



Allure UNITOUCH™

Occupant interface with mobile app support, sensors and touchscreen for the control of HVAC, lighting and sunblinds.



Overview

The Allure UNITOUCH is an elegant and occupant focused room device that provides an intuitive user interface, allowing wireless control of room comfort parameters from a smartphone using *Bluetooth®* low energy technology. Its compact style and slim profile provides a modern appearance when installed in any setting.

The high resolution 3.5" capacitive touchscreen makes this communicating sensor the ideal all-in-one solution for a wide range of HVAC, lighting, and sunblind application; a perfect addition to the Smart Room Control solution.

Several models are available in different color and sensing options to suit any room requirements.

Applications

Compatible with any ECLYPSE Connected Controller, the Allure UNITOUCH provides precise environmental zone control for temperature, fan speed, lighting, and blinds.

Features & Benefits

Modern Design with Modern Features

The Allure UNITOUCH incorporates a multitude of design features:

- ☐ Slim and compact
- ☐ Intuitive user interface
- ☐ Responsive capacitive touch screen
- ☐ Wireless control via a mobile application
- ☐ Easy customization

Mobile App Compatibility

The Allure UNITOUCH can be controlled via Bluetooth low energy technology using the mobile app. This direct connection allows for a mirrored user interface through your smartphone for easy remote control from anywhere within range.

Ergonomic and Intuitive Design

An intuitive control scheme and an engaging operation allows for an unparalleled user experience that is highlighted by its responsive capacitive touchscreen. Also equipped with a close range proximity sensor, the UNITOUCH can wake up from sleep mode with a simple wave of the hand.

Enhanced User Experience

Occupants can view and adjust environmental settings to their liking, for example, view the space temperature, adjust the setpoint, control lighting and sunblinds, set the fan speed, and apply occupancy overrides.

Temperature and Fan Speed Selection

Temperature control and adjustable fan speed offers occupants the flexibility to adjust settings to suit their own personal comfort level.

Lighting and Sunblind Control

Users can control lighting fixtures (DALI, ON/OFF, dimming) and shades/sunblind motors (24 VDC or 100-240 VAC, up/down and angle rotation) through additional expansion modules.

Occupancy Management

For people working outside of core hours, an occupancy indicator allows occupants to override system schedules during occupied or unoccupied times.

Multilingual Interface

The multitude of supported languages offers occupants the flexibility to view the Allure UNITOUCH interface in their preferred language. Each UNITOUCH can host up to 5 languages, based on the configuration in EC-gfxProgram. Supported languages are: English, French, Spanish, Italian, German, Danish, Dutch, Polish, Portuguese.

Custom Images

A custom image can be added to the rolling screen to further customize the Allure UNITOUCH experience to your needs. A customized company logo can also be added at the top of the main menu.

Personal Scenes (pending)

Different scenes (setpoint, light level, sunblinds...) can be configured for any potential situation such as during meetings or presentations which may require a temporary modification of environmental settings.

Centralized Control

Control HVAC, and up to 8 lighting groups and 8 shades/sunblinds groups, handled simultaneously or individually, from a single accessory

Adaptive Brightness

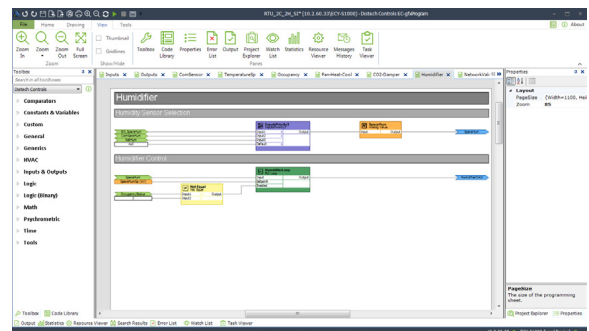
Equipped with an ambient light sensor, the display brightness is adjusted accordingly and automatically for optimal reading comfort.

Easy Configuration and Customization

The Allure UNITOUCH also benefits from intuitive customization through a specific EC-gfxProgram block which meets most installation requirements.

Programmability

Supports Distech Controls' EC-gfxProgram, which makes Building Automation System (BAS) programming effortless, by allowing you to visually assemble building blocks to create a custom control sequence for any HVAC, lighting, or building automation application.



Wiring and Commissioning

Cost Savings

Free up Controller Inputs

The sensor is wired to the dedicated subnet port of ECLYPSE series BACnet/IP and Wi-Fi Controllers, freeing up controllers' inputs.

Reduce Wiring Lengths

Daisy-chain communicating sensors to one controller for increased range while using less wire thereby reducing material costs in large open space and multi zone applications.

"3-in-1" Communicating Sensors

Multi-sensing capabilities (temperature, humidity, and CO₂) using one wire and one connection.

Quick and Easy Installation

Both power and communications pass through a single Cat 5e cable for reduced installation costs and for easier installation.

Two RJ-45 ports facilitate the daisy-chain connections of room devices.

Quick-link Connectors

This device features quick-link connectors, accelerating installation time by up to 75% and reducing potential wiring errors.

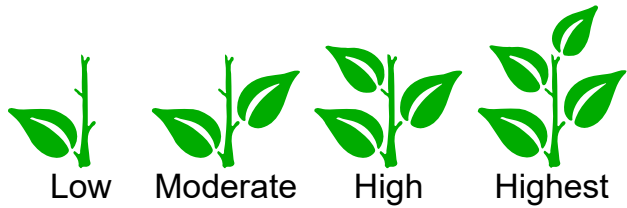
Versatile Mounting

These sensors support various mounting scenarios, including on dry wall or on a North American, European, Swiss, or Asian style switch box.

ECO-Vue™ Leaf Pattern

The innovative ECO-Vue Leaf Pattern graphically indicates energy consumption in real time to promote an occupant's energy-conscious behavior. Occupants are encouraged to have greener habits with the ECO-Vue Leaf Pattern while reducing energy costs. As more leaves appear, greater energy efficiency is being achieved, while fewer leaves will encourage the occupant to take corrective action to optimize the system's environmental performance.

Energy efficiency levels:



Automatic Calibration of CO₂ Sensors

ABC Logic (Automatic Calibration Logic) is a patented self-calibration technique that eliminates the need for manual calibration in most applications. The sensor is designed to work in environments where CO₂ concentrations will drop to outdoor ambient conditions (400 ppm) at least three times in a 14-day period, typically during unoccupied periods. For example, in a typical office, school, theater, etc., people are the main source of CO₂ in a building. When people go home at night, the indoor CO₂ level will drop to the outdoor CO₂ level, which is typically 380 to 400 ppm. The ABC Logic system records the lowest reading every 24-hour period for analysis. If there is a statistical difference in the baseline readings, then a calibration factor is applied to all subsequent sensor readings. The ABC Logic system typically takes three weeks of continuous run-time before making corrections. Lifetime CO₂ calibration is guaranteed with ABC Logic.

The sensor will typically reach its operational accuracy after 25 hours of continuous operation on condition that it was exposed to ambient air reference levels of 400 ppm ±10 ppm CO₂.

Model Selection¹

Model Name		Temperature	Humidity	CO ₂
Black	Allure UNITOUCH-B	■		
	Allure UNITOUCH-B-H	■	■	
	Allure UNITOUCH-B-CH	■	■	■
White	Allure UNITOUCH-W	■		
	Allure UNITOUCH-W-H	■	■	
	Allure UNITOUCH-W-CH	■	■	■

1. All models include a Bluetooth low energy transceiver

Product Specifications

Power Supply Input

Voltage _____ 16 VDC Maximum, Class 2 (subnet powered)

Power consumption:

With CO₂ sensor _____ 1.8W

Without CO₂ sensor _____ 1W

Wired Communications

Compatible Controllers _____ ECY-PTU/TU, ECY-VAV, ECY-303, ECY-S1000

Rate _____ 38 400 bps

Communications _____ RS-485

Topology _____ Daisy-chain

Wiring _____ Total cable length: 100m (328 ft)

Addressing _____ On-screen selectable

Cable Type _____ T568B Cat 5e network cable, 4 twisted pairs

Connectors:

☐ IN _____ RJ-45

☐ OUT _____ RJ-45 (pass-through for daisy chain connection to other room devices)



A mixed architecture with standard room devices and Bluetooth low energy enabled devices is not recommended.

Wireless Communications

Type _____ Bluetooth 4.2

Frequency _____ 2402 - 2480 MHz

Temperature Sensor

Range _____ 0°C to 50°C (32°F to 122°F)

Accuracy:

☐ Sensing component _____ ±0.20°C (±0.36°F)

☐ Overall accuracy _____ ±0.50°C (±0.90°F)

Resolution _____ 0.10°C (0.18°F)

Humidity Sensor

Accuracy _____ <±3% : RH 0% to 70%

Resolution _____ 1%

CO₂ Sensor

Measurement Range _____ 0 to 2000 ppm

Operating Elevation _____ 0 to 4877m (16000 ft)

Warm-up Time _____ < 2 minutes (operational), 10 minutes (maximum accuracy)

CO₂ Accuracy _____ 400-1250 ppm ± 30 ppm or 3% of reading, whichever is greater¹

_____ 1250-2000 ppm ±5% of reading + 30ppm¹

Temperature Dependence _____ ±0.2% FS per °C (±0.11% per °F)

Stability _____ <2% of FS over life of sensor (15 years)

Pressure Dependence _____ 0.135% of reading per mm Hg; software adjustable



Allure UNITOUCH

Sensing Method ————— Non-dispersive infrared (NDIR) absorption
————— Gold-plated optics
Calibration Method ————— Patented ABC Logic self-calibration algorithm

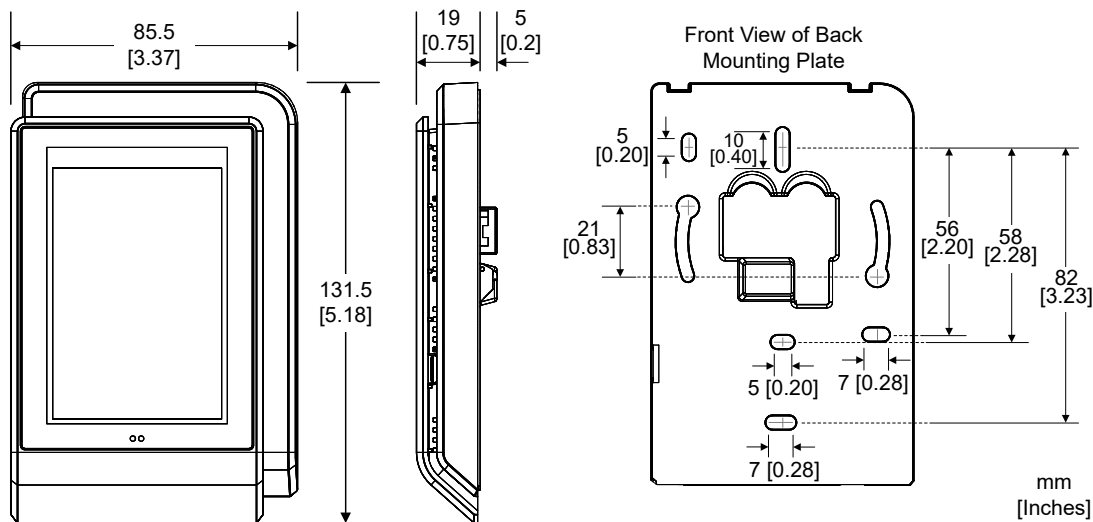
1. Tolerance based on span gas of $\pm 2\%$ and ABC Logic enabled.

LCD Characteristics

Display Type ————— Full color, backlit, capacitive LCD touchscreen
Display Resolution ————— High definition (320 × 480)
Effective Viewing Area (W × H) ————— 48.96 × 73.44 mm (1.93 × 2.89")

Mechanical

Dimensions (H × W × D) ————— 131.5 × 85.5 × 19.0 mm (5.18 × 3.37 × 0.75")



Shipping Weight ————— 0.2 kg (0.44 lbs)
Enclosure Material ————— ABS
Enclosure Rating ————— Plastic housing, UL94-V0
Color ————— white or black
Installation ————— wall mounting through mounting holes (see figure above for hole positions)

Environmental

Operating Temperature ————— 0°C to 50°C (32°F to 122°F)
Storage Temperature ————— -20°C to 50°C (-4°F to 122°F)
Relative Humidity ————— 0 to 90% Non-condensing

Standards and Regulations

CE

- ☐ Emission ————— EN 61000-6-3: 2007 + A1: ed.2011; Generic standards for residential, commercial and light-industrial environments
- ☐ Immunity ————— EN 61000-6-1: 2007; Generic standards for residential, commercial and light-industrial environments
- ☐ Radio ————— EN 300 328 V2.1.1 November 2016; Wideband transmission systems Data transmission equipment operating in the 2.4GHz ISM and using wide band modulation

FCC ————— This device complies with FCC rules part 15, subpart B class B

UL Listed (CDN & US) ————— UL916 Energy management equipment
WEEE ————— All products are marked according to the Waste Electrical and
Electronic Equipment (WEEE) directive.
RoHS ————— All materials and manufacturing processes comply with the RoHS directive.



