



CFSA69594P / CFSA69594P1

5G Ceiling Mount DAS Antennas Datasheet

CFSA69594P and CFSA69594P1 are low-PIM, indoor, wideband, omnidirectional low-profile ceiling mount DAS antennas. Designed to provide pattern coverage that is optimized for indoor coverage requirements at 698-960 MHz and 1690-5925 MHz for 5G, 4G/LTE and older cellular networks. Applicable for environments where wide-angle coverage is necessary for a successful wireless deployment, while maintaining desired in-building aesthetics.

FEATURES AND BENEFITS

- 5G sub-6 GHz networks including C-Band, CBRS, LAA
- Ultra-low profile
- Ultra-low and optimized PIM rating less than -163 dBc
- Mounts directly and easily to ceiling tile or hard ceilings
- Radome is paintable using commonly available spray paints (must not contain metal)
- UL94-V0 flammability rating
- Plenum rated cable

ELECTRICAL SPECIFICATION

Operating Frequency (MHz)	698-824	824-894	880-960	1350-1550	1690-1880	1850-1990	1910-2200	2300-2700	3300-4000	4000-4200	5150-5925
VSWR - Avg	<1.3:1	<1.2:1	<1.4:1	<1.3:1	<1.2:1	<1.2:1	<1.2:1	<1.3:1	<1.4:1	<1.4:1	<1.4:1
VSWR - Max	<1.7:1	<1.7:1	<1.7:1	<2.0:1	<1.7:1	<1.7:1	<1.7:1	<1.7:1	<1.7:1	<2.5:1	<2.0:1
Peak Gain - Average (dBi)	3.2	3.0	2.6	3.8	5.2	5.4	5.3	5.2	3.7	3.8	4.4
Peak Gain (dBi)	3.7	3.4	3.2	4.5	5.4	5.6	5.6	5.6	4.3	4.1	4.9
PIM - 2x20W - Ave (dBc)	<-166							<-163	<-164		-
PIM - 2x20W - Max (dBc)	<-150										-
Nominal Impedance (Ohms)	-50										
Max Power - Ambient 25°C (W)	50										
Polarization	Linear - Horizontal										
Azimuth Beamwidth	360°, Omnidirectional										

MECHANICAL SPECIFICATION

Dimensions - height x diameter - mm (in.)	7.6 x 180 (0.30 x 7.09)
Weight - g (oz.)	240 (8.47)
Ports	1
Cable Length / Connector (cm)	Standard 30 cm, available Type N (female) and 4.3-10 (female)
Radome	PC, UL94-V0 (White)
Mounting	Ceiling mount (flush mount with screws or anchors)

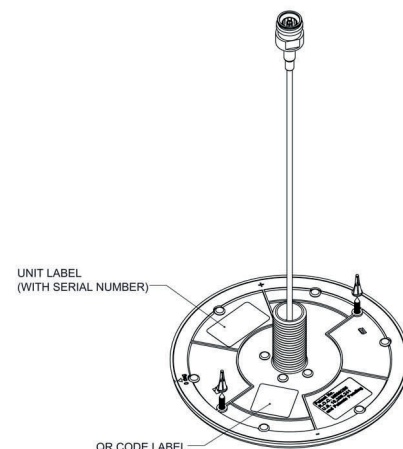
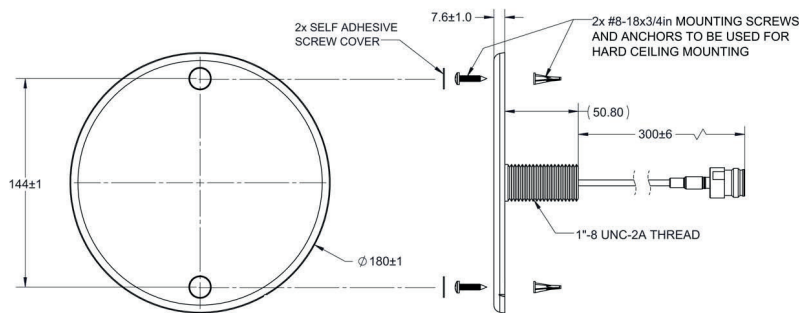
ENVIRONMENTAL SPECIFICATION

Operating Temperature - °C (°F)	-30 to +70°C (-22 to +158°F)
Storage Temperature - °C (°F)	-40 to +85°C (-40 to +185°F)
Flammability Rating	UL94-V0
Material Substance Compliance	RoHS Compliant
Standard for Safety: Fire and Smoke (Plenum)	Plenum UL 444

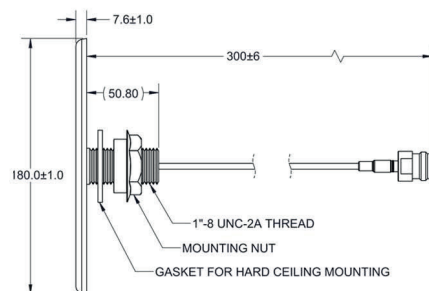
PART NUMBER	CABLE LENGTH	CONNECTOR	MOUNTING	PACKAGING
CFSA69594P-30NF	30 cm (12 in.)	Type N-Female	Ceiling Tile	Unit
CFSA69594P-30D43F	30 cm (12 in.)	4.3-10 Female	Ceiling Tile	Unit
CFSA69594P-B30NF	30 cm (12 in.)	Type N-Female	Ceiling Tile	Bulk (16 Pack)
CFSA69594P-B30D43F	30 cm (12 in.)	4.3-10 Female	Ceiling Tile	Bulk (16 Pack)
CFSA69594P1-30NF	30 cm (12 in.)	Type N-Female	Hard Ceiling	Unit
CFSA69594P1-30D43F	30 cm (12 in.)	4.3-10 Female	Hard Ceiling	Unit
CFSA69594P1-B30NF	30 cm (12 in.)	Type N-Female	Hard Ceiling	Bulk (16 Pack)
CFSA69594P1-B30D3F	30 cm (12 in.)	4.3-10 Female	Hard Ceiling	Bulk (16 Pack)

MECHANICAL DRAWINGS

HARD CEILING MOUNT



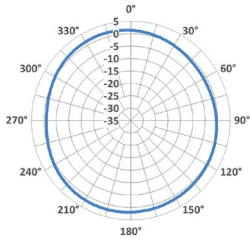
CEILING TILE MOUNT



RADIATION PATTERNS

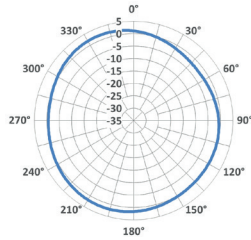
725 MHz

Horizontal - 725 MHz



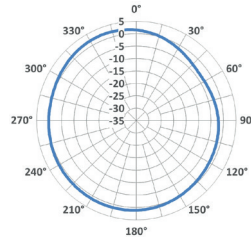
850 MHz

Horizontal - 850 MHz



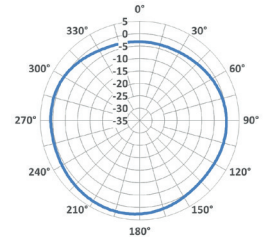
925 MHz

Horizontal - 925 MHz

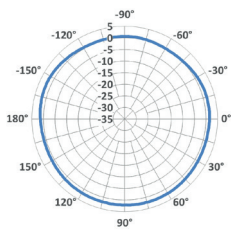


1448 MHz

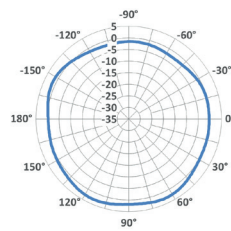
Horizontal - 1448 MHz



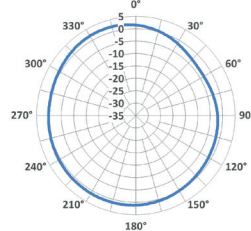
Vertical - 725 MHz



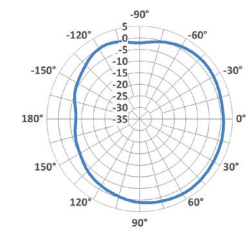
Vertical - 850 MHz



Vertical - 925 MHz

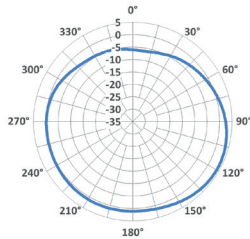


Vertical - 1448 MHz



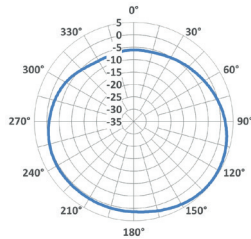
1730 MHz

Horizontal - 1730 MHz



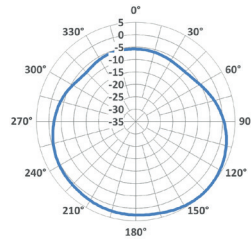
1930 MHz

Horizontal - 1930 MHz



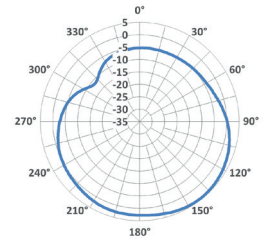
2130 MHz

Horizontal - 2130 MHz

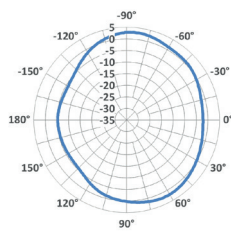


2310 MHz

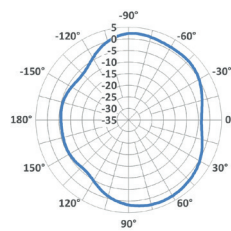
Horizontal - 2310 MHz



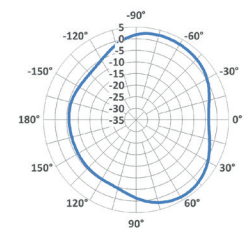
Vertical - 1730 MHz



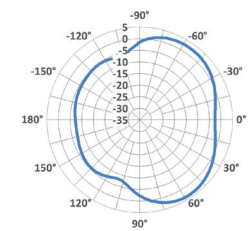
Vertical - 1930 MHz



Vertical - 2130 MHz

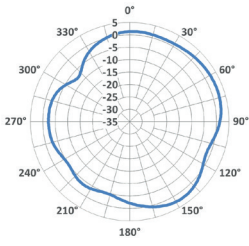


Vertical - 2310 MHz



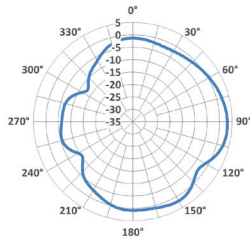
3500 MHz

Horizontal - 3500 MHz



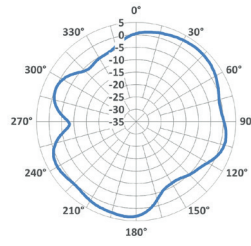
4000 MHz

Horizontal - 4000 MHz

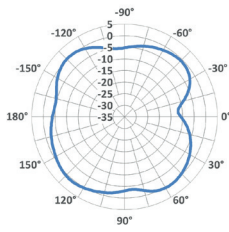


5500 MHz

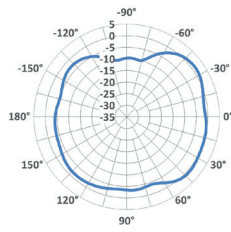
Horizontal - 5500 MHz



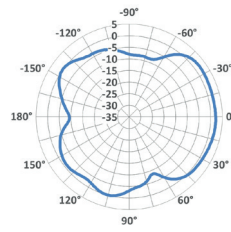
Vertical - 3500 MHz



Vertical - 4000 MHz

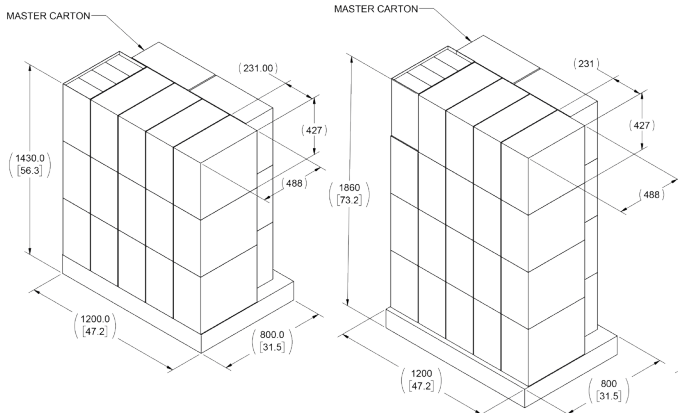


Vertical - 5500 MHz



PACKING INFORMATION

PACKAGING - INDIVIDUAL CARTON

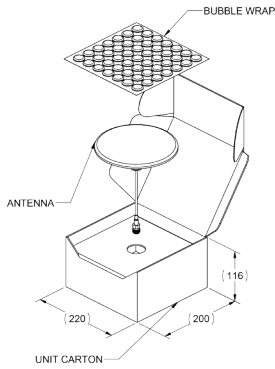


AIR SHIPMENT PALLET LAYOUT

- 8 UNITS OF ANTENNA PER MASTER CARTON
- 7 MASTER CARTON PER LAYER
- 3 LAYERS STACK PER PALLET
- TOTAL OF ANTENNA PER PALLET = 168 PCS
- ESTIMATED FULL PALLET WEIGHT= 96 Kg

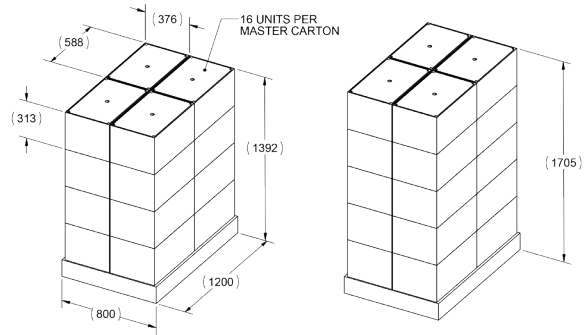
OCEAN SHIPMENT PALLET LAYOUT

- 8 UNITS OF ANTENNA PER MASTER CARTON
- 7 MASTER CARTON PER LAYER
- 4 LAYERS STACK PER PALLET
- TOTAL OF ANTENNA PER PALLET = 224 PCS
- ESTIMATED FULL PALLET WEIGHT= 124 Kg



UNIT PACKAGING DETAIL

PACKAGING - BULK PACK

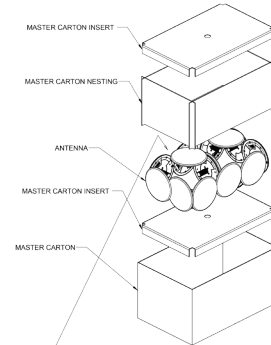


PALLETIZE - FOR AIR SHIPMENT

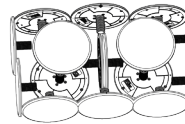
PALLETIZE - FOR OCEAN SHIPMENT

BULK PACKAGING INFORMATION

- PALLET (1200 x 800 x 140) MM
- FOR AIR SHIPMENT, TOTAL 16 MASTER CARTONS @ 256 UNIT ANTENNAS PER PALLET. ESTIMATED FULL PALLET WEIGHT= 125 Kg
- FOR OCEAN SHIPMENT, TOTAL 20 MASTER CARTONS @ 320 UNIT ANTENNAS PER PALLET. ESTIMATED FULL PALLET WEIGHT= 149 Kg



BULK PACKAGING DETAIL



ANTENNA LAYOUT FROM TOP SIDE, 16 UNITS PER MASTER CARTON

TE TECHNICAL SUPPORT CENTER

- USA: +1 (800) 522-6752
- Canada: +1 (905) 475-6222
- Mexico: +52 (0) 55-1106-0800
- Latin/S. America: +54 (0) 11-4733-2200
- Germany: +49 (0) 6251-133-1999
- UK: +44 (0) 800-267666
- France: +33 (0) 1-3420-8686
- Netherlands: +31 (0) 73-6246-999
- China: +86 (0) 400-820-6015

te.com

TE, TE Connectivity, TE connectivity (logo), and EVERY CONNECTION COUNTS are trademarks owned or licensed by the TE Connectivity plc family of companies. Other product names, logos, and company names mentioned herein may be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information in this document, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, complete, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES REGARDING THE INFORMATION CONTAINED HEREIN, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. In no event will TE be liable for any direct, indirect, incidental, special or consequential damages arising from or related to recipient's use of the information. It is the sole responsibility of recipient of this information to verify the results of this information using their engineering and product environment. Recipient assumes any and all risks associated with the use of the information. Antenna performance may vary. TE is a component manufacturer, and customer and/or end-user is responsible for all end-use compliance and regulatory requirements.

©2025 TE Connectivity. All Rights Reserved.

05/25 Original