

Description: UltraThin, clear radome antenna for iDAS

Series: CLARITY





Features:

- Ultra-Thin
- Translucent (Clear)

PART NUMBER: DASUTCCxxx

- Industry leading -155 dBc at 2 x 20W (2 x 43dBm) PIM rating
- Covers cellular bands and WiFi from 608 through 2700 MHz
- Available with N, Mini-DIN and 4.3-10
 female connector
- RoHS Compliant
- Patent Pending design

Applications:

- Ultra-Thin structure of products allow installation in places where Aesthetics is important
- Clear (Translucent) structure of antenna make this product nearlyinvisible
- In-building DAS systems requiring best PIM

All dimensions are in mm / inches

Issue:1836

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Description: UltraThin, clear radome antenna for iDAS

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This document covers all product variants of the following product family:

Antenna and accessory products covered in this documents are following:

Pulse Part Number	Connector Type	Reflector
DASUTCC500NF	N Female	Not Included
DASUTCC500MD	4.1-9.5 Mini-DIN Female	Not Included
DASUTCC5004310	4.3-10 DIN Female	Not Included
DASUTCCR500NF	N Female	Included
DASUTCCR500MD	4.1-9.5 Mini-DIN Female	Included
DASUTCCR5004310	4.3-10 DIN Female	Included

Accessory Part Number	Description	
DASUTCCACC1	Reflector only (not antenna)	



Reflector: DASUTCCACC1

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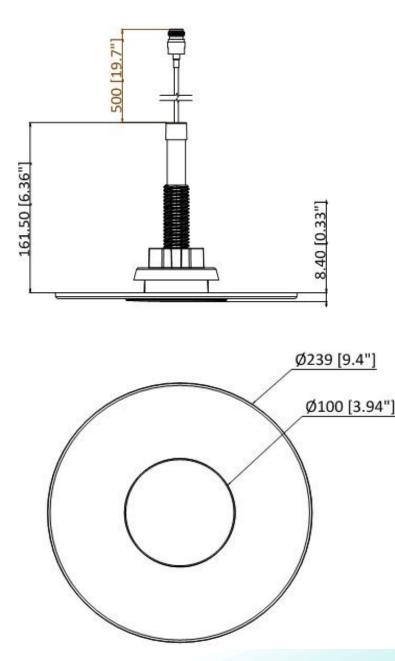
Description: UltraThin, clear radome antenna for iDAS

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PART NUMBER: DASUTCCxxx

MECHANICAL DRAWING

DASUTCC500NF, DASUTCC500MD and DASUTCC5004310 i.e. antennas without reflector DASUTCCACC1



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Description: UltraThin, clear radome antenna for iDAS

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PART NUMBER: DASUTCCxxx

ELECTRICAL SPECIFICATIONS

DASUTCC500NF, DASUTCC500MD and DASUTCC5004310 i.e. antennas without reflector DASUTCCACC1

Frequency	608-960 / 1695-2200 / 2300-2700MHz	
Nominal Impedance	50Ω	
VSWR (608-960MHz)	2:1	
VSWR (1695-2700MHz)	2:1	
Average Peak Gain (608-960MHz)	4dBi	
Average Peak Gain (1695-2200MHz)	6dBi	
Average Peak Gain (2300-2700MHz)	6dBi	
Efficiency (608-960MHz)	70%	
Efficiency (1695-2200MHz)	65%	
Efficiency (2300-2700MHz)	60%	
Horizontal plane (th=45deg)	Omni	
HPBW Vertical plane (608-960MHz)	100° Typ	
HPBW Vertical plane (1695-2200MHz)	130° Typ	
HPBW Vertical plane (2300-2700MHz)	130° Typ	
Maximum power input	40W	
PIM at 2x20W	<-155dBc	
Connector type	N-female,	
	4.1-9.5 Mini-DIN female or	
	4.3-10 DIN female	
Cable type	Dia. 0.16" low loss, Low PIM,	

Plenum Rated

19.7" / 500mm

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Cable length [Inches/mm]

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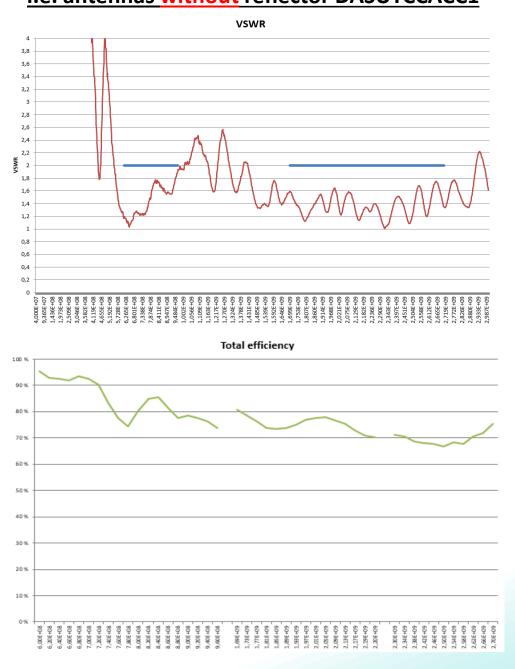
Description: UltraThin, clear radome antenna for iDAS

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PART NUMBER: DASUTCCxxx

CHARTS

DASUTCC500NF, DASUTCC500MD and DASUTCC5004310 i.e. antennas without reflector DASUTCCACC1



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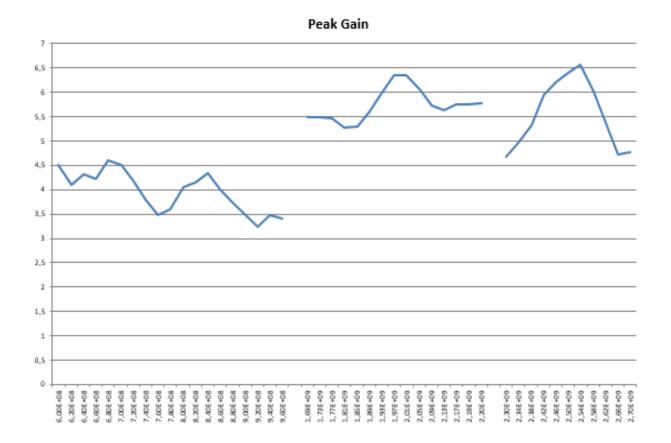
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Description: UltraThin, clear radome antenna for iDAS

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PART NUMBER: DASUTCCxxx

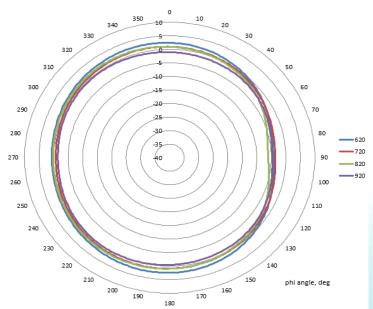
Low band elevation plane

CHARTS

DASUTCC500NF, DASUTCC500MD and DASUTCC5004310 i.e. antennas without reflector DASUTCCACC1

Radiation patterns, 608-960MHz 180 180 10 170 -170 -160 160 -150 150 -140 140 -130 130 -120 120 -110 110 -2.5 -100 100 620 -90 90 820 920 -80 80 -70 70 -50 -30 Theta, deg 20 -20 Floor at theta=0deg 10 -10 n

Low band conical azimuth plane @ 45deg elevation



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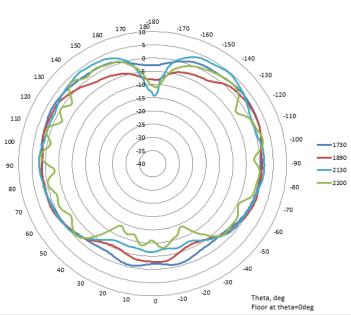
Series: CLARITY

PART NUMBER: DASUTCCxxx

CHARTS

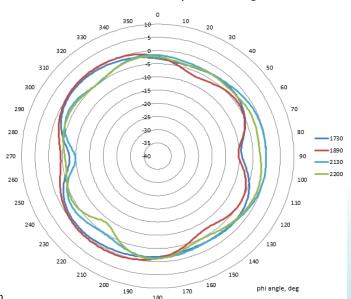
DASUTCC500NF, DASUTCC500MD and DASUTCC5004310 i.e. antennas without reflector DASUTCCACC1

Radiation patterns, 1695-2200MHz



Mid band elevation plane

Mid band conical azimuth plane @ 45deg elevation



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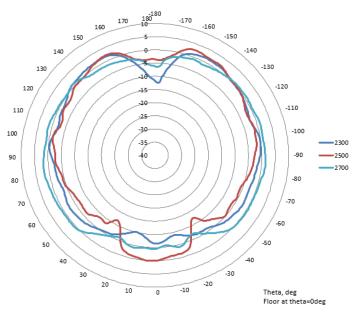
PART NUMBER: DASUTCCxxx

CHARTS

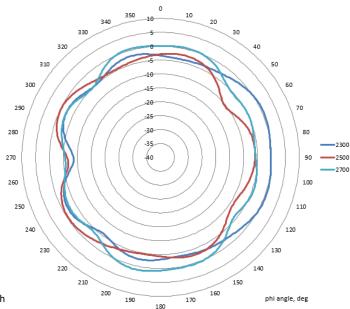
DASUTCC500NF, DASUTCC500MD and DASUTCC5004310 i.e. antennas without reflector DASUTCCACC1

Radiation patterns, 2300-2700MHz

High band elevation plane



High band conical azimuth plane @ 45deg elevation



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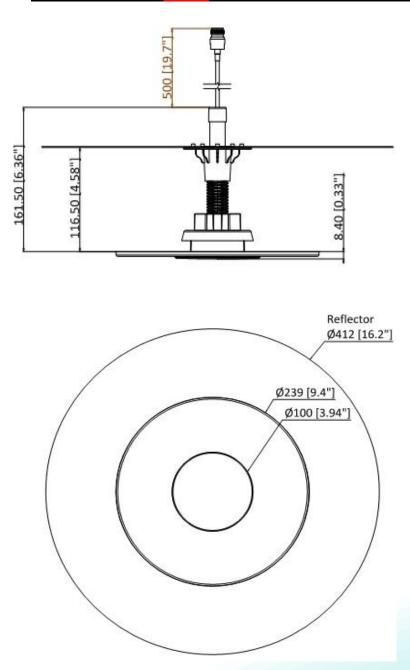
Description: UltraThin, clear radome antenna for iDAS

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MECHANICAL DRAWING

DASUTCC5R00NF, DASUTCCR500MD and DASUTCCR5004310 i.e. antennas with reflector DASUTCCACC1



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Description: UltraThin, clear radome antenna for iDAS

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ELECTRICAL SPECIFICATIONS

DASUTCC5R00NF, DASUTCCR500MD and DASUTCCR5004310 i.e. antennas with reflector DASUTCCACC1

Frequency	608-960 / 1695-2200 / 2300-2700MHz
Nominal Impedance	50Ω
VSWR (608-960MHz)	2:1
VSWR (1695-2700MHz)	2:1
Average Peak Gain (608-960MHz)	7dBi
Average Peak Gain (1695-2200MHz)	7dBi
Average Peak Gain (2300-2700MHz)	5dBi
Efficiency (608-960MHz)	70%
Efficiency (1695-2200MHz)	65%
Efficiency (2300-2700MHz)	60%
Horizontal plane (th=45deg)	Omni
HPBW Vertical plane (608-960MHz)	90° Typ
HPBW Vertical plane (1695-2200MHz)	25° Typ
HPBW Vertical plane (2300-2700MHz)	25° Typ
Maximum power input	40W
PIM at 2x20W	<-155dBc
Connector type	N-female,
	4.1-9.5 Mini-DIN female or
	4.3-10 DIN female
Cable type	Dia. 0.16" low loss, Low PIM,
	Plenum Rated
Cable length [Inches/mm]	19.7" / 500mm

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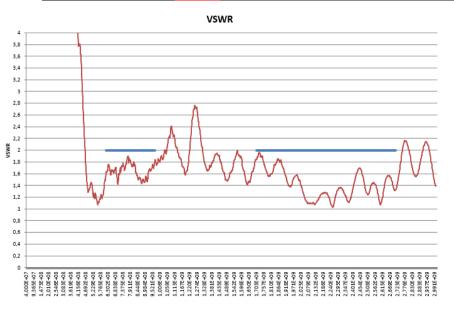
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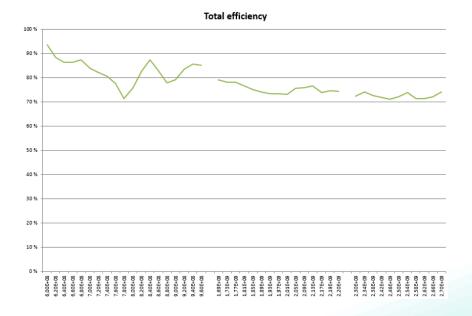
Series: CLARITY

PART NUMBER: DASUTCCxxx

CHARTS

DASUTCC5R00NF, DASUTCCR500MD and DASUTCCR5004310 i.e. antennas with reflector DASUTCCACC1





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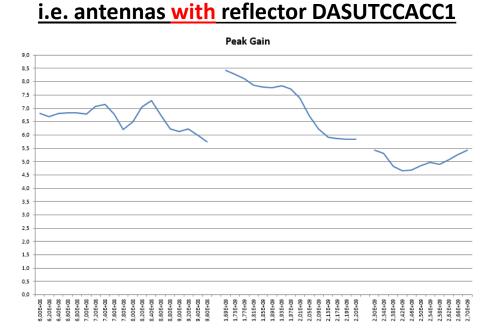
Description: UltraThin, clear radome antenna for iDAS

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PART NUMBER: DASUTCCxxx

CHARTS

DASUTCC5R00NF, DASUTCCR500MD and DASUTCCR5004310



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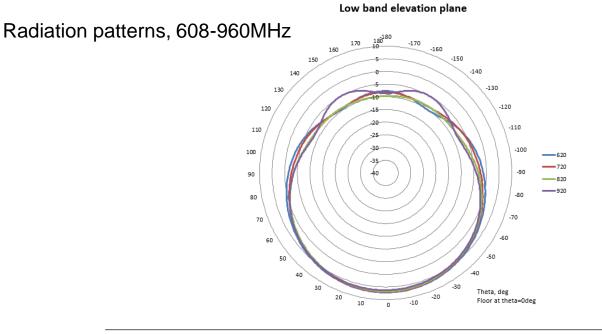
Description: UltraThin, clear radome antenna for iDAS

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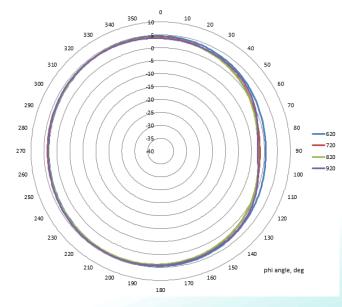
PART NUMBER: DASUTCCxxx

CHARTS

DASUTCC5R00NF, DASUTCCR500MD and DASUTCCR5004310 i.e. antennas with reflector DASUTCCACC1



Low band conical azimuth plane @ 45deg elevation



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CHARTS

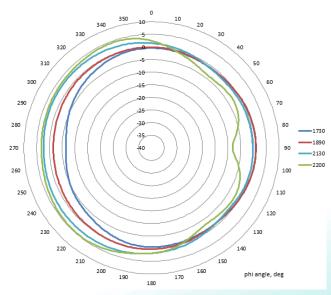
DASUTCC5R00NF, DASUTCCR500MD and DASUTCCR5004310 i.e. antennas with reflector DASUTCCACC1

Radiation patterns, 1695-2200MHz

170 -170 -160 -150 -140 130 120 120 -110 110 -100 100 1730 -35 1890 -90 90 2130 2200 0.0 80 -60 Theta, deg -10 10 Floor at theta=0deg

Mid band elevation plane

Mid band conical azimuth plane @ 45deg elevation



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Description: UltraThin, clear radome antenna for iDAS

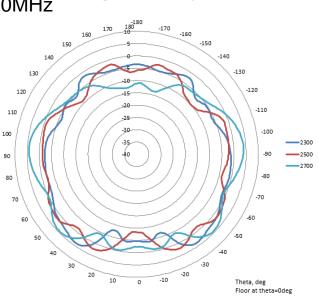
Series: CLARITY

PART NUMBER: DASUTCCxxx

CHARTS

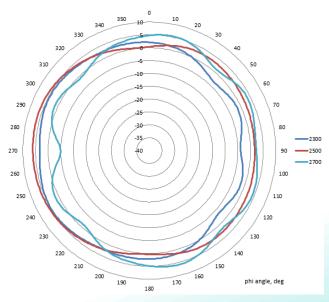
DASUTCC5R00NF, DASUTCCR500MD and DASUTCCR5004310 i.e. antennas with reflector DASUTCCACC1

Radiation patterns, 2300-2700MHz



High band elevation plane

High band conical azimuth plane @ 45deg elevation



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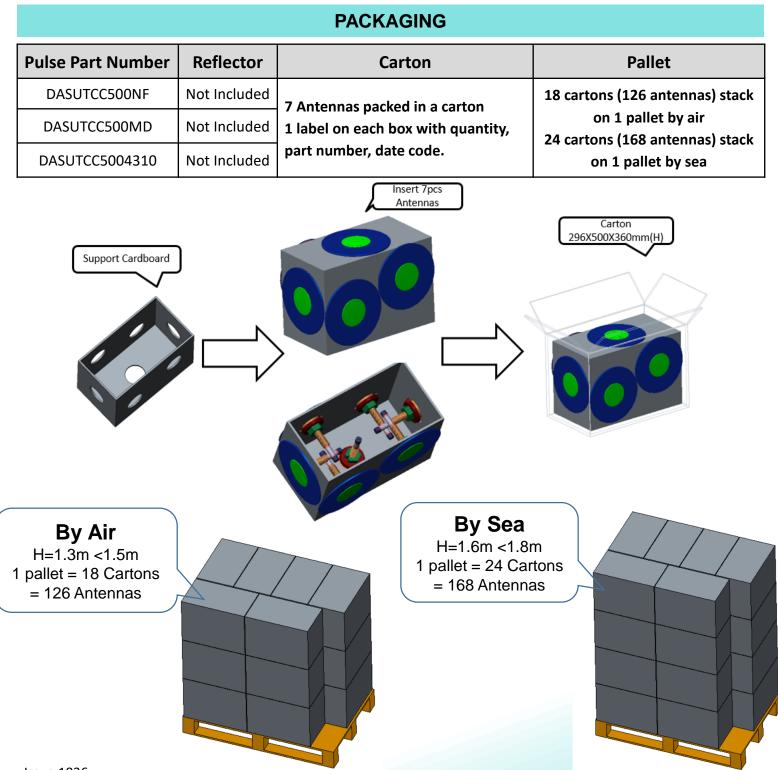
ROHS 16



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RóHS



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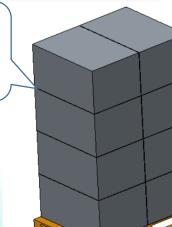
PART NUMBER: DASUTCCxxx

PACKAGING

	-		
Pulse Part Number	Reflector	Carton	Pallet
DASUTCC <mark>R</mark> 500NF	Included	7 Antennas and 7 DASUTCCACC1	6 cartons (42 Antennas and 42
DASUTCCR500MD	Included	packed in a master carton 1 label on each box with quantity,	DASUTCCACC1) stack on 1 pallet by air 8 cartons (56 Antennas and 56 DASUTCCACC1) stack on 1 pallet by sea
DASUTCCR5004310	Included	part number, date code.	
DASUTCCSO0XXX (Weight: 0.45Kg) DASUTCCSO0XXX 7-in-1 To Pack 7pcs in 1 box 1 Master Carton = 7pcs Antennas + 7pcs DASUTCCACC1 Size: 530mm X 405mm 1 Master Carton = 7pcs Antennas + 7pcs DASUTCCACC1 Size: 530mm X 405mm			

By Air H=1.37m <1.5m 1 pallet = 6 Cartons = 42 Antennas + 42 DASUTCCACC1

By Sea H=1.77m <1.8m 1 pallet = 8 Cartons = 56 Antennas + 56 DASUTCCACC1



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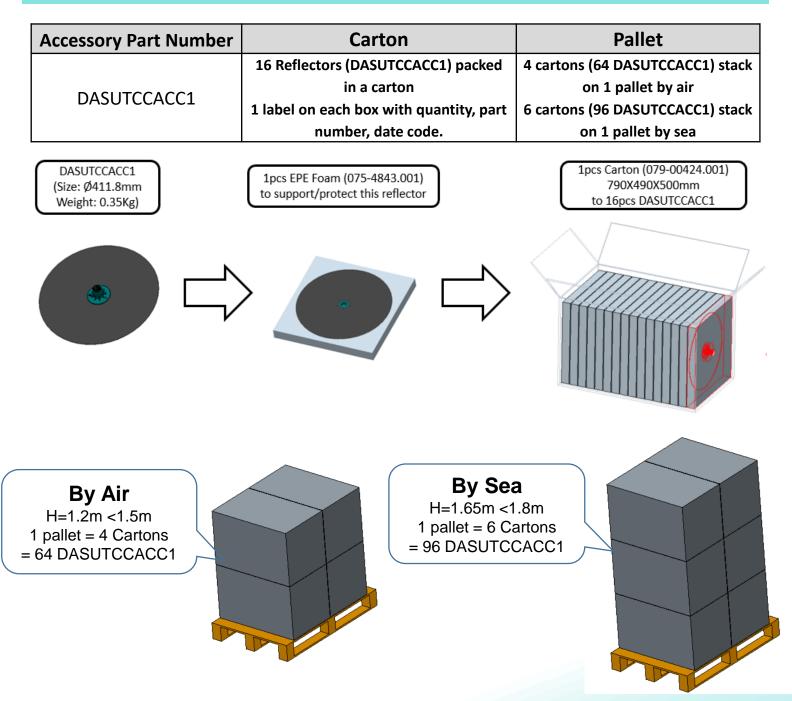


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PACKAGING



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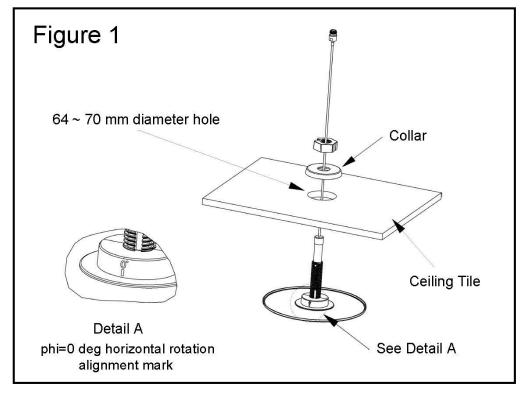
Series: CLARITY

PART NUMBER: DASUTCCxxx

ASSEMBLY

Installation

1. Drill or cut a hole 2.5-2.75 inches (64-70 mm) diameter at the center of the ceiling tile or at the desired location. Slide the antenna cable/connector assembly through the hole. Slide the Collar and Nut onto the cable. Turn the Nut, tightening the antenna against the ceiling tile. See



Note: Fiberboard ceiling tile is soft; tighten the nut just enough to hold the antenna firmly in place.

If using the reflector, thread the reflector onto the Antenna Stem before attaching the connectors. See Figure 2.

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