

## 03-HUB, FIRST IN CLASS IN INTEGRATED MULTIDETECTION TECHNOLOGY

Delta Controls' new 03 platform was recently installed at the new elementary school in Saint-Charles-Borromée which makes it the first school in Quebec to use integrated multidetection technology.

The 03-HUB contains several sensors that allow, through machine learning, fast and accurate measurements of the temperature, light intensity, humidity, occupancy, etc. The 03-HUB is installed on the ceiling of each class, since it is also an EnOcean wireless access point and a Bluetooth beacon, which avoids metal obstacles that can hinder telecommunications.

Measuring the temperature from the ceiling is known to be problematic. Delta Controls solved this issue with a machine learning algorithm that combines the temperature values of an on-board thermistor, a temperature sensor in the humidity probe and an infrared reader. The 03-HUB measures the temperature at four feet above the ground, in the centre of the room.

Presence detection is also often problematic and dual technology detectors (motion and infrared) are expensive. However, the HUB-03, using machine learning, uses three detectors to confirm occupancy: motion, infrared and sound. Indeed, it includes a microphone used to recognize

occupancy, glass breakage, gunfire and other audio signatures.

The 03-HUB microphone is paired with a loudspeaker. It currently allows WAV files to be played, but the design plan provides for voice control of temperature, lighting and blind setpoint adjustments with acknowledgement.

To control lighting and blinds, the 03-HUB contains a lux light level sensor and a light temperature sensor. The 03-HUB supports the DALI (lighting) and SMI (blinds) protocols, and its outputs can be programmed for LED lighting.

Finally, the 03-HUB, thanks to its Bluetooth beacon, allows communication with a smartphone that has downloaded the 03 application available on Google Play or Apple Store.

Thanks to this state-of-the-art product, the Saint-Charles-Borromée elementary school can boast of being at the forefront of technology.

### Project Team

|                            |                                  |
|----------------------------|----------------------------------|
| <b>General contractor</b>  | Construction Raynald Tisseur     |
| <b>Architects</b>          | Lachance Associée et Architectes |
| <b>Engineering firm</b>    | GBI-Services Ingénierie          |
| <b>Building automation</b> | Régulvar inc.                    |

Regulvar wishes you a  
Happy Holiday Season!

Regulvar Team



## FOCUS ON THE BACNET SC8131 CAMERA

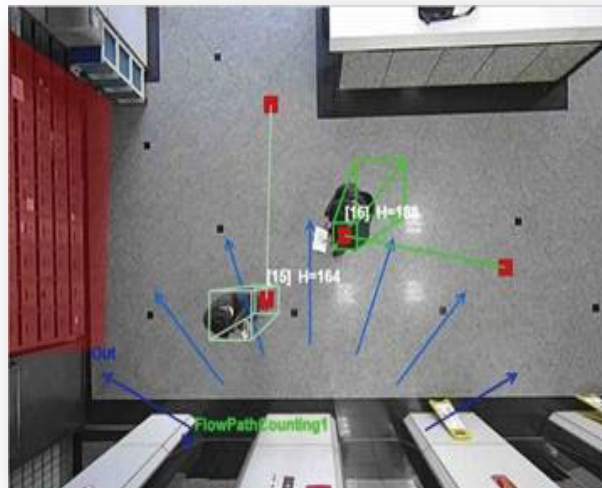
In an era where security and surveillance are an absolute necessity for many companies and institutions, the SC8131 camera simplifies building management with state-of-the-art people counting technology that provides a 3D view of all people circulating.

Designed by Vivotek, a Delta Controls satellite company, the SC8131 camera calculates the number of people who use a building over a period of time (day). Thanks to its 3D depth technology, it distinguishes humans from objects, as well as children from adults, individuals and groups, and achieves 98% accuracy, allowing accurate counting analysis to be performed even at the busiest times.

Whether it's installed above doors, in access corridors or in rooms, the SC8131 camera has features that are very useful for measuring attendance, monitoring fresh air, calculating load prediction or improving building layout in institutions such as stores, libraries, showrooms, stations. It also makes it possible to evaluate the effectiveness of an advertising campaign, measure the success of a transportation service, adjust the number of employees according to the number of visitors, etc.

This stereo network camera can be integrated into a security system

and share its images with an IP recorder. In addition, it communicates with Delta O3 platform controllers using the BACnet protocol, and BACnet objects indicate the number of people entering and leaving. Finally, a variable allows the counter to be reset at the end of the desired period.



3D Depth Technology

## Features

- ✓ VIVOTEK 3D depth technology
- ✓ Equipped with the BACnet protocol
- ✓ High accuracy rate up to 98%
- ✓ Report on local storage data for counting
- ✓ Easy installation and configuration



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### Written

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### BACnet OBJECT HANDLING ADVANCED OBJECTS AND CONTROLLERS

### GCL PROGRAMMING

### CREATING GRAPHICAL INTERFACES

with Illustrator

### CREATING GRAPHICAL INTERFACES

with enteliviz

### In Laval (French)

February 3 - 4, 2020\*

February 5 - 6, 2020\*

February 11 - 12 - 13\*

February 18 - 19, 2020\*

Upon request

### In Gatineau (English)

Upon request

Upon request

Upon request

Upon request

Upon request

For more information,  
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\*Dates subject to changes