CFSA35606P/CFSA35606P1

350-6000 MHz Antenna | Ultra-Low Profile Low PIM Assembly and Installation Instructions

SPECIFICATIONS						
Operating Frequency (MHz)	350-380 380-520 600-698	698-806 806-894	880-960 1350-1550	1690-1880 1850-1990	1910-2180 2300-2700	3300-4200 4900-5925
VSWR – Max	2.5:1 (350-380) 2.0:1 (380-520, 600-698, 698-806, 806-894, 880-960, 1350-1550, 1690-1880, 1850-1990, 1910-2180, 2300-2700, 3300-4200, 4900-5925)					
Gain (dBi)	4.5 @ 350-380 MHz 4.4 @ 380-520 MHz 3.7 @ 600-698 MHz 4.0 @ 698-806 MHz	4.2 @ 806-894 MHz 4.6 @ 880-960 MHz 5.6 @ 1350-1550 MHz	5.4 @ 1690-1880 MHz 4.1 @ 1850-1990 MHz 5.0 @ 1910-2180 MHz	5.7 @ 2300-2700 MHz 6.8 @ 3300-4200 MHz 7.3 @ 4900-5925 MHz		
PIM – 3rd Order – 2x20W (dBc)	-150 (350-380, 380-520, 600-698, 698-806, 806-894, 880-960, 1690-1880, 1850-1990, 1910-2180, 2300-2700, 3300-4200)					
Nominal Impedance (Ohms)	50					
Max Power – Ambient 25°C (W)	50					
Polarization	Vertical					
Azimuth 3 dB Beamwidth (°)	360°, Omnidirectional					
Dimensions – height x diameter – mm (in.)	7.6 x 270 (0.3 x 10.63)					
Weight – kg (lbs.)	0.46 (1.01)					
Antenna Color	White					
Radome Material	White					
Operating Temperature – C° (F°)	-30 to +70 (-22 to +158)					
Storage Temperature – C° (F°)	-40 to +85 (-40 to +185)					
Material Substance Compliance	RoHS					
Cable Length – cm (in.)	30 (12)					
Connector	Type N-female/4.3-10 female					
Mounting	Ceiling tile					

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SAFETY

The CFSA35606P/CFSA35606P1 and all associated equipment should be installed in accordance with all applicable local and national electrical code guidelines to ensure safe operation.

APPLICATION

The multi-band antenna is designed to provide simultaneous omnidirectional coverage in 350-520MHz/600-960MHz/1350-1550MHz/1690-4200MHz/4900-5925 MHz bands for indoor applications. All bands may be transmitted or received without interference from the other but requiring only one connection.

MOUNTING

A thread post on the back of the antenna and a supplied mounting nut is the mounting method when access is available to both sides of the mounting surface, such as suspended ceiling tile. Mark the desired mounting location on the tile and cut a Ø30 mm (1.18”) hole for threaded post. Feed the cables through the hole and secure the antenna with the mounting nut and gasket if necessary (see Figure 1). For a hard ceiling installation, we recommend the CFSA35606P1 model; two sets of mounting screws and anchors can be used to secure the antenna onto the ceiling. (see Figure 2).

LOCATION

For best results, mount the antenna above exterior obstructions in a location near the center of the coverage area. A line-of-sight path between the antenna and active locations generally works best. Although frequency signals penetrate cubical dividers, partitions, and interior walls with little attenuation, reinforced block walls, metal surfaces, and steel shelving may attenuate signals or cause multipath, a condition where reflected signals interfere with the primary signal path. Avoid mounting next to a column or vertical support that could create a “shadow zone” of reduced coverage to one portion of the room.

Avoid installing antenna on a metal backed ceiling or metal structure for best performance. Any metal structure may detune the antenna. If installation below metal structure is unavoidable, a minimum distance of 155 mm from the metal surface is recommended for less VSWR impact but it will change the radiation pattern significantly.

PARTS LIST			
ITEM NO.	PART NO.	DESCRIPTION	QTY
1	348798	WASH, FLAT, 1”, NE, NF	1
2	120-00176	NUT, CUSTOM, 1” -8, NY, NF	1
3	154465	ANCHOR, WALL, #8 PLASTIC	2
4	105-00066	SCREW CAP, SELF ADHESIVE, PC, WHITE	2
5	014466	SCR, PPH-F, 8- 18x3/4”, SS, PA, TYPE-AB	2

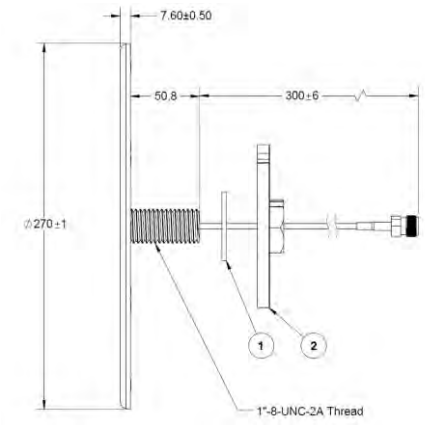


Figure 1: CFSA35606P - Stud mount

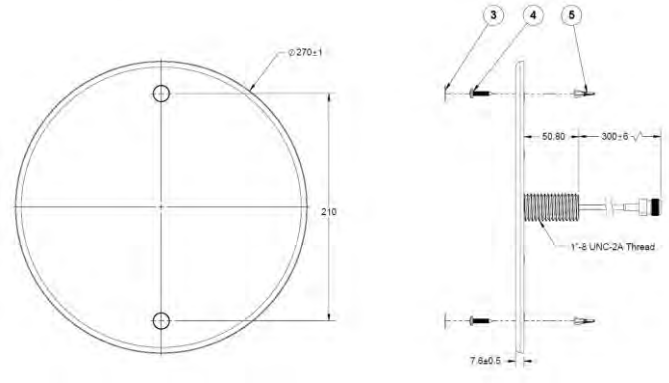
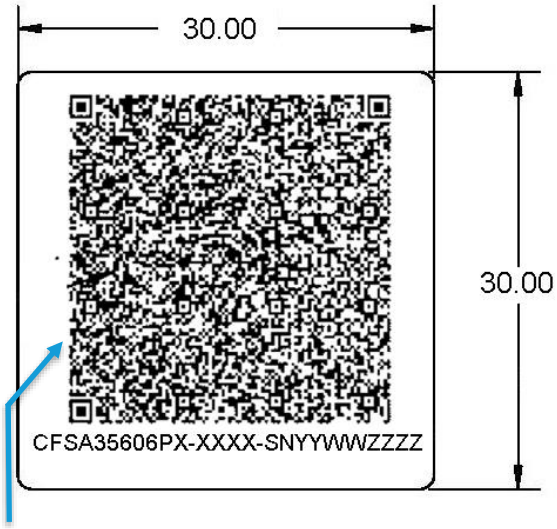


Figure 2: CFSA35606P1 Hard ceiling mount only

QR CODES

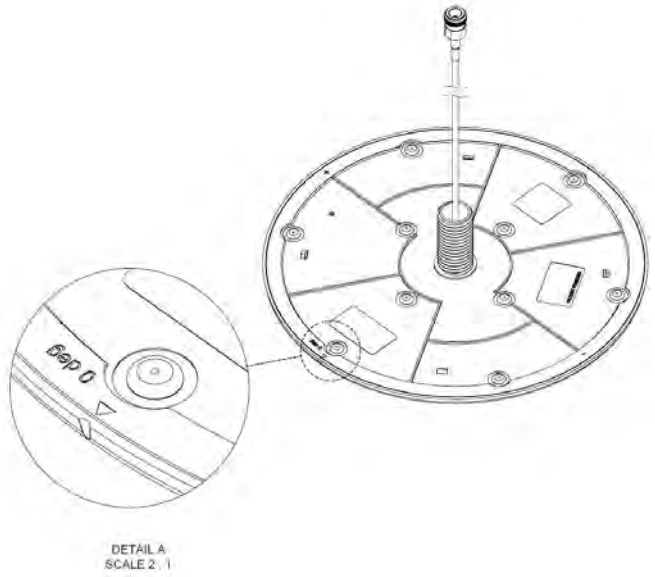
There is a unique QR Code placed on the back of each antenna. Your system manager can scan the code with a smartphone and instantly see all of the needed performance data of the antenna. This solution provides fast, accurate data and allows customers to instantly track more information than they could previously review.



TEXT TO EMBED IN QR CODE:
CFSA35606PX-XXXX-SNYYWWZZZZ, VSWR: V@ FREQUENCY RANGE
LOW PIM: -LdBc

V = VALUE OF VSWR @ FREQUENCY RANGE
L = PIM VALUE @ FREQUENCY RANGE

ANGLE MARKING



PRECAUTION

To avoid damage of the connector joint, use the correct size of wrench to hold the connector body shell properly during tightening. Use a 14-millimeter wrench for the N connector or 18-millimeter wrench for the 4.3-10 connector.

For best PIM results:

1. Make sure the connectors are clean and free from any metal flakes/dirt and tighten the connector using a torque wrench. Follow the torques specified below:

4.3-10 Type	N-Type
44.3 lbs in (5 Nm)	25 lbs in (2.82 Nm)

2. Avoid extreme bending to the cable.
3. Do not remove dust cap from connector when not in use.

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