Daintree™ Wireless Controls
WHS20 Wireless Sensor

Description

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.

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, parking garages, and outdoor area lighting.

The WHS20 can operate in two primary modes:

1) As a 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.

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PRODUCT ID				**GENERATION**		**VOLTAGE**		**MOUNTING**		**HOUSING**
WHS = Wireless Highbay Sensor				**2** = 2nd Generation		**0** = Low Voltage		**BM** = Bottom Mount **SD** = Side Mount		**S** = Sealed

See pg. 5 for accessories ordering information

Occupancy Detection   Ambient Light Detection   Upgradeable   **IP69K**   **IP66**   **NSF**   Works with Apple iBeacon

GE current
a Daintree company
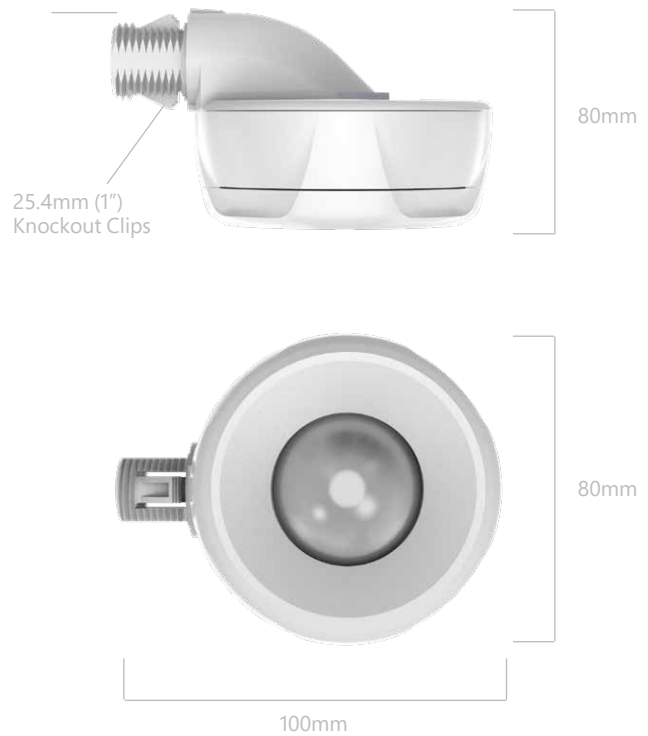
Daintree^{TM} | Wireless High Bay Sensor (WHS20)

Product Dimensions

Bottom Mount (WHS20-BM-S)

Side Mount (WHS20-SD-S)

1/2" NPS Threads

19.8mm

33.8mm

80mm

80mm

25.4mm (1")
Knockout Clips

80mm

80mm

100mm

Mounting

The WHS20 has a combination snap feature and 1/2in NPS threaded nipple for mounting to a luminaire. The snap feature can be used with most sheet metal fixtures including a standard 0.875in knockout. For IP66, IP69K or NSF applications, attach the WHS20 to an equivalent rated fixture and use a conduit nut to achieve proper seal against the fixture.

Specifications	
Occupancy Detection	PIR
Ambient Light Detection	ALS
Wireless Technology	Zigbee PRO (HA, BA) Bidirectional IR
Radio	2.4GHz +10dBm transmit power
BLE Beacon	iBeacon™
Driver Compatibility	Digital Addressible (DA) Digital Power Bus
Power Consumption	< 0.5W
LED Indicators	Green: Occupancy Detection Red: Off for Normal Operation
Lenses	2.5m, 6m, and 12m (8ft, 20ft, and 40ft) 360° or Aisle
Operating Environment	-40°C to +70°C (-40°F to +158°F) 5 to 90% RH, Non-Condensing
Enclosure	NSF, IP66 and IP69K Rated (when installed in similarly rated fixture)
Compliance	FCC Part 15 FCC ID: QOQMGM12PO IC ID: 5123A-MGM12PO CAN ICES-3 (B)/NMB-3(B) UL Listed: E337125
Warranty	5 Years

Labels

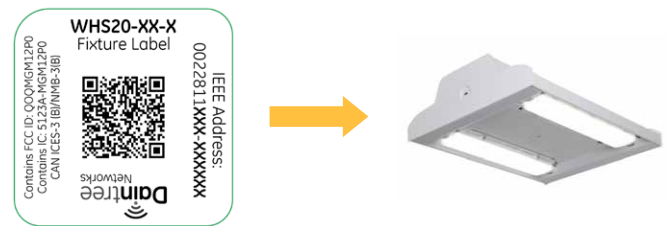Every WHS20 includes the necessary labels for Daintree Networked commissioning.

Unit Label

The unit label is already on the WHS20.

Fixture Label

The fixture label should be attached 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)

Daintree Networked Default Performance

When in Daintree Networked mode, the default operation of the WHS20 is as follows:

Default Operation

- The WHS20 will keep the luminaire on at 100% until commissioned

Daintree Network Conencted

Not Commissioned

- The WHS20 will still keep the luminaire on at 100%

Commissioned to a Zone

- The WHS20 will follow the zone control of the Daintree Network, configurable via WHR1

Daintree Network Connection Lost

- The WHS20 will keep the luminaire on at 100% until commissioned

Daintree One Default Performance

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

Occupancy Detection

Occupied Output	100%
Idle Output	10%
Vacant Output	Off
Occupied Time	15m
Idle Time	15m
Occupancy Sensitivity	High
Transition Rise Time	Instant
Transition Fall Time	5s

Ambient Light Detection

Low Ambient Threshold	2.5x
High Ambient Threshold	3.5x
High Ambient Output	Off
Ambient Light Sensitivity	Medium
Ambient Transition Time	1m

Dimming Function

Max Dim Output	100%
Min Dim Output	10%
MinOutput	OFF

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Accessories

Aisle Mask (Snap On)

SKU	QTY
93134984	1 PC
93134985	10 PCS

Aisle Mask (Internal)

SKU	QTY
93134982	1 PC
93134983	10 PCS
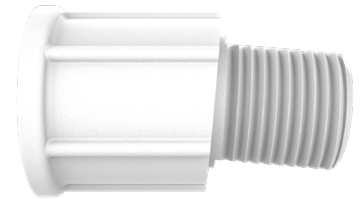
Angle Adjuster

SKU	QTY
93134996	1 PC
93134997	10 PCS

Low Lens

SKU	QTY
93134998	1 PC
93134999	10 PCS

Medium Lens

SKU	QTY
93135000	1 PC
93135001	10 PCS

High Lens

| SKU	QTY
93135002	1 PC
93135003	10 PCS

Convenient Commissioning with WHR1

The Daintree™ WHR1 remote control enables the detailed commissioning and control over IR-enabled Daintree connected devices, such as the WHS20.
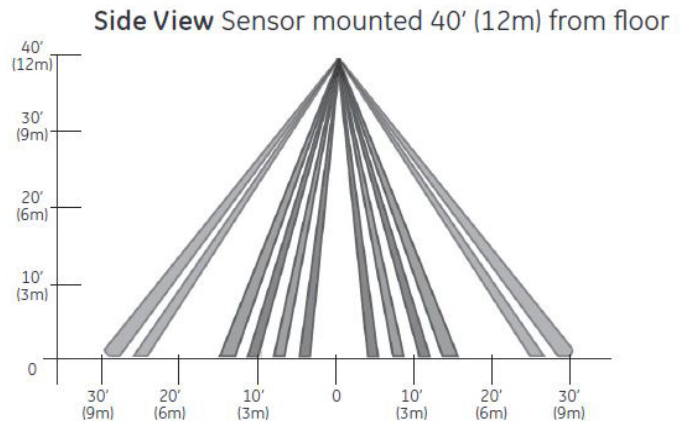
Effortlessly upgrade your Daintree™ devices from Daintree One™ to Daintree Networked™ utilizing the WHR1. See WHR1 spec sheet for additional details.
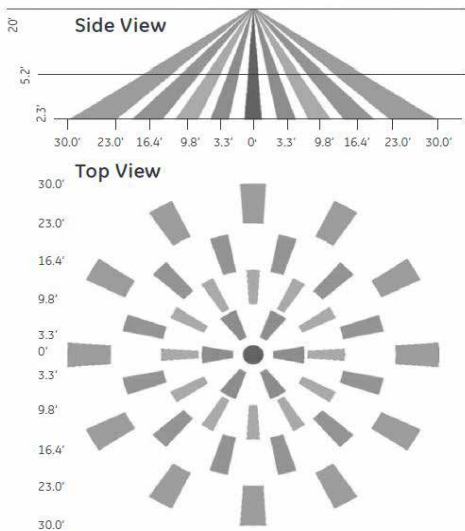
Occupancy Detection Pattern

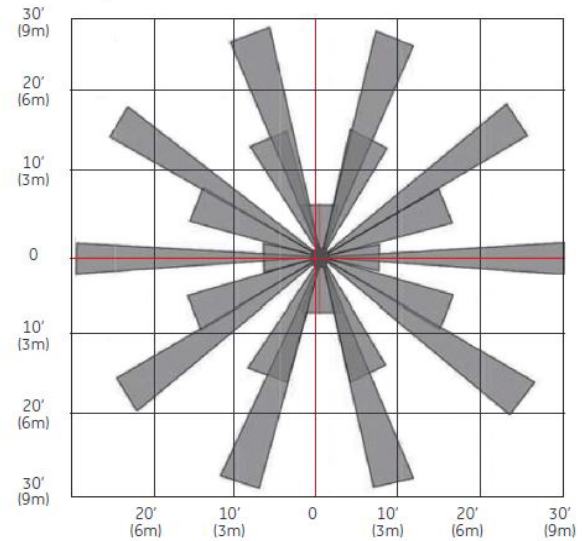### Low Lens: 2.5m (8ft)
20ft Radius/40ft Diameter
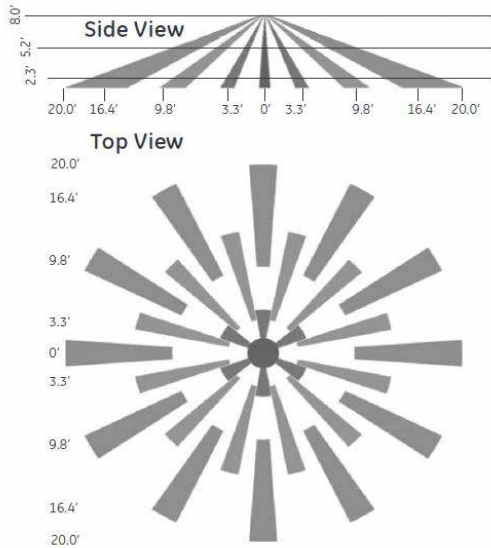
High Lens: 12m (40ft)
30ft Radius/60ft Diameter

Med Lens: 6m (20ft)
30ft Radius/60ft Diameter

The WHS20 comes with the High Lens by default.