Supply	24 VDC, NEC Class 2 power source, supplied by ECOAZUR® Power Supply panel (PS)
Power Consumption	1.1W
I/O (configurable)	1 temperature inputs, 10k thermistor (Type III)
	1 digital input, dry contact, 24 VDC sourcing
	1 digital output, 24V DC sourcing, 100mA max.
	1 analog outputs, 0-10V
VB terminals (1 VAV Box)	1 temperature inputs, 10k thermistor (Type III)
	1 analog input, 0-10V, VB feedback signal
	1 analog outputs, 0-10V, VB command signal
	1 Supply Voltage, 24 VDC, 5W max. (210 mA)
Terminals	16-18 AWG (0.75-1.5mm²), 0.5Nm (4.4lb-in), copper conductors only
Hood Network	8 RJ45 comm. ports dedicated for ECOAZUR® intelligent devices (TT, IB, PT, KP & HC), excluding MDs & VBs
	3 RJ45 communication ports dedicated for ECOAZUR® MDs
	1 RJ45 uplink communication port, connects for ECOAZUR® SC or parent HC
Operating Conditions	Temperature: 5 to 55°C (41 to 131°F) Humidity: 10 to 90%RH, non-condensing, indoor location
Material	Enclosure: Galvanized steel, 1.3mm (0.05”) thick
Knockout(s)	14 knockouts, RMC 21mm, EMT 3/4”
	3 knockouts, RMC 35 mm, EMT 1-1/4”
Dimensions	412mm (16.2”) W x 203mm (8”) D x 165mm (6.5”) H
Weight	4.3kg (9.5lb)
Agency Listings	Refer to the Compliance section

Dimensional Drawing



Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6HC-220 ECOAZUR® Hood Controller, supports 2 MDs & 2 VBs

c UL us LISTED CE

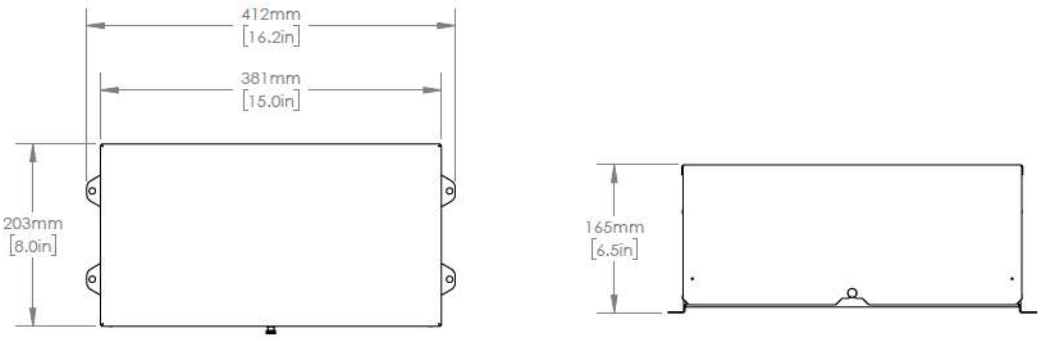
The Hood Controller (HC) acts as a hub, relaying hood sensor information to the System Controller. Positioned atop a hood, the HC significantly reduces the number of cables between the hoods and the SC, thereby minimizing overall installation time and costs.

The V6HC-220 series also supports connections for 2 Modulating Dampers (MDs) and 2 supply air VAV box (VB), thus requires low-voltage power from an ECOAZUR® Power Supply panel.

Key Features. Supports 8 ECOAZUR® intelligent devices (TT, IB, PT, KP, HC), 2 MDs, 2 VB ● Plug & play (RJ45) network ports ● Diagnostic LEDs for 24V and for communication status ● Thermistor input for room temp. ● Digital input for monitoring of external equipment such as a dishwasher ● Storage space for coiling excess cable ● Brackets for mounting on top of the hood (welded studs)

Power Supply	24 VDC, NEC Class 2 power source, supplied by ECOAZUR® Power Supply panel (PS)
Power Consumption	1.1W
I/O (configurable)	1 temperature inputs, 10k thermistor (Type III)
	1 digital input, dry contact, 24 VDC sourcing
	1 digital output, 24V DC sourcing, 100mA max.
	1 analog outputs, 0-10V
VB terminals (2 VAV Box)	2 temperature inputs, 10k thermistor (Type III)
	2 analog input, 0-10V, VB feedback signal
	2 analog outputs, 0-10V, VB command signal
	2 Supply Voltage, each 24 VDC, 5W max. (210 mA)
Terminals	16-18 AWG (0.75-1.5mm²), 0.5Nm (4.4lb-in), copper conductors only
Hood Network	8 RJ45 comm. ports dedicated for ECOAZUR® intelligent devices (TT, IB, PT, KP & HC), excluding MDs & VBs
	2 RJ45 communication ports dedicated for ECOAZUR® MDs
	1 RJ45 uplink communication port, connects for ECOAZUR® SC or parent HC
Operating Conditions	Temperature: 5 to 55°C (41 to 131°F) Humidity: 10 to 90%RH, non-condensing, indoor location
Material	Enclosure: Galvanized steel, 1.3mm (0.05”) thick
Knockout(s)	14 knockouts, RMC 21mm, EMT 3/4”
	3 knockouts, RMC 35 mm, EMT 1-1/4”
Dimensions	412mm (16.2”) W x 203mm (8”) D x 165mm (6.5”) H
Weight	4.3kg (9.5lb)
Agency Listings	Refer to the Compliance section

Dimensional Drawing



Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6IB-xxx ECOAZUR® Optic Sensor & Accessories

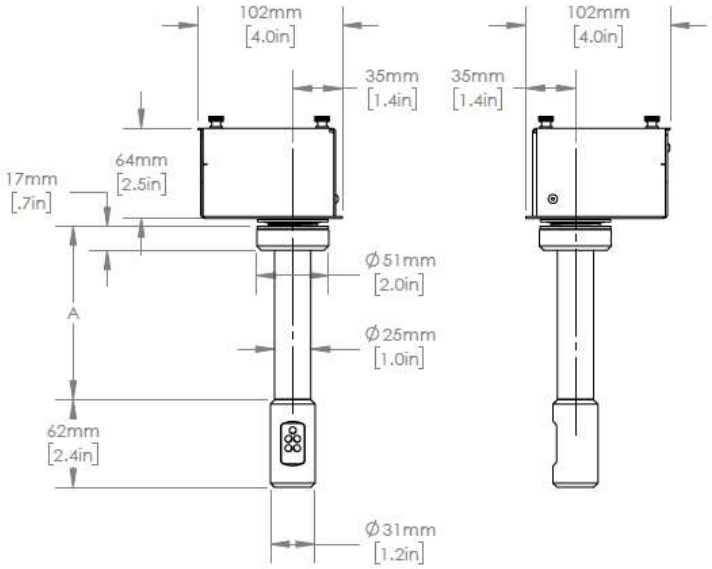
The IRIS BLEU® optical sensors (IB) monitor vapor, steam, smoke, and even the most subtle changes in air distortion to accurately measure cooking activity and cooking by-products. IB sensors operate in pairs, one at each end of a hood section.

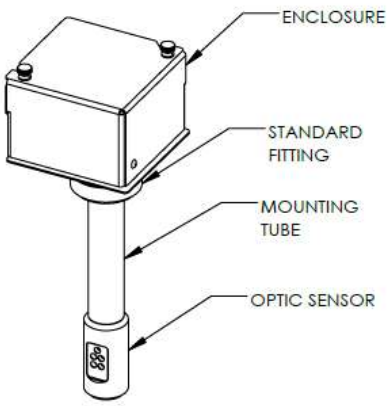
Key Features. High-precision detection with blue light wavelength ● Durable stainless-steel machined housing ● Waterproof & impervious to grease ● Pairs capable of spanning from 1 to 9 m (3 to 30') ● 15° light beam for easy alignment ● No air purge units required ● Free hanging fixture with set screw ● Industrial optic sensor (V6IB-310) supports pressure wash ● Plug & play (RJ45) network port

Power Supply	24 VDC, NEC Class 2 power source, through a V6NC network cable	
Power Consumption	0.5W	
Location	Installed in pairs, one at each end of a hood or hood section. Mounted through hood ceiling. Max. distance: 9m (30') Max. angle misalignment: ±7.5°	
Hood Network	RJ45 communication port, connects to ECOAZUR® System Controller or Hood Controller	
Operating Conditions	**Optic Sensor**	Temperature: 5 to 75°C (41 to 167°F) Optic Sensor from within the hood: waterproof Enclosure mounted on top of the hood: 10 to 90%RH, non-condensing
Material & Weight	**Optic Sensor**	304 Stainless steel, Standard: 0.3kg (0.8lb), Industrial: 0.4kg (0.8lb)
	Mount. Tube	304 Stainless steel, 150mm (6"): 0.1kg (0.3lb), 300mm (12"): 0.3kg (0.6lb), 900mm (35"): 0.8kg (1.8lb)
	Standard Fitting	304 Stainless steel, 0.3kg (0.6lb)
	Lite Fitting	Carbon steel, w/ nickel/chrome plating, 0.4kg (0.9lb)
	Enclosure	Galvanized steel, 1.3mm (0.05") thick, 0.5kg (1.0lb) Knockouts: (2) RMC 21mm, EMT 3/4"
	Mount. Bracket	304 Stainless steel, Side bracket: 0.2kgg (0.5lb), Union bracket: 0.4kg (1.0lb)
	Passthrough Fitting	Carbon steel, w/ nickel/chrome plating, 0.6kg (1.3lb)
Dimensions	Refer to the Dimensional Drawing Section	
Agency Listings	Refer to the Compliance section	

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

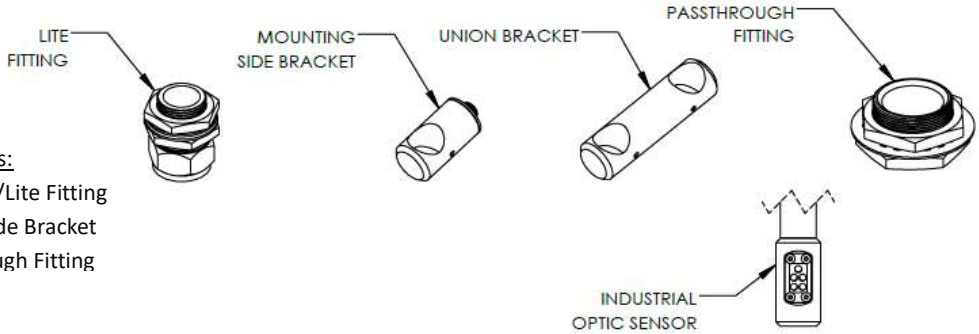
Dimensional Drawing





A = 122mm (4.8”) for V6IB-410
274mm (10.8”) for V6IB-420
871mm (34.3”) for V6IB-430

Required hood cutout diameters:
35mm (1-3/8”) for Standard/Lite Fitting
6mm (1/4”) for Mounting Side Bracket
64mm (2-1/2”) for Passthrough Fitting



Product Numbering

Optic Sensor	**Standard**	**Industrial**	
	V6IB-300	V6IB-310	
Mount. Tube	**150mm (6”)**	**300mm (12”)**	**900mm (35”)**
	V6IB-410	V6IB-420	V6IB-430
Fitting	**Standard**	**Lite**	
	V6IB-440	V6IB-510	
Enclosure	**Standard**		
	V6IB-520		
Mount. Bracket	**Side Bracket**	**Union Bracket**	
	V6IB-450	V6IB-460	
Passthrough Fitting	**Standard**		
	V6IB-530		

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6KP-100 ECOAZUR® Keypad, Recessed

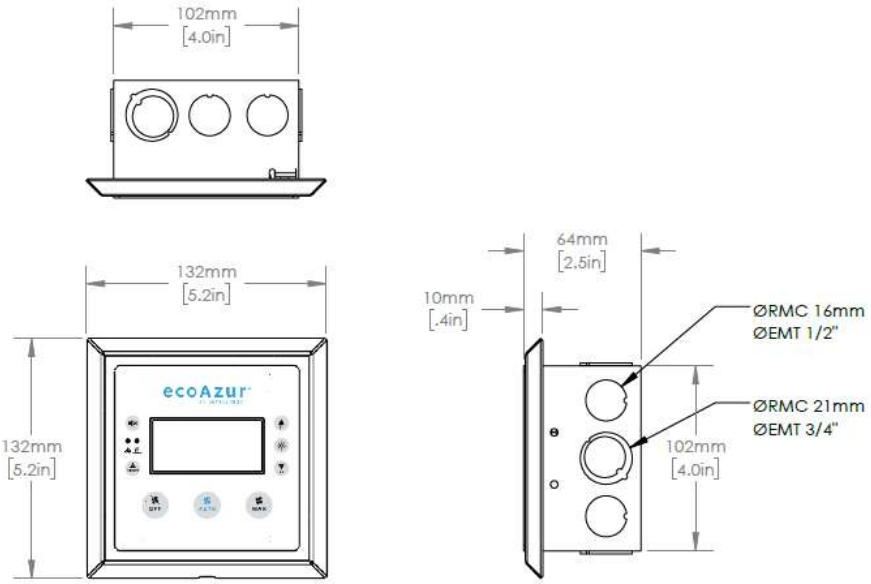
The Keypad allows the kitchen staff to monitor the current hood ventilation airflow rates, select ventilation modes, toggle hood lights, and display/reset alarms. The Keypad is typically located in the kitchen area near the hoods it controls.

While ECOAZUR® is designed to start/stop the ventilation and hood lights automatically, the user can override the current operating ventilation mode by using the MAX, AUTO or OFF keys. OFF solely bypasses hysteresis timers.

Key Features. Recess Mount ● 4-line LCD display ● Ventilation keys: MAX, AUTO and OFF ● Hood light key ● Cooking Appliance manual RESET key ● SILENCE key ● Audible alarm option ● Fire Alarm status LED ● Cooking Appliance energized status LED ● Monitors ambient temperature ● Plug & play (RJ45) network port

Power Supply	24 VDC, NEC Class 2 power source, through a V6NC network cable
Power Consumption	0.6W
Hood Network	RJ45 communication port, connects to ECOAZUR® System Controller or Hood Controller
I/O (configurable)	1 temperature input, 10k thermistor (Type III) 1 temperature integrated to the keypad membrane
Operating Conditions	Temperature: 5 to 55°C (41 to 131°F) Humidity: 10 to 90%RH, non-condensing, indoor location
Material	Faceplate and wall plate: Stainless steel, 1.6mm (0.06”) thick Membrane keypad: Polyester film assembly, 0.78mm (0.031”) thick Recessed enclosure: Galvanized steel, 1.3mm (0.05”) thick
Knockout(s)	14 knockouts, RMC 16mm, EMT 1/2” 6 knockouts, RMC 21mm, EMT 3/4”
Dimensions	132mm (5.2”) W x 132mm (5.2”) H x 10mm (0.4”) D (faceplate)
Weight	0.8kg (1.7lb)
Agency Listings	Refer to the Compliance section

Dimensional Drawing



Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6KP-200 ECOAZUR® Lite Keypad w/o Display, Recessed

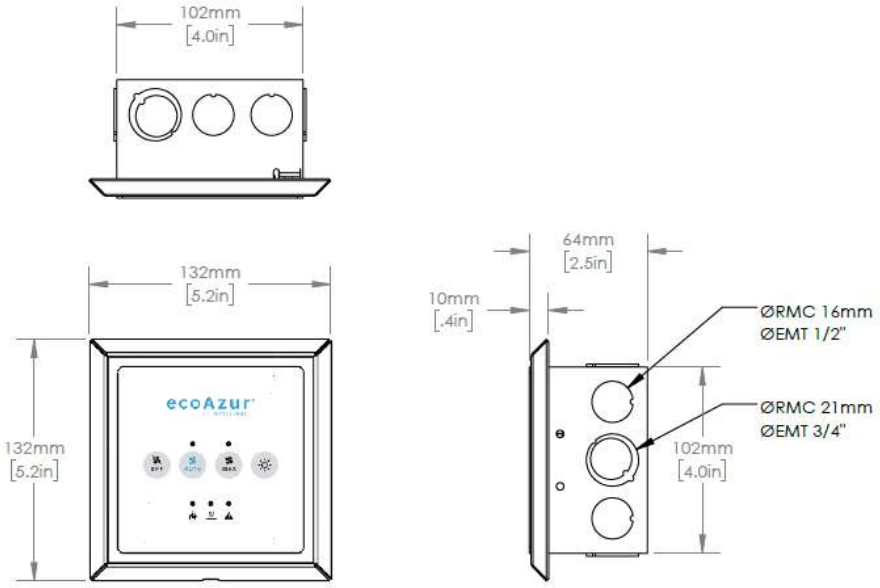
The Lite Keypad provides control over ventilation and hood lights exclusively and does not include a display. It is intended to be installed in addition to a standard Keypad to control a specific hood or set of hoods. Typically, the Lite Keypad is located in the kitchen area near the hoods it controls.

While ECOAZUR® is designed to start/stop the ventilation and hood lights automatically, the user can override the current operating ventilation mode by using the MAX, AUTO or OFF keys. OFF solely bypasses hysteresis timers.

Key Features. Recess Mount ● Ventilation keys: MAX, AUTO and OFF ● Hood light key ● Cooking Appliance manual RESET key ● Cooking Appliance manual RESET key ● Fire Alarm status LED ● Cooking Appliance energized status LED ● Alarm status LED ● Monitors ambient temperature ● Plug & play (RJ45) network port

Power Supply	24 VDC, NEC Class 2 power source, through a V6NC network cable
Power Consumption	0.3W
Hood Network	RJ45 communication port, connects to ECOAZUR® System Controller or Hood Controller
Operating Conditions	Temperature: 5 to 55°C (41 to 131°F) Humidity: 10 to 90%RH, non-condensing, indoor location
Material	Faceplate and wall plate: Stainless steel, 1.6mm (0.06”) thick Membrane keypad: Polyester film assembly, 0.78mm (0.031”) thick Recessed enclosure: Galvanized steel, 1.3mm (0.05”) thick
Knockout(s)	14 knockouts, RMC 16mm, EMT 1/2” 6 knockouts, RMC 21mm, EMT 3/4”
Dimensions	132mm (5.2”) W x 132mm (5.2”) H x 10mm (0.4”) D (faceplate)
Weight	0.7kg (1.6lb)
Agency Listings	Refer to the Compliance section

Dimensional Drawing



Specifications are subject to change as updates are completed

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6KP-110 ECOAZUR® Keypad, Wall Mount

c UL us LISTED CE

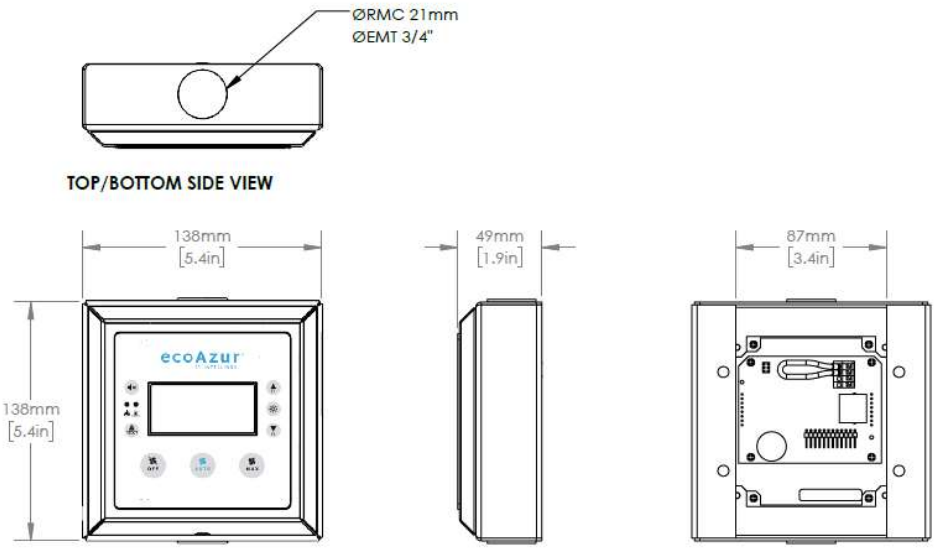
The Keypad allows the kitchen staff to monitor the current hood ventilation airflow rates, select ventilation modes, toggle hood lights, and display/reset alarms. The Keypad is typically located in the kitchen area near the hoods it controls.

While ECOAZUR® is designed to start/stop the ventilation and hood lights automatically, the user can override the current operating ventilation mode by using the MAX, AUTO or OFF keys. OFF solely bypasses hysteresis timers.

Key Features. Wall-mount ● 4-line LCD display ● Ventilation keys: MAX, AUTO and OFF ● Hood light key ● Cooking Appliance manual RESET key ● SILENCE key ● Audible alarm option ● Fire Alarm status LED ● Cooking Appliance energized status LED ● Monitors ambient temperature ● Plug & play (RJ45) network port

Power Supply	24 VDC, NEC Class 2 power source, through a V6NC network cable
Power Consumption	0.6W
Hood Network	RJ45 communication port, connects to ECOAZUR® System Controller or Hood Controller
I/O (configurable)	1 temperature input, 10k thermistor (Type III) 1 temperature integrated to the keypad membrane
Operating Conditions	Temperature: 5 to 55°C (41 to 131°F) Humidity: 10 to 90%RH, non-condensing, indoor location
Material	Faceplate and Enclosure: Stainless steel, 1.6mm (0.06”) thick Membrane keypad: Polyester film assembly, 0.78mm (0.031”) thick
Knockout(s)	2 knockouts, RMC 21mm, EMT 3/4”
Dimensions	138mm (5.4”) W x 138mm (5.4”) H x 49mm (1.9”) D
Weight	0.7kg (1.6lb)
Agency Listings	Refer to the Compliance section

Dimensional Drawing



Specifications are subject to change as updates are completed

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6KP-210 ECOAZUR® Lite Keypad w/o Display, Wall Mount

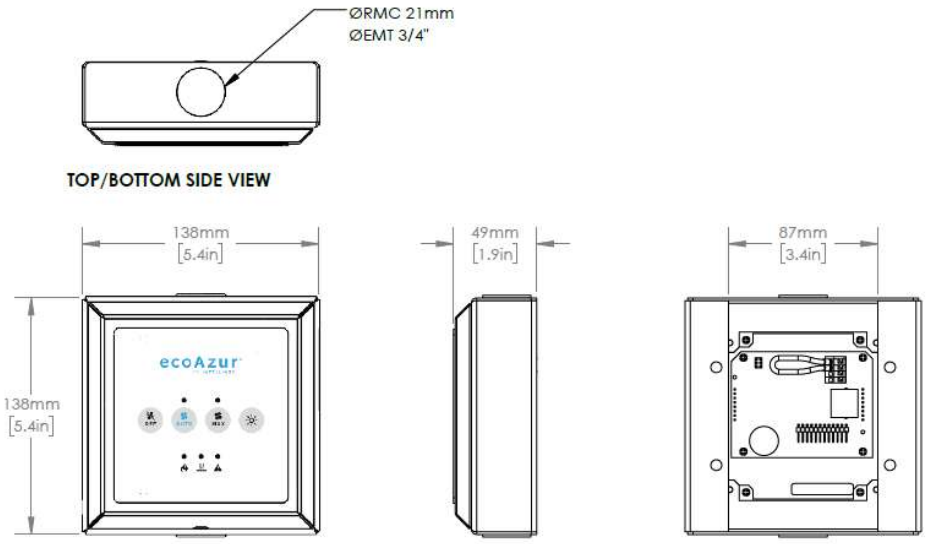
The Lite Keypad provides control over ventilation and hood lights exclusively and does not include a display. It is intended to be installed in addition to a standard Keypad to control a specific hood or set of hoods. Typically, the Lite Keypad is located in the kitchen area near the hoods it controls.

While ECOAZUR® is designed to start/stop the ventilation and hood lights automatically, the user can override the current operating ventilation mode by using the MAX, AUTO or OFF keys. OFF solely bypasses hysteresis timers.

Key Features. Wall-mount ● Ventilation keys: MAX, AUTO and OFF ● Hood light key ● Cooking Appliance manual RESET key ● Cooking Appliance manual RESET key ● Fire Alarm status LED ● Cooking Appliance energized status LED ● Alarm status LED ● Monitors ambient temperature ● Plug & play (RJ45) network port

Power Supply	24 VDC, NEC Class 2 power source, through a V6NC network cable
Power Consumption	0.3W
Hood Network	RJ45 communication port, connects to ECOAZUR® System Controller or Hood Controller
Operating Conditions	Temperature: 5 to 55°C (41 to 131°F) Humidity: 10 to 90%RH, non-condensing, indoor location
Material	Faceplate and Enclosure: Stainless steel, 1.6mm (0.06”) thick Membrane keypad: Polyester film assembly, 0.78mm (0.031”) thick
Knockout(s)	2 knockouts, RMC 21mm, EMT 3/4”
Dimensions	138mm (5.4”) W x 138mm (5.4”) H x 49mm (1.9”) D
Weight	0.7kg (1.6lb)
Agency Listings	Refer to the Compliance section

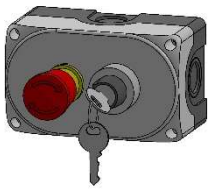
Dimensional Drawing



Specifications are subject to change as updates are completed

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6KP-410 ECOAZUR® OFF Override Station, Wall Mount

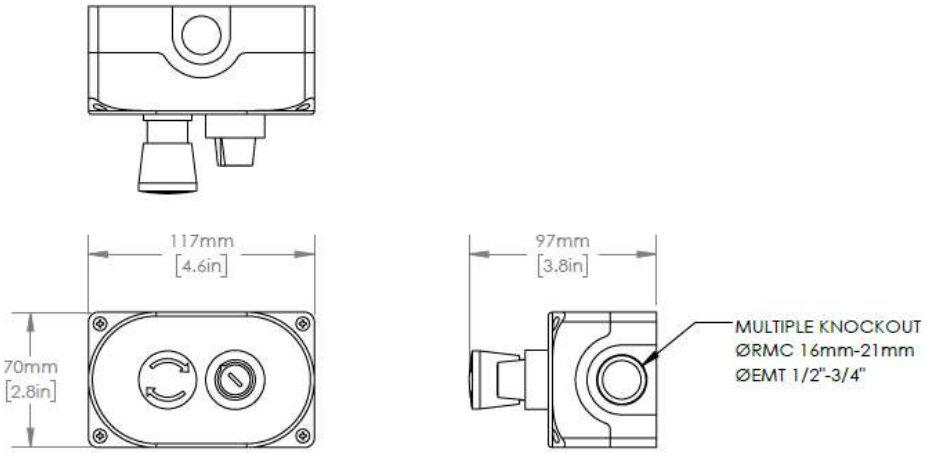


This station includes both an Emergency Stop push button and a key switch that force an OFF OVERRIDE state. This provides a means for de-energizing the cooking appliances as well as shutting down the kitchen ventilation. The Keypad RESET key must be pressed to energize the cooking appliances when both switches are returned to the normal position. FIRE OVERRIDE has priority over the fan status when OFF OVERRIDE is active. Connects to the System Controller.

Key Features. Wall-mount ● Turn-to-release Emergency Stop push button ● Key switch

Elect. Connections	14-18 AWG (0.75-2.5mm²), 1Nm (8.8lb-in), copper conductors only
Operating Conditions	Temperature: 5 to 55°C (41 to 131°F) Humidity: 10 to 90%RH, non-condensing, indoor location
Material	Enclosure: Polycarbonate
Knockout(s)	4 Multiple knockouts, RMC 16mm-21mm, EMT 1/2”-3/4”
Dimensions	117mm (4.6”) W x 71mm (2.8”) H x 97mm (3.8”) D
Weight	0.2kg (0.5lb)
Agency Listings	Refer to the Compliance section

Dimensional Drawing



Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6TT-100 ECOAZUR® Hood/Duct Temperature Transmitter

c UL us LISTED CE

The Temperature Transmitter (TT) is an intelligent sensor that measures the cooking load based on the temperature in the hood riser or canopy, compared to the kitchen ambient temperature.

Canopy sensors are crucial to ensure the hood ventilation starts automatically when the cooking equipment is turned on, in accordance with NFPA 96 and the IMC. They also prevent any backdraft in the exhaust duct from delaying the ventilation start.

A programmable temperature span allows adjustment of the desired exhaust airflow rate based on the actual cooking load. A minimum temperature is assigned to a minimum exhaust airflow rate, and a maximum temperature is assigned to the maximum airflow rate. The airflow modulation range depends on the cooking equipment below the hood, the minimum velocity allowed in the exhaust ductwork, and the hood sensors installed. Typically:

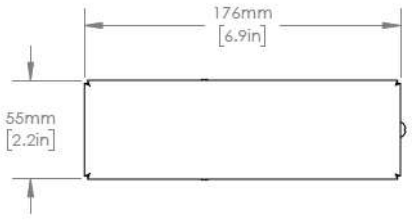
- Temperature-only systems have an 80-100% airflow modulation range.
- Temperature & optic systems allow for a 30-100% airflow modulation range.

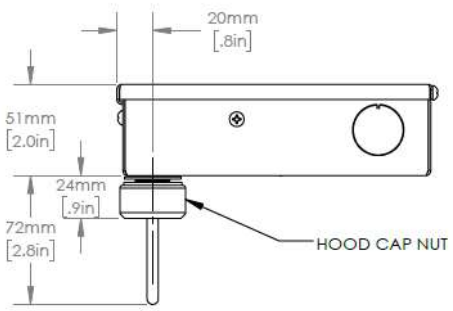
For optimal comfort and energy savings, it is recommended to use IB optic sensors in conjunction with temperature sensors.

Key Features. Stainless steel cap nut ● Intelligent transmitter ● Delta T logic between hood and ambient temperature ● Temp. setpoints offset according to a schedule ● Plug & play (RJ45) network port

Power Supply	24 VDC, NEC Class 2 power source, through a V6NC network cable
Power Consumption	0.2W
Location	Hood riser or canopy (mounted through hood ceiling, in front of hood filters)
Hood Network	RJ45 communication port, connects to ECOAZUR® System Controller or Hood Controller
Probe	10k Thermistor (type III)
Operating Conditions (enclosure)	Temperature: 5 to 75°C (41 to 167°F) Humidity: 10 to 90%RH, non-condensing, indoor location
Operating Conditions (probe)	Temperature: -30 to 140°C (-22 to 284°F)
Material	Enclosure: Galvanized steel, 1.3mm (0.05”) thick Probe and hood cap nut: Stainless steel
Knockout(s)	3 knockouts, RMC 21mm, EMT 3/4”
Dimensions	176mm (6.9”) W x 56mm (2.2”) D x 51mm (2”) H
Weight	0.7kg (1.6lb)
Agency Listings	Refer to the Compliance section

Dimensional Drawing





Required hood cutout diameter:

19mm (3/4”) for temperature probe

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6TT-110 ECOAZUR® Hood/Duct Temperature 10k Probe

The temperature probe is a 10k thermistor measuring the cooking load based on the temperature in the hood riser or canopy, compared to the kitchen ambient temperature.

Canopy sensors are crucial to ensure the hood ventilation starts automatically when the cooking equipment is turned on, in accordance with NFPA 96 and the IMC. They also prevent any backdraft in the exhaust duct from delaying the ventilation start.

A programmable temperature span allows adjustment of the desired exhaust airflow rate based on the actual cooking load. A minimum temperature is assigned to a minimum exhaust airflow rate, and a maximum temperature is assigned to the maximum airflow rate. The airflow modulation range depends on the cooking equipment below the hood, the minimum velocity allowed in the exhaust ductwork, and the hood sensors installed. Typically:

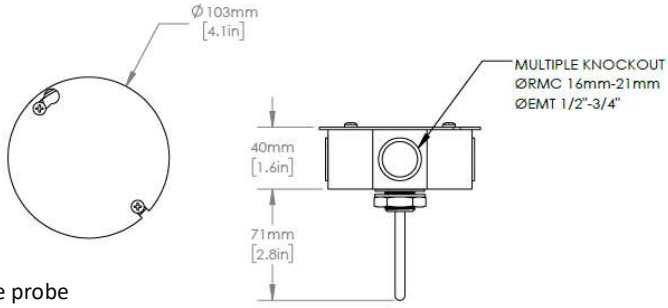
- Temperature-only systems have an 80-100% airflow modulation range.
- Temperature & optic systems allow for a 30-100% airflow modulation range.

For optimal comfort and energy savings, it is recommended to use IB optic sensors in conjunction with temperature sensors.

Key Features. Delta T logic between hood and ambient temperature ● Temp. setpoints offset according to a schedule.

Elect. Connections	Wire leads, 22AWG (0.34mm²)
Sensor Accuracy	0-70°C (32-158°F): ±0.2°C (±0.36°F)
Location	Hood riser or canopy (mounted through hood ceiling, in front of hood filters)
Probe	10k Thermistor (type III)
Operating Conditions (enclosure)	Temperature: 5 to 75°C (41 to 167°F) Humidity: 10 to 90%RH, non-condensing, indoor location
Operating Conditions (probe)	Temperature: -30 to 140°C (-22 to 284°F)
Material	Enclosure: Galvanized steel, 1.3mm (0.05”) thick Probe: Stainless steel
Knockout(s)	4 Multiple knockouts, RMC 16mm-21mm, EMT 1/2”-3/4”
Dimensions	103mm (4.1”) W x 103mm (4.1”) H x 47mm (1.9”) D
Weight	0.4kg (0.9lb)
Agency Listings	Refer to the Compliance section

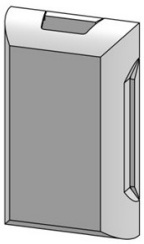
Dimensional Drawing



Required hood cutout diameter:
19mm (3/4”) for temperature probe

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6RS-110 ECOAZUR® Ambient Temperature Sensor, 10k Probe, Wall Mount



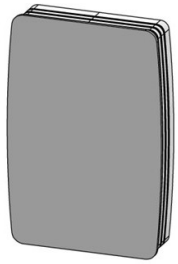
ECOAZUR® offers a variety of kitchen ambient sensors that connect to the ECOAZUR® System Controller or Hood Controller. The ambient temperature sensor is a wall-mount a 10k thermistor.

Key Features. Monitors the ambient temperature sensor ● Temperature used as room reference for airflow calculations ● Multiple sensors can be used to average room temperature reading

Elect. Connections	16-26 AWG (0.14-1.5mm²), 0.6Nm (4.4lb-in), copper conductors only
Probe	10k Thermistor (type III)
Sensor Accuracy	0-70°C (32-158°F): ±0.2°C (±0.36°F)
Location	1,219-1,829mm (48-72'') above the floor, away from hoods and heat sources
Operating Conditions	Temperature: 1.5 to 50°C (35 to 122°F) Humidity: 10 to 95%RH, non-condensing, indoor location
Material	Enclosure: ABS Plastic, White, UL94-HB
Dimensions	70mm (2.8") W x 114mm (4.5") H x 29mm (1.1") D
Weight	0.1kg (0.2lb)
Agency Listings	Refer to the Compliance section

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6RS-120 ECOAZUR® Ambient Temperature/RH/CO_2 Sensor, Modbus, Wall Mount



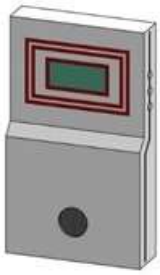
ECOAZUR® offers a variety of kitchen ambient sensors that connect to the ECOAZUR® System Controller or Hood Controller. The ambient Temperature/RH/CO2 sensor is a multi-sensing device monitoring relative humidity and CO_2 levels, as well as temperature within the kitchen.

Key Features. Monitoring and control of ventilation based on humidity and CO_2 ● Temperature used as room reference for airflow calculations ● Multiple sensors can be used to average room temperature reading ● Connects Modbus RTU to the SC

Power Supply	24 VDC, NEC Class 2 power source	
Elect. Connections	16 AWG (1.5mm²), copper conductors only	
Connectivity	Modbus RTU	
Power Consumption	2.0W	
Sensor Accuracy	**Temp**	±0.5°C at 17 to 28°C (±0.9°F at 63 to 82°F) ±1°C at 0 to 50°C (±1.8°F at 32 to 122°F)
	Humidity	±5%RH at 20 to 80%RH ±1%RH hysteresis at 20 to 80%RH
	CO_2	±50ppm at 1000ppm, 17 to 28°C (63 to 82°F) Typical full range ±30ppm ±3% of reading
Location	1,219-1,829mm (48-72'') above the floor, away from hoods, heat sources and sources of condensation	
Operating Conditions	Temperature: 0 to 50°C (32 to 122°F) Humidity: 0 to 95%RH, non-condensing, indoor location	
Material	Enclosure: PC & ABS blend, UL 94V-0	
Dimensions	85mm (3.4") W x 125mm (5") H x 22mm (0.9") D	
Weight	0.2kg (0.4lb)	

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6RS-210 ECOAZUR® Ambient CO Sensor, Wall Mount



The ambient CO sensor monitors carbon monoxide levels and forces the BYPASS OVERRIDE mode in ECOAZUR® System Controller when in alarm.

Key Features. Display indicating current CO level ● Buzzer ● Latching Relay ● Modbus RTU Relay

Power Supply	24 VDC, NEC Class 2 power source
Power Consumption	6.0W
Elect. Connections	16-26 AWG (0.14-1.5mm²), 3Nm (26.6lb-in), copper conductors only
Connectivity	Relay Output, for BYPASS OVERRIDE (hardwired) in ECOAZUR (“BY1-BY2”) Modbus RTU (optional, for sensor status only)
I/O (configurable)	1 relay output, 30 VDC max., 1A max.
	1 analog output, 2-10 VDC
Sensor Accuracy	±2.5% of reading
Location	1,219-1,829mm (48-72’’) above the floor
Operating Conditions	Temperature: -20 to 40°C (-4 to 104°F) Humidity: 15 to 90%RH, non-condensing, indoor location
Material	Enclosure: Polycarbonate & ABS, UL 94V-0
Dimensions	89mm (3.5”) W x 152mm (6”) H x 28mm (1.1”) D
Weight	0.3kg (0.6lb)

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6RS-220 ECOAZUR® Ambient Nat. Gas Sensor, Wall Mount

The ambient natural gas sensor monitors methane (CH4) levels and forces the BYPASS OVERRIDE mode in the ECOAZUR® System Controller when in alarm.

Key Features. Display indicating current CH4 level ● Buzzer ● Latching Relay ● Modbus RTU Relay

Power Supply	24 VDC, NEC Class 2 power source
Power Consumption	6.0W
Elect. Connections	16-24 AWG (0.25-1.5mm²), 0.5Nm (4.4lb-in), copper conductors only
Sensor Accuracy	N/A
Connectivity	Modbus RTU
I/O (configurable)	1 relay output, 30 VDC max., 1A max.
	1 analog output, 2-10 VDC
Location	152 - 457mm (6-18'') below ceiling
Operating Conditions	Temperature: -10 to 50°C (14 to 122°F) Humidity: 5 to 95%RH, non-condensing, indoor location
Material	Enclosure: Polycarbonate, UL 94V-0
Knockout(s)	8 Multiple knockouts, RMC 16mm-21mm, EMT 1/2"-3/4"
Dimensions	90mm (3.5") W x 150mm (5.9") H x 65mm (2.6") D
Weight	0.5kg (1.0lb)

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

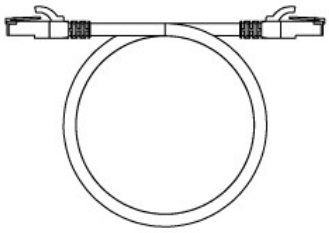
V6NC-xxx ECOAZUR® Hood Network Cable

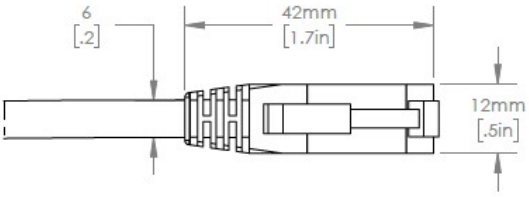
The V6NC series network cables are specifically designed for the ECOAZUR® DCKV application. These cables are used to interconnect ECOAZUR® intelligent devices such as hood sensors, Hood Controllers, and Keypads, linking them to the System Controller. To ensure system performance and safety, only use V6NC cables to connect ECOAZUR® components.

Key Features. Listed for the ECOAZUR® application (safety and EMC) ● Plenum rated ● 75°C ● 24 AWG

Construction	**Conductors**	CAT5e, 4 twisted pairs, 24AWG copper		
	Shield	Aluminum foil, drain wire		
	Insulation	HD-PE		
	Jacket	PVC, 0.38mm (0.015”) thick, Orange		
	Plugs	RJ45 8P8C Male, w/ gold plating		
Ratings	**Voltage**	300V		
	Temperature	75°C		
	Flame Test	UL CMP, CSA FT-6 (Plenum rated)		
Dimensions	OD: 5.8mm (0.228”) Refer to the Dimensional Drawing Section			
Weight	**1.5m (5’)**	0.1kg (0.2lb)	**15m (50’)**	0.7kg (1.6lb)
	3m (10’)	0.2kg (0.4lb)	**22.5m (75’)**	1.0kg (2.2lb)
	4.5m (15’)	0.2kg (0.5lb)	**35m (100’)**	2.1kg (4.6lb)
	7.5m (25’)	0.3kg (0.7lb)	**45m (150’)**	3.5kg (7.7lb)
	10.5m (35’)	0.5kg (1.1b)	**60m (200’)**	4.9kg (10.7lb)
Agency Listings	Refer to the Compliance section			

Dimensional Drawing



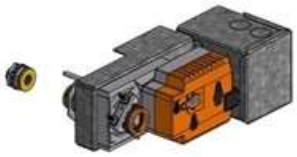


Product Numbering

CAT5e FT6 Cable	**1.5m (5’)**	**3m (10’)**	**4.5m (15’)**	**7.5m (25’)**	**10.5m (35’)**
	V6NC-005	V6NC-010	V6NC-015	V6NC-025	V6NC-035
	15m (50’)	**22.5m (75’)**	**35m (100’)**	**45m (150’)**	**60m (200’)**
	V6NC-050	V6NC-075	V6NC-100	V6NC-150	V6NC-200

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6MD-100 & -200 ECOAZUR® Modulating Damper Actuator Kit



The Modulating Damper Actuator Kit (MD) is installed in conjunction with the V6MD-3xx damper blades. They are specifically designed and certified for existing or new commercial kitchen grease hoods and ducts, solely as part of an ECOAZUR® DCKV control system. The MD dampers are NOT fire dampers.

The dampers are most effective when multiple hoods are connected to a single exhaust fan. They allow controlling the exhaust airflow rates independently at every hood section, maximizing energy savings.

Key Features. 4 seconds fast-running ● Electronic fail-safe actuator ● For new or retrofit installations ● No cutting and welding required ● Rectangular or circular ducts ● Plug & play (RJ45) network ports ● Pressure Transmitter ● Duct Temperature

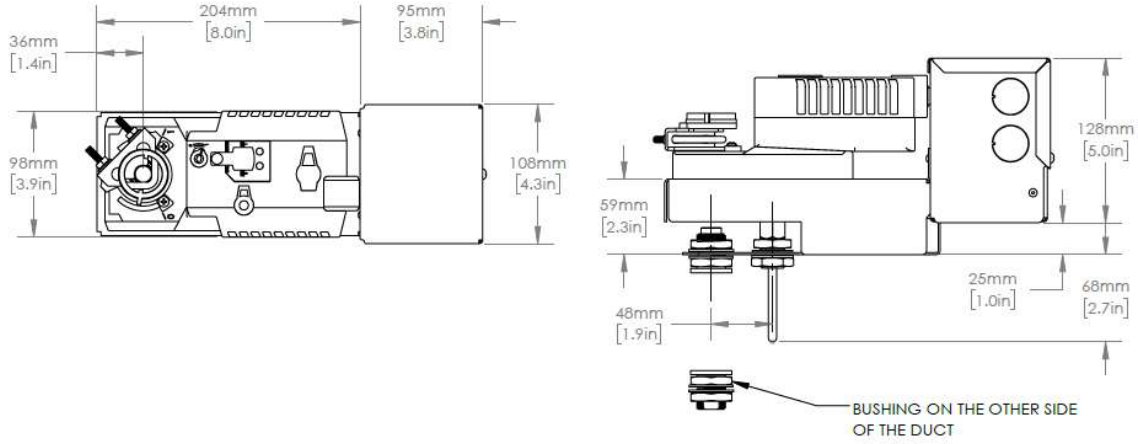
Modulating blades are sold separately (see V6MD-3xx).

U.S. PATENT NO. 10.801.745
CANADIAN PATENT NO. 2.925.949
EUROPEAN PATENT NO. 3052867

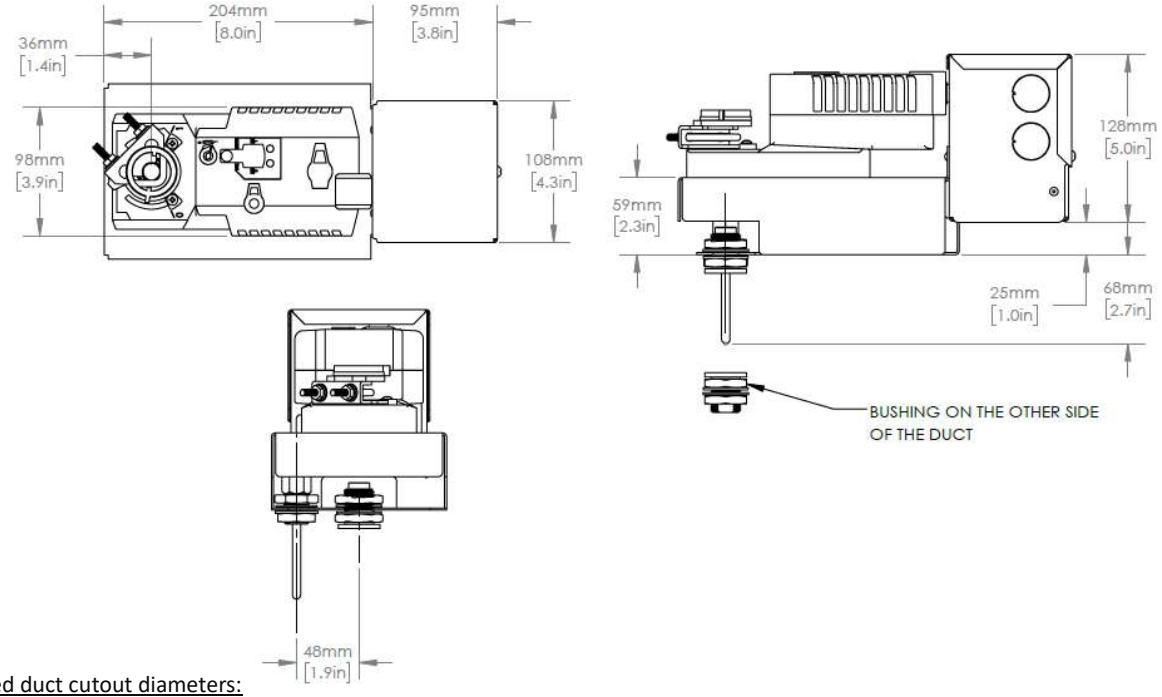
Power Supply	24 VDC, Class 2 power source (LPS), through a V6NC network cable	
Power Consumption	11.3W	
Hood Network	RJ45 communication port, connects to ECOAZUR® V6HC-2xx Hood Controller	
Damper Actuator Specs	**Torque**	6Nm (54in-lb)
	Motor Running Time	4 seconds
	Fail-Safe Mode	Fail-safe position knob
	Fail-Safe Run. Time	Less than 4 seconds
Temp. Sensor	10k thermistor Type III, w/ 533mm (21”) long wire leads	
Operating Conditions	Temperature: 5 to 55°C (41 to 131°F) Humidity: 10 to 90%RH, non-condensing, indoor location	
Material	Actuator: UL94-5VA, NEMA 2, IP54 UL Type 2 enclosure Base plate: Galvanized steel, 1.6mm (0.06”) thick Bushings: Carbon steel, w/ nickel/chrome plating Enclosure: Galvanized steel, 1.3mm (0.05”) thick	
Knockout(s)	7 knockouts, RMC 21mm, EMT 3/4”	
Dimensions	Refer to the Dimensional Drawing Section	
Weight	**For Rect. Ducts**	2.4kg (5.3lb)
	For Circ. Ducts	2.6kg (5.8lb)
Agency Listings	Refer to the Compliance section	

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

Dimensional Drawing



V6MD-100



Required duct cutout diameters:

22mm (7/8”) for damper bushings

19mm (3/4”) for temperature probe

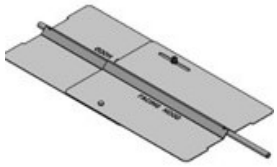
V6MD-200

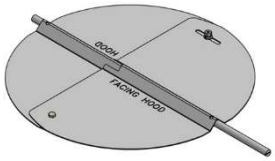
Product Numbering

Mod. Damper Kit	For Rect. Ducts	For Circular Ducts
	V6MD-100	V6MD-200

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6MD-3xx ECOAZUR® Damper Blade & Accessories





The Modulating Dampers are designed to modulate airflow in commercial kitchen hood applications. The damper blades are intended to be used as part of the ECOAZUR® DCKV control system in conjunction with the Modulating Damper kit actuators (see V6MD-100 & -200).

Key Features. Retractable design to ease installation ● No welding required ● Designed to avoid temperature probe collision

The exact duct or hood riser external dimensions must be confirmed when ordering damper blades. See the Product Numbering Section for limit dimensions within each model.

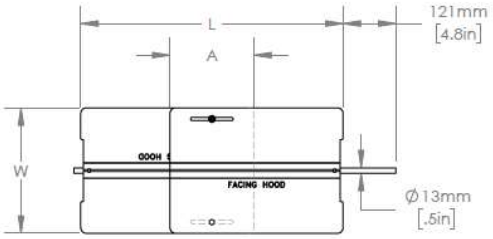
The damper shaft kits are available for customers who manufacture their own damper blades according to manufacturing specifications sent by Intellinox.

U.S. PATENT NO. 10.801.745
CANADIAN PATENT NO. 2.925.949
EUROPEAN PATENT NO. 3052867

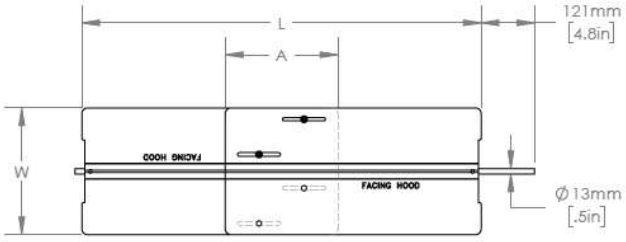
Material	V6MD-310: 304 Stainless steel, 1.3mm (0.05”) thick Other Damper Blades: 304 Stainless steel, 1.6mm (0.06”) thick Damper the Shaft Kits: 304 Stainless steel	
Dimensions	Refer to the Dimensional Drawing Section	
Weight	**Duct Length up to 305mm (12’)**	Up to 1.8kg (4.0lb)
	Duct Length up to 457mm (18’)	Up to 3.2kg (7.1lb)
	Duct length up to 610mm (24”)	Up to 4.0kg (8.7lb)
	Duct length up to 762mm (30”)	Up to 5.0kg (11.0lb)
	Duct length up to 914mm (36”)	Up to 5.7kg (12.6lb)
	Duct length up to 1,219mm (48”)	Up to 7.7kg (16.9lb)
	Duct length up to 1,524mm (60”)	Up to 9.6kg (21.2lb)
	Duct diameter up to 305mm (12”)	Up to 1.2kg (2.6lb)
	Duct diameter up to 457mm (18”)	Up to 2.4kg (5.3lb)
	Duct diameter up to 610mm (24”)	Up to 4.1kg (9.0lb)
	Damper Shaft Kit, 152mm (6”) Master Shaft	0.2kg (0.5lb)
	Damper Shaft Kit, 203mm (8”) Master Shaft	0.3kg (0.6lb)
Agency Listings	Refer to the Compliance section	

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

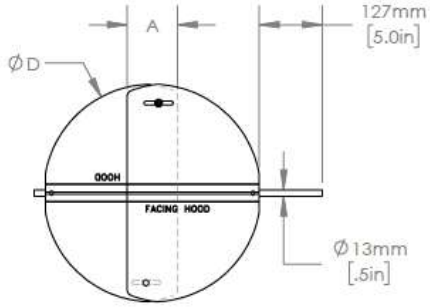
Dimensional Drawing



V6MD-310 to V6MD-330



V6MD-340 to V6MD-370



V6MD-380 to V6MD-3A0

L[1] = Up to 305mm (12”) for V6MD-310
Up to 457mm (18”) for V6MD-320
Up to 610mm (24”) for V6MD-330
Up to 762mm (30”) for V6MD-340
Up to 914mm (36”) for V6MD-350
Up to 1,219mm (48”) for V6MD-360
Up to 1,524mm (60”) for V6MD-370

W[2] = 152mm (6”) to 406mm (16”)

A = 127mm (5”) for V6MD-310
191mm (7.5”) for V6MD-320 to V6MD-330
254mm (10”) for V6MD-340 to V6MD-350
356mm (14”) for V6MD-360
457mm (18”) for V6MD-370
102mm (4”) for V6MD-380 to V6MD-3A0

D = Up to 286mm (11.3”) for V6MD-380
Up to 438mm (17.3”) for V6MD-390
Up to 591mm (23.3”) for V6MD-3A0

Required duct cutout diameter:
22mm (7/8”) for damper bushings

1. Minimal length (L) is 152mm (6”).
2. Typically, dampers are manufactured 19mm (3/4”) narrower than the specified duct width.

Part Number

Rect. Blade†	**Duct length up to 305mm (12”)**	**Duct length up to 457mm (18”)**	**Duct length up to 610mm (24”)**	**Duct length up to 762mm (30”)**
	V6MD-310	V6MD-320	V6MD-330	V6MD-340
	Duct length up to 914mm (36”)	**Duct length up to 1,219mm (48”)**	**Duct length up to 1,524mm (60”)**	
	V6MD-350	V6MD-360	V6MD-370	
Circ. Blade†	**Duct diameter up to 305mm (12”)**	**Duct diameter up to 457mm (18”)**	**Duct diameter up to 610mm (24”)**	
	V6MD-380	V6MD-390	V6MD-3A0	
Damper Shaft Kit	**152mm (6”) Master Shaft**	**203mm (8”) Master Shaft**		
	V6MD-410	V6MD-420		

† Specify duct or hood riser external dimensions when ordering damper blades.

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

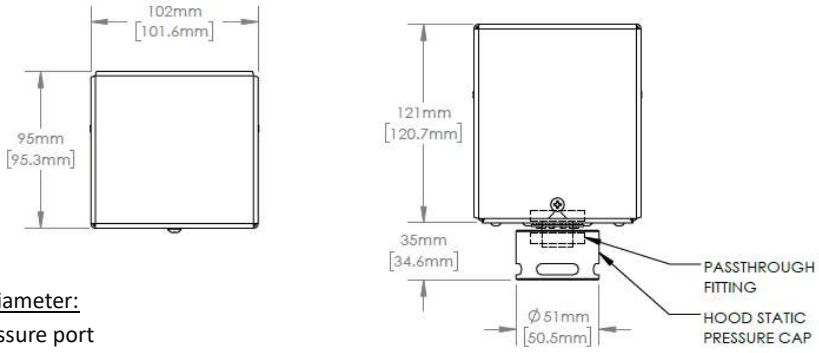
V6PT-100 ECOAZUR® Hood Pressure Transmitter

The hood Pressure Transmitter is designed to work in symbiosis with the Modulating Damper, as it provides the pressure data to adjust its airflow setpoint. Alternatively, it can act as a multi-function device when the modulating damper is not supplied by Intellinox, measuring static pressure as well as calculating damper position.

Key Features. Use to measure static pressure differential between open space and behind hood filter section ● Static pressure cap design to repel any grease vapor droplet ● Connect with an RJ45 cable to the Modulating Damper or directly to the System Controller or Hood Controller

Power Supply	24 VDC, Class 2 power source (LPS), through a V6NC network cable
Power Consumption	0.3W
Location	Through hood ceiling, behind hood filters, within 610mm (24”) of the hood riser perimeter
I/O (configurable)	1 temperature input, 10k thermistor Type III
	1 analog input, 0-10V
	1 analog output, 0-10V
Hood Network	RJ45 communication port, connects to ECOAZUR® Modulating Damper, or System Controller or Hood Controller
Operating Conditions	Temperature: 5 to 55°C (41 to 131°F) Humidity: 10 to 90%RH, non-condensing, indoor location
Material	Enclosure: Galvanized steel, 1.3mm (0.05”) thick Hood static pressure cap: 6061-T6 Aluminum Hood fitting: Carbon steel, w/ nickel/chrome plating
Knockout(s)	4 knockouts, RMC 21mm, EMT 3/4”
Dimensions	102mm (4”) W x 95mm (3.8”) D x 121mm (4.8”) H
Weight	0.9kg (2.1lb)
Agency Listings	Refer to the Compliance section

Dimensional Drawing



Required hood cutout diameter:
19mm (3/4”) for pressure port

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6PT-200 & -300 ECOAZUR® Exhaust/Supply Duct Pressure Transmitter, w/ Interlock

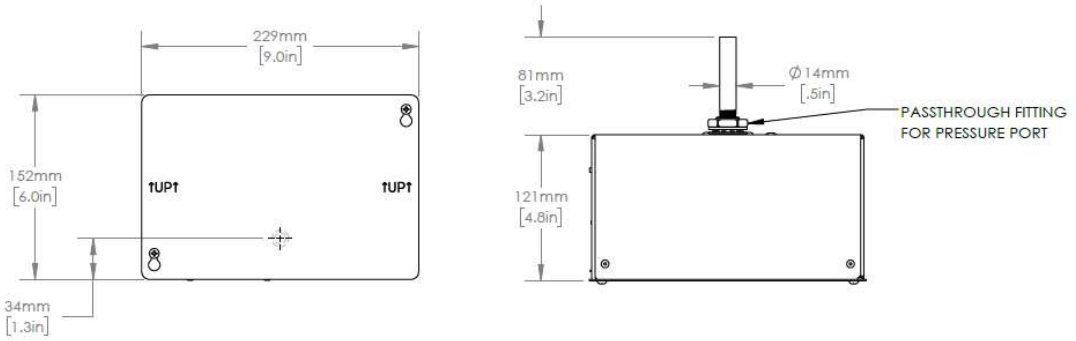
The duct Pressure Transmitter is designed to supervise and/or control static pressure in a commercial kitchen grease duct application. It is comprised of a digital sensor transmitting pressure data to the ECOAZUR® System Controller, as well as an adjustable pressure interlock to be connected to the corresponding fan VFD.

Key Features. Work with a PID open loop on ECOAZUR® DCKV system ● For exhaust ducts as well as supply ducts ● Pressure switch to interlock fan in case of malfunction

Power Supply	24 VDC, Class 2 power source (LPS), through a V6NC network cable	
Power Consumption	0.3W	
Location	**For Exhaust**	Inside exhaust duct downstream of main junction, on the widest surface of the duct Min. distance from duct junction: 2x equivalent diameter
	For Supply	Inside supply duct upstream of main junction, on the widest surface of the duct Min. distance from duct junction: 2x equivalent diameter
I/O (dedicated)	1 dry contact N.O./N.C. on the pressure switch	
I/O (configurable)	1 temperature input, 10k thermistor Type III	
	1 analog input, 0-10V	
	1 analog output, 0-10V	
Hood Network	RJ45 communication port, connects to ECOAZUR® System Controller or Hood Controller	
Pressure Range	Transmitter: 0 to 2,000 Pa (0 to 8.3” W.C.) Interlock: 0 to 3,000 Pa (0 to 12” W.C.)	
Operating Conditions	Temperature: 5 to 55°C (41 to 131°F) Humidity: 10 to 90%RH, non-condensing, indoor location	
Material	Enclosure: Galvanized steel, 1.3mm (0.05”) thick Tube: 304 Stainless steel Fitting: Carbon steel, w/ nickel/chrome plating	
Knockout(s)	4 knockouts, RMC 21mm, EMT 3/4”	
Dimensions	229mm (9”) W x 152mm (6”) H x 121mm (4.8”) D	
Weight	2.3kg (5.1lb)	
Agency Listings	Refer to the Compliance section	

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

Dimensional Drawing



Required duct cutout diameter:

19mm (3/4”) for pressure port

Product Numbering

Duct Pres. Transm. w/	For Exhaust	For Supply
Interlock	V6PT-200	V6PT-300

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6PT-210 & -310 ECOAZUR® Exhaust/Supply Duct Pressure Transmitter

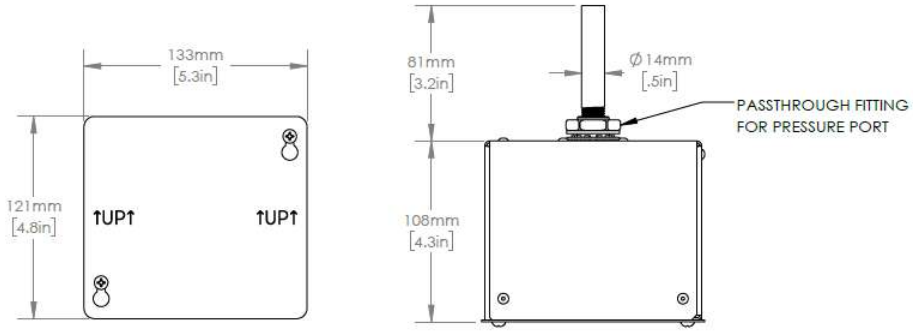
The duct Pressure Transmitter is designed to supervise and/or control static pressure in a commercial kitchen grease duct application. Its digital sensor transmits pressure data to the ECOAZUR® System Controller.

Key Features. Work with a PID open loop on ECOAZUR® DCKV system ● For exhaust ducts as well as supply ducts

Power Supply	24 VDC, Class 2 power source (LPS), through a V6NC network cable	
Power Consumption	0.3W	
Location	**For Exhaust**	Inside exhaust duct downstream of main junction, on the widest surface of the duct Min. distance from duct junction: 2x equivalent diameter
	For Supply	Inside supply duct upstream of main junction, on the widest surface of the duct Min. distance from duct junction: 2x equivalent diameter
I/O (configurable)	1 temperature input, 10k thermistor Type III	
	1 analog input, 0-10V	
	1 analog output, 0-10V	
Hood Network	RJ45 communication port, connects to ECOAZUR® System Controller or Hood Controller	
Pressure Range	0 to 2,000 Pa (0 to 8.3” W.C.)	
Operating Conditions	Temperature: 5 to 55°C (41 to 131°F) Humidity: 10 to 90%RH, non-condensing, indoor location	
Material	Enclosure: Galvanized steel, 1.3mm (0.05”) thick Tube: Stainless steel Fitting: Carbon steel, w/ nickel/chrome plating	
Knockout(s)	2 knockouts, RMC 21mm, EMT 3/4”	
Dimensions	133mm (5.3”) W x 121mm (4.8”) H x 108mm (4.3”) D	
Weight	1.3kg (2.9lb)	
Agency Listings	Refer to the Compliance section	

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

Dimensional Drawing



Required duct cutout diameter:

19mm (3/4”) for pressure port

Product Numbering

Duct Pres. Transm.	For Exhaust	For Supply
	V6PT-210	V6PT-310

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6PT-220 & -320 ECOAZUR® Exhaust/Supply Duct Pressure Interlock

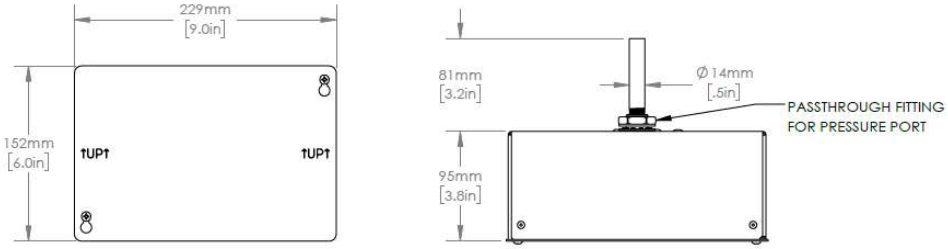
The duct Pressure Interlock is designed as a safety feature to protect against malfunction of the ventilation system. Its adjustable pressure switch is designed to be connected to the corresponding fan VFD.

Key Features. Pressure switch to interlock fan in case of malfunction ● For exhaust ducts as well as supply ducts

c UL us LISTED CE

Elect. Connection	14-18 AWG (0.75-2.5mm²), 0.45Nm (4lb-in), copper conductors only	
Pressure Range	0 to 3,000 Pa (0 to 12” W.C.)	
Location	**For Exhaust**	Inside exhaust duct, the closest to the exhaust fan, on the widest surface of the duct Max. distance from exhaust fan: 2x equivalent diameter
	For Supply	Inside supply duct upstream of main junction, on the widest surface of the duct Min. distance from duct junction: 2x equivalent diameter
Operating Conditions	Temperature: 5 to 55°C (41 to 131°F) Humidity: 10 to 90%RH, non-condensing, indoor location	
Material	Enclosure: Galvanized steel, 1.3mm (0.05”) thick Tube: Stainless steel Fitting: Carbon steel, w/ nickel/chrome plating	
Knockout(s)	4 knockouts, RMC 21mm, EMT 3/4”	
Dimensions	229mm (9”) W x 152mm (6”) H x 95mm (3.8”) D	
Weight	1.9kg (4.2lb)	
Agency Listings	Refer to the Compliance section	

Dimensional Drawing



Required duct cutout diameter:

19mm (3/4”) for pressure port

Product Numbering

Duct Pres. Interlock	For Exhaust	For Supply
	V6PT-220	V6PT-320

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6HM-110 & -120 ECOAZUR® Hood Wiring Channel Assemblies

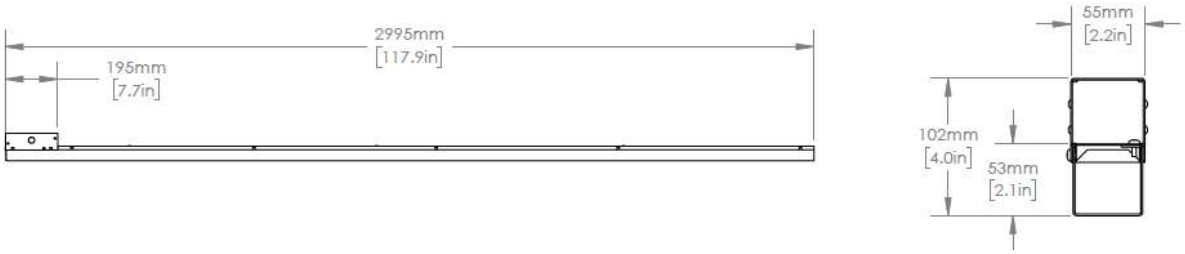
The hood wiring channels are a clever way for hood manufacturers and installation teams to get out of installing electrical conduits between main ECOAZUR® Hood Controllers. These UL-listed channels keep all wiring ordered and covered while making hood shipments for manufacturers more secure.

Key Features. Pre-cut to fit optic sensors and an adapted Temperature Transmitter (see V6HM-130) ● Plenty of holes to fix channels to the hood ● High covers to protect and provide optic sensor cable space ● Install both channels on the hood with Hood Controller in between ● Longer channel ready to be cut-to-size

Operating Conditions	Temperature: 5 to 55°C (41 to 131°F) Humidity: 10 to 90%RH, non-condensing, indoor location	
Material	Enclosure: Galvanized steel, 1.3mm (0.05”) thick	
Knockout(s)	2 knockouts per channel, RMC 21mm, EMT 3/4”	
Dimensions	Refer to the Dimensional Drawing Section	
Weight	**Long Channel 3,759mm (148”)**	6.2kg (13.7lb)
	Short Channel 178mm (7”)	0.7kg (1.5lb)
Agency Listings	Refer to the Compliance section	

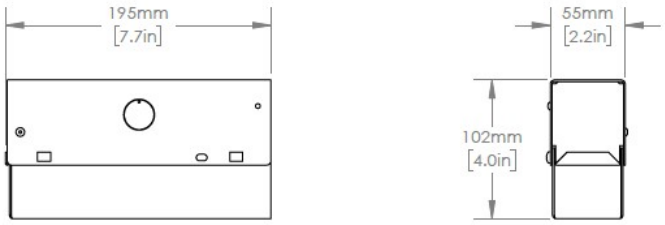
Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

Dimensional Drawing



V6HM-110

Long channel assembly must be cut to adapt to kitchen hood length.



V6HM-120

Product Numbering

	Long Channel 3,759mm (148”)	Short Channel 178mm (7”)
Hood Wiring Channel	V6HM-110	V6HM-120

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6HM-130 ECOAZUR® Hood Temperature Transmitter, Wiring Channel Mount

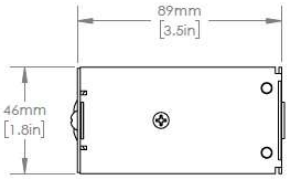
The Temperature Transmitter is one of the two main sensors of the ECOAZUR® DCKV system, being an intelligent temperature sensing device and programmable component to control the airflow rate of the hood. For best comfort and energy savings, it is recommended to use optic sensors in conjunction with Temperature Transmitters.

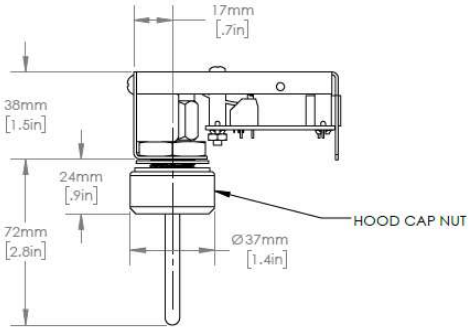
Key Features. Airflow demand adjusted to temperature fluctuations ● Nice cap nut around probe ● Setpoints offset according to a schedule signal and to room temperature measured by the Keypad or another room temperature probe ● Anti-backdraft protection ● RJ45 connection to ECOAZUR® Hood Controller

This hood Temperature Transmitter is made to fit within the hood wiring channel assemblies (see V6HM-110 & -120).

Power Supply	24 VDC, Class 2 power source (LPS), through a V6NC network cable
Power Consumption	0.2W
Location	One in front of each hood riser, Or one at each 2,438mm (96”) if smaller
Hood Network	RJ45 communication port, connects to ECOAZUR® Hood Controller
Operating Conditions	Temperature: 5 to 55°C (41 to 131°F) Humidity: 10 to 90%RH, non-condensing, indoor location
Material	Enclosure: Galvanized steel, 1.3mm (0.05”) thick Hood cap nut: 304 Stainless steel
Dimensions	89mm (3.5”) W x 46mm (1.8”) D x 38.1mm (1.5”) H
Weight	0.4kg (0.9lb)
Agency Listings	Refer to the Compliance section

Dimensional Drawing



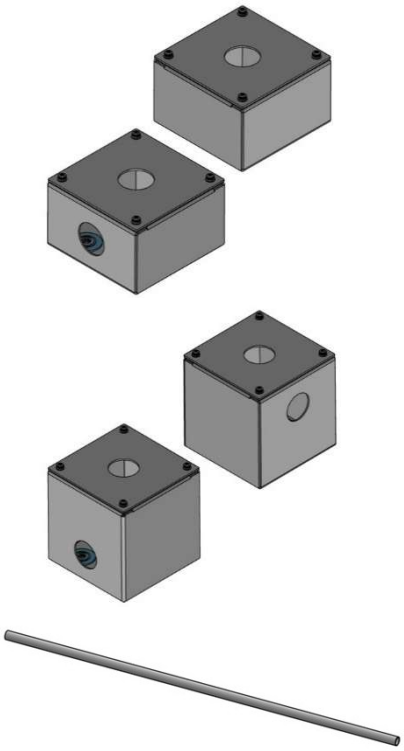


Required hood cutout diameter:

19mm (3/4”) for temperature probe

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6LA-2xx & -3xx ECOAZUR® Hood Limited-Access Enclosures & Tubes



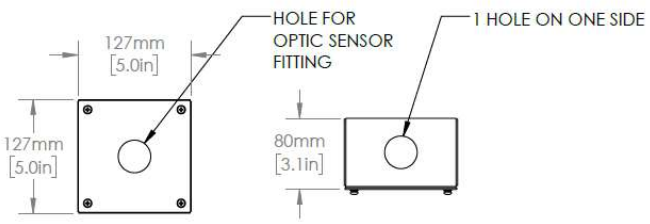
Hood Limited-Access enclosures and tubes, as the names suggest, are used when there is a non-existing or very narrow space restricting access to electrical and control enclosures over the hood. Therefore, this set of UL-listed enclosures for commercial kitchen hoods is mounted inside the hood, providing a means to install and connect the sensors within.

Key Features. One or two side openings per enclosure to maximize versatility ● To be used with optic sensors, temperature probes, and a specific version of Hood Controller (see V6LA-4xx & -510) ● Tubes used as conduits between enclosures ● Up to 4 temperature probes ● Variant for low ceilings (V6LA-240 model)

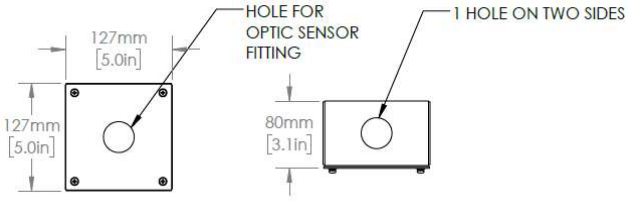
Location	**Optic Sensor Enclosures**	One at each end of hood section, aligned with other enclosures
	Temp. Probe Enclosures	One in front of each hood riser, Or one at each 2,438mm (96”) if smaller
Material	Enclosure: Stainless steel, 2.0mm (0.07”) thick	
Dimensions	Refer to the Dimensional Drawing Section	
Weight	**Enclosure, 76mm (3”) Deep**	1.2kg (2.7lb)
	Enclosure, 127mm (5”) Deep	1.6kg (3.5lb)
	Tube, 1220mm (48”) Long	1.0kg (2.1lb)
	Tube, 2,440mm (96”) Long	2.3kg (5.1lb)
Dimensions	Refer to the Dimensional Drawing Section	
Agency Listings	Refer to the Compliance section	

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

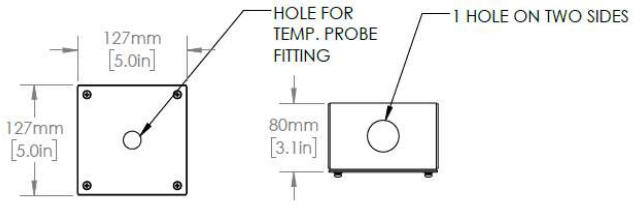
Dimensional Drawing



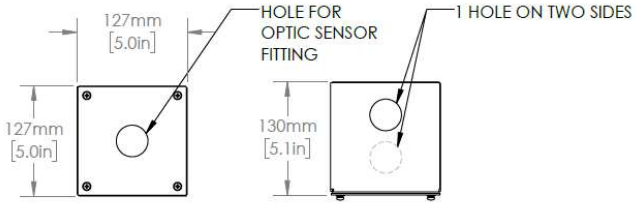
V6LA-210



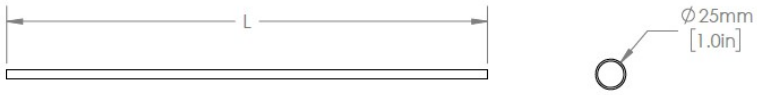
V6LA-220



V6LA-230



V6LA-240



V6LA-310 & V6LA-320

L = 1,216mm (47.9”) for V6LA-310
2,435mm (95.9”) for V6LA-320

Product Numbering

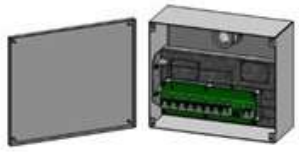
Enclosure 76mm (3”) deep	**For optic sensor, w/ 1 opening**	**For optic sensor, w/ 2 openings**	**For temp. probe, w/ 2 openings**
	V6LA-210	V6LA-220	V6LA-230

Enclosure 127mm (5”) deep	**For optic sensor, w/ 2 offset openings**
	V6LA-240

Tube	**1,220mm (48”) Long**	**2,440mm (96”) Long**
	V6LA-310	V6LA-320

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

V6LA-4xx & -510 ECOAZUR® Hood Limited-Access Hood Controller & Temp. Probe



The Hood Controller expands the ECOAZUR® System Controller network connection capabilities while minimizing overall installation time and costs.

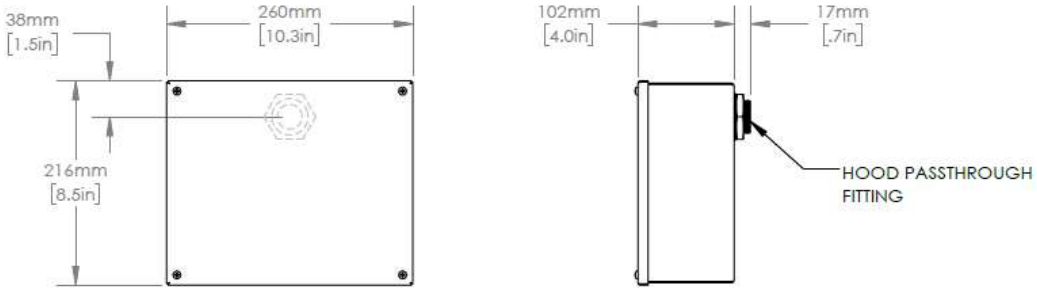
Key Features. Easy connection for up to 8 ECOAZUR® devices (hood sensors, Keypads, hubs & Pressure Transmitters) (RJ45) ● Connection to up to 4 exhaust Modulating Dampers on RJ45 ports ● Diagnostic LEDs on RJ45 ports ● Extra space to coil and store excess cable

The V6LA-4xx Hood Controller is designed to fit with the hood's limited-access enclosures & tubes (see V6LA-2xx & -3xx). Models V6LA-410 to -440 accommodate 1 to 4 temperature probes in the hood.
Modulating Dampers cannot connect to this Hood Controller.

Power Supply	24 VDC, Class 2 power source (LPS), through a V6NC network cable	
Power Consumption	**Supports 1 Temp. Probe**	0.8W
	Supports 2 Temp. Probes	1.0W
	Supports 3 Temp. Probes	1.2W
	Supports 4 Temp. Probes	1.4W
I/O (configurable)	1 temperature input, 10k thermistor Type III, up to 4 with V6LA-440 model	
	1 digital input, dry contact, 24 VDC sourcing	
Hood Network	8 RJ45 input communication ports, connect to ECOAZUR® sensors, Keypads and additional Hood Controllers	
	1 RJ45 output communication port, connects to ECOAZUR® System Controller or parent Hood Controller	
Operating Conditions	Temperature: 5 to 55°C (41 to 131°F) Humidity: 10 to 90%RH, non-condensing, indoor location	
Material	Enclosure: Stainless steel, 1.6mm (0.06”) thick	
Dimensions	254mm (10”) W x 203mm (8”) D x 165mm (6.5”) H	
Weight	**Hood Controller**	3.6kg (7.8lb)
	Temp. Probe	0.1kg (0.2lb)
Agency Listings	Refer to the Compliance section	

Intellinox Technologies Inc.
1677 avenue des Affaires, Québec
QC, G3J 1Y7, CANADA

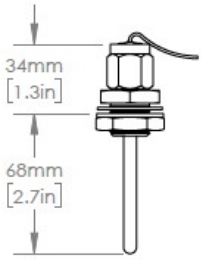
Dimensional Drawing



Required hood cutout diameter:

35mm (1-3/8”) for passthrough fitting

V6LA-410 to V6LA-440



Required hood cutout diameter:

19mm (3/4”) for temperature probe

V6LA-510

Product Numbering

Hood Controller	**Supports 1 Temp. Probe**	**Supports 2 Temp. Probes**	**Supports 3 Temp. Probes**	**Supports 4 Temp. Probes**
	V6LA-410	V6LA-420	V6LA-430	V6LA-440

Temp. Probe	**Standard**
	V6LA-510