The Daintree™ Wireless High-Bay Sensor (WHS20) is a sensing and control module within the Daintree wireless building control solution. It enables standalone or networked control of individual luminaires. The WHS20 provides cost-effective occupancy and ambient light detection with full range dimming. An optional built-in BLE beacon with Apple® iBeacon™ technology can be used for position and proximity detection.

The WHS20 Control Module is equipped with a passive infrared (PIR) sensor for Occupancy Detection and an ambient light sensor for Ambient Light Detection to adjust the luminaire based on external light levels from daylight and other fixtures to ensure consistent lighting at the task level. With innovative methodology, Occupancy and Ambient Light Detection can be synchronized to provide dynamic continuous dimming performance to maximize energy efficiency.

Available in both a bottom mount and side mount version, the WHS20 is an extremely versatile solution for a wide range of fixture types including low, mid, and high bay luminaires. Perfect for industrial warehouses and racked aisles, the WHS20 has an optional snap-on aisle mask for directed occupancy detection that makes for simple and easy installation. With a wide operating temperature range, IP66 and IP69K rating, the WHS20 is well suited for more demanding environments such as manufacturing spaces, high bay retail, warehouses and parking garages.

Lighting parameters can be customized to fit with the lighting strategy of the building by operating in one of the following modes:

1) As Daintree One™ standalone control module with occupancy and ambient light detection, configured with the Daintree Wireless Handheld Remote (WHR1)
2) As a component of the Daintree Networked solution - a highly scalable system for lighting and building control, monitoring, and optimization.
Daintree™ Wireless High Bay Sensor (WHS20)

**Product Dimensions**

### Bottom Mount (WHS20-BM-S)
- 1.33 in. (33.8mm)
- 0.78 in. (19.8mm)
- 1/2 in. NPS Threads

### Side Mount (WHS20-SD-S)
- 3.15 in. (80mm)
- 1 in. (25.4mm) Knockout Clips

**Ordering Information**

WHS20 sensors are available in Albeo High Bay Fixtures. For current catalog logic please reference the Albeo cut sheets for availability.

<table>
<thead>
<tr>
<th>Catalog #</th>
<th>Material #</th>
<th>Description</th>
<th>Quantity</th>
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<tr>
<td>WHS20BMS</td>
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<td>WHS20 High Bay Sensor Bottom Mount</td>
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<tr>
<td>WHS20SDS</td>
<td>93134985</td>
<td>WHS20 High Bay Sensor Side Mount</td>
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<td>WHS20SDS</td>
<td>93134986</td>
<td>Snap On Aisle Mask</td>
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<td>WHS20SDS</td>
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<td>93134990</td>
<td>Angle Adjuster</td>
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<td>WHS20SDS</td>
<td>93134997</td>
<td>High Lens</td>
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</table>

**Product ID**

- **WHS** = Wireless Highbay Sensor
- **2** = 2nd Generation
- **0** = Low Voltage
- **BM** = Bottom Mount
- **SD** = Side Mount
- **S** = Sealed
Daintree™ Wireless High Bay Sensor (WHS20)

Mounting

The WHS20 has a combination snap feature and 1/2 inch NPS threaded nipple for mounting to a luminaire. The snap feature can be used with most sheet metal fixtures including a Standard 1/2 inch knockout. For IP66 or IP69K applications, attach the WHS20 to an equivalent rated fixture and use a conduit nut to achieve proper seal against the fixture.

<table>
<thead>
<tr>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupancy Detection</td>
</tr>
<tr>
<td>Ambient Light Detection</td>
</tr>
<tr>
<td>Wireless Technology</td>
</tr>
<tr>
<td>Radio</td>
</tr>
<tr>
<td>BLE Beacon</td>
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<tr>
<td>Driver Compatibility</td>
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<tr>
<td>Power Consumption</td>
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<tr>
<td>DA Input</td>
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<tr>
<td>LED Indicators</td>
</tr>
<tr>
<td>Lenses</td>
</tr>
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<tr>
<td>Enclosure</td>
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<tr>
<td>Compliance</td>
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<tr>
<td>Warranty</td>
</tr>
</tbody>
</table>

Labels

Every WHS20 includes the necessary labels for Daintree Networked commissioning.

Unit Label

WHS20 comes with unit label affixed.

Fixture Label

When attaching WHS20 to a fixture, attach fixture label to the fixture and visible to maintain regulatory compliance.

Plan Label

The plan label is useful for attaching to a paper facility map or tracking sheet.
Daintree™ | Wireless High Bay Sensor (WHS20)

WHS20 Commissioning
Daintree WHS20 sensors can be commissioned in Daintree ONE Stand alone mode, 0-10V or in a Daintree Networked environment. Commissioning and upgrading to Daintree Networked is capable via the Daintree WHR1 Remote.

Daintree One Default Performance
When in standalone Daintree One mode, the default operation of the WHS20 is as follows:

<table>
<thead>
<tr>
<th>Occupancy Detection</th>
<th>Ambient Light Detection</th>
<th>Dimming Function</th>
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</thead>
<tbody>
<tr>
<td>Occupied Output</td>
<td>Low Ambient Threshold</td>
<td>Max Dim Output</td>
</tr>
<tr>
<td>Idle Output</td>
<td>High Ambient Threshold</td>
<td>Min Dim Output</td>
</tr>
<tr>
<td>Vacant Output</td>
<td>High Ambient Output</td>
<td>Min Output</td>
</tr>
<tr>
<td>Occupied Time</td>
<td>Ambient Light Sensitivity</td>
<td></td>
</tr>
<tr>
<td>Idle Time</td>
<td>Ambient Transition Time</td>
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<tr>
<td>Occupancy Sensitivity</td>
<td></td>
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<tr>
<td>Transition Rise Time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transition Fall Time</td>
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<td></td>
</tr>
</tbody>
</table>

Daintree Networked Mode - Default Performance
When in Daintree Networked mode, the default operation is as follows:

- **Default Operation**
  - The WHS20 will keep the luminaire on at the Max Dim Output until commissioned.

- **Daintree Network Connected**
  - **Not Commissioned**
    - The WHS20 will still keep the luminaire on at Max Dim Output setting.
  - **Commissioned to a Zone**
    - The WHS20 will follow the zone control of the Daintree Network, configurable via ControlScope software.

- **Daintree Networked Connection Lost**
  - The WHS20 will return the luminaire to Max Dim Output after a period of lost connection.
  - Once connection is restored, the WHS20 will return to the zone control configurable via Daintree ControlScope software.

Available in the following Evolve Luminaires ABV Series and ABN Series
**Daintree™ Wireless High Bay Sensor (WHS20)**

### Accessories
Accessories are available for customization and can be ordered separately.

<table>
<thead>
<tr>
<th>Aisle Mask (Snap On)</th>
<th>SKU</th>
<th>QTY</th>
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<table>
<thead>
<tr>
<th>Aisle Mask (Internal)</th>
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<table>
<thead>
<tr>
<th>Angle Adjuster</th>
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<table>
<thead>
<tr>
<th>Low Lens</th>
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Mounting Height: 2.5m (8 ft.)

<table>
<thead>
<tr>
<th>Medium Lens</th>
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<tbody>
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Mounting Height: 6m (20 ft.)

<table>
<thead>
<tr>
<th>High Lens</th>
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<tbody>
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<td>93135002</td>
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<td>93135003</td>
<td>10 PC</td>
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</table>

Mounting Height: 12m (40 ft.)

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**Convenient Commissioning with WHR1**

WHR1 is the Daintree One™ Wireless Handheld Remote control that provides easy commissioning of Control Modules from the ground with bi-directional IR communication. The interface is intuitive and graphical to make configuration easy in the field.

Effortlessly upgrade your Daintree™ devices from Daintree One™ to Daintree Networked™ utilizing the WHR1. See WHR1 spec sheet for additional details.
Occupancy Detection Pattern

The WHS20 comes with the High Lens as standard. Low and Medium lenses can be ordered separately.