Sensor - Dual Tech In-Wall OCC/VAC Sensor

Item ALC-DT-BT-WH

PRODUCT DESCRIPTION

The ALC-DT-BT-WH is a Dual Technology (PIR and Ultrasonic) Sensor designed for use with the ARISTA® Lighting Controls System by Intermatic and will control lighting based upon occupancy/vacancy. If the space is configured for Occupancy and movement is detected, the sensor informs the ARISTA controller(s) in the space and the lights will illuminate. The lights will turn off after the ARISTA controller(s) deem the space vacant and the timeout period completes. If the space is configured for Vacancy, the ARISTA controller(s) in the space will only react when they are manually activated. The lights will turn off after the ALC-DT-BT-WH deems the space vacant and the timeout period completes. The ALC-DT-BT-WH also utilizes a built-in switch that can be used as a manual override to the programmed ARISTA controller(s). Pricing is available upon request.

FEATURES

- 120-277 VAC.
- Wireless communications.
- Eliminates 3-way and multi-way wiring.
- Adjustable sensitivity settings.
- Independent settings for Ultrasonic and PIR sensor technologies.
- Programmable ON/OFF button.
- Can be used for occupancy or vacancy applications.
- LED indicators for easy identification.

APPLICATIONS

- Indoor Lighting Control
- Indoor Sensing Control

TECHNICAL DATA

General	
Model Number	ALC-DT-BT-WH
Description	Dual Tech In-Wall OCC/VAC Sensor
UPC Code	078275150737
Brand	Intermatic
Warranty Period	5-Year limited
Country of Origin (Intermatic)	CHINA

Control Specifications	
Operation Features	Presence
Operation Mode	Occupancy; Vacancy
Data Transfer Options	Bluetooth
Backup Restoration Time	1 Minute
Backup Type	Non-volatile
Backup Protection Time	Indefinite
PIR Coverage Area (sq ft)	1200
Ultrasonic Coverage Area (sq ft)	300
Application Compatibilities	ARISTA Controllers
Function type	Occupancy; Scheduled ON/OFF; Vacancy

Mechanical Specifications	
Mount Type	In-Wall

Dimensions	
Product Height (in)	3.15
Product Height (mm)	80.01
Product Width (in)	2.766
Product Width (mm)	70.2564
Product Depth (in)	4.92
Product Depth (mm)	124.968
Class 1 Wire Size Min	14
Class 1 Wire Size Max	10

Material Specifications	
Color	White
Material	Plastic

Communication Method	
Radio signal	Bluetooth

Electrical Specifications	
Voltage Selection Type	Auto Voltage 120-277
Input Voltage Range(s)	120-277 VAC, 50/60 Hz
Wiring Options Line Voltage	Leads

Display and Format	
Status Indicator	LED Indicator

Packaging	
Shipping Weight (lbs)	0.442
Shipping Weight (kg)	0.2
Product Weight (lbs)	0.442
Product Weight (kg)	0.2

Operating Specifications	
Programming Targets	Smartphone
Tampering protection	Yes

Environmental Specifications	
Operating Humidity	Dry Location
Temperature (operation)	32°F..131°F
Temperature (operation)	0°C..55°C
Usage Environments	Indoor

Standards and Certifications	
UL Certification	cULus
Other Certifications and Compatibilities	Ashrae 90.1 2016; IECC 2018; Green Energy +
California Proposition 65	Lead; DEHP
RoHS Certification	Y

ARISTA™ Case Study

Commercial Office Installation: Bloomingdale, IL

ARISTA™ Paves the Way for Happy Tenants, Lower Utility Costs

Leasing commercial office space is a lot like renting units in an apartment complex, according to Wendie Peters, owner of two suburban office buildings in northwest Illinois. At the end of the day, tenants just want a place they can call home.

But landing a new tenant (or keeping an existing tenant happy) isn't always straightforward. The decision to sign or extend a lease can hinge on the smallest of details.

That's why it was a no-brainer for Peters to upgrade one of her 1,200 sq. ft. office units with the ARISTA™ Advanced Lighting Control System. In her view, installing ARISTA was a cost-effective way to modernize her space while promoting energy-saving best practices.

"Utilities are only going up, and every improvement helps," says Peters. "Sometimes it's better to spend a little extra up front if it's a long-term benefit for the building (and tenants)."

In December 2021, Wendie outfitted the office with a combination of ARISTA room controllers, sensors, and in-wall controls while also updating existing light fixtures to LED. The system would ensure lights turned on at a comfortable level whenever they were needed but then shut off when the office was not in use.

Long-term tenant of the space, Pete Semenek, chairman of a regional non-profit organization, saw the benefits immediately.

"The month after Wendie installed ARISTA, our electric bill dropped by about 12%," says Semenek. "I almost didn't believe it because it was so drastic."

In addition to a drop in monthly utility expenses, Semenek appreciated how lights turned on automatically in meeting rooms and common areas (and shut off automatically), giving him one less thing to worry about in his busy day.

"It took me a few weeks to get used to not having to turn the lights off. But now it's great – I don't even think about it," says Semenek. "If I'm working late, the whole back of the office will be dim. I can go right from my office out the side door without re-triggering the lights."

Getting Started with ARISTA

Much like the seemingly overnight drop in energy costs, Peters and Semenek were impressed by how fast they were able to get ARISTA up and running.

After discussing day-to-day lighting needs with Semenek and his team, Wendie worked with her electrical contractor and an Intermatic representative to determine the ideal configuration of ARISTA components. They knew they'd want to tailor schedules around regular business hours (7:30am to 4pm on weekdays) and account for both their everyday staff of 2-3 individuals and times when 5 or more people would be in the office for special meetings.

In less than two days, a trusted electrician replaced outdated fluorescent fixtures throughout the office and installed a total of 27 ARISTA components.

At the core of their ARISTA setup was an ALC1-R room controller, which was used to drive daily schedules, set dimming levels and connect with the ARISTA app via Bluetooth® mesh technology. The configuration also included 9 presence sensors, which were placed in private offices, a hallway, a meeting room, and a common work area, as well as a daylight harvesting sensor and 9 in-wall controls.

Once the basic installation was complete, the electrician worked with Wendie and Pete to create admin accounts for the ARISTA app, which allowed them to tweak schedules and adjust parameters, such as maximum run level and dimming levels, at their convenience.

Finding the Perfect Balance

Though installation was completed in a matter of days, being able to 'live' with ARISTA and fine-tune settings gave Pete and his team the opportunity to customize their space and meet everyone's needs. It also showed that it was possible to be mindful of energy consumption without sacrificing comfort or productivity.

"After the system was installed, I customized the dimming levels and shut-off times in my office to make it feel more comfortable," says Semenek. "Some people like it darker, but for me, the lights need to be on all the way to do my best work."

In contrast to Pete's preferences, a co-worker in an adjacent office chose to set the threshold of their daylight harvesting sensor to take advantage of natural light, even if it means a dimmer workspace in some cases.

Moreover, Semenek cites the system's manual override function (and its automatic reset feature) as a practical way for his team to control lighting for ad-hoc needs without jeopardizing schedules or system settings.

"I appreciate that I can manually turn the lights on at the wall if I need to," says Semenek. "Then in 20 minutes the system resets. It's a big plus for us and helps ensure our programming doesn't get messed up if new people are in the office."

The tailor-made ARISTA configuration allows Pete's staff to stay focused on what matters most – their work.

"ARISTA is perfect for our needs," says Semenek. "It's added convenience to our day-to-day and is saving us money – I'd recommend it."

A Bright Future Ahead

With Pete and his team enjoying the creature comforts and financial benefits of a smart lighting system, Wendie has already set her sights on her next building project.

"Now I need to install ARISTA in the lobby and hallways – the savings is too good to pass up," says Peters.

Although Wendie was familiar with the Intermatic brand, having installed multiple ET Series controls and ST01 in-wall timers, ARISTA was her first step into the world of smart lighting controls. That willingness to get out of her comfort zone is sure to pay dividends. She believes solutions like ARISTA will be the difference when marketing her commercial properties for years to come.

"This is new territory for us, but I'm so glad we made the jump," says Peters.

"Having a smart lighting control system is a point of differentiation, especially when prospective tenants are choosing between comparable spaces. I'm going to have my real estate agent include it as an upgrade on our listings."

Ready to make ARISTA a part of your next commercial upgrade? Contact your local Intermatic representative today and visit **Intermatic.com/ARISTA**.

Customer Snapshot

Customer: Wendie Peters (commercial real estate)

Location: Bloomingdale, Illinois

Application: Office lighting control

Key Takeaways:

- Peters installed ARISTA to attract commercial tenants, promote energy efficiency
- Placed 27 ARISTA components (e.g., sensors, controllers, in-wall dimmers) throughout a 1,200 sq. ft. office setting
- Quick two-day installation included conversion of outdated fluorescent fixtures to LED
- Tenant saw immediate impact with ~12% decrease in electric utility costs

Scan for our ARISTA Installation Walkthrough - Office Lighting Control Case Study

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