CMAX-OMF7-43-UWI53



Cell-Max[™] Low PIM 4x4 Omni MIMO In-building Antenna, 617-6000 MHz

Product Classification

Product Type In-building antenna

Product Brand Cell-Max™

General Specifications

ApplicationIndoorAntenna TypeOmni

Antenna Array Characteristic MIMO 4x4

PolarizationLinear HorizontalColorWhite (RAL 9016)

Mounting Thru-hole ceiling mount (optional)

Mounting Note For antenna installation on metal ceilings, please contact your local CommScope representative

Number of Ports 4

Pigtail Cable 670-141SXE, plenum rated

Radome Material ASA+PC, UV stabilized

RF Connector Interface 4 3-10 Female

Dimensions

 Height
 24 mm | 0.945 in

 Pigtail Length
 500 mm | 19.685 in

 Outer Diameter
 361 mm | 14.213 in

Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1695 – 2700 MHz | 3300 – 4200 MHz | 4800 – 6000 MHz | 617 – 698 MHz | 698 –

960 MHz

Electrical Note Values typical, unless otherwise stated

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CMAX-OMF7-43-UWI53

Electrical Specifications

Frequency Band, MHz	617-698	698-960	1695-2700	3300-4200	4800-6000
Gain, dBi	3.3	3.9	5.4	5.5	8.1
Beamwidth, Horizontal, degrees	360	360	360	360	360
Isolation, Cross Polarization, dB	17	17	20	30	30
VSWR Return loss, dB	1.7 11.7	1.6 12.7	1.4 15.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	
Input Power per Port, maximum, watts	100	100	100	100	100

Environmental Specifications

Operating Temperature $-40 \,^{\circ}\text{C}$ to $+60 \,^{\circ}\text{C}$ (-40 $^{\circ}\text{F}$ to $+140 \,^{\circ}\text{F}$)

Relative Humidity Up to 100%

Packaging and Weights

 Width, packed
 380 mm | 14.961 in

 Depth, packed
 157 mm | 6.181 in

 Length, packed
 407 mm | 16.024 in

 Weight, gross
 1.7 kg | 3.748 lb

 Weight, net
 1 kg | 2.205 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

ROHS Compliant UK-ROHS Compliant



Included Products

7850475 – Omni Absorber ground plane to improve VSWR on metal ceilings (This product was designed to match the CMAX-OMF7-43-UWI53 antenna to metal ceiling)

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7850475



Omni Absorber ground plane to improve VSWR on metal ceilings (This product was designed to match the CMAX-OMF7-43-UWI53 antenna to metal ceiling)

Product Classification

Product Type Cover

General Specifications

Color White (RAL 9016)

Dimensions

 Height
 31.5 mm | 1.24 in

 Outer Diameter
 363 mm | 14.291 in

Electrical Performance

VSWR data with antenna CMAX-OMF7-43-UWI53 on metal ceiling

		617-698 [MHz]	698-960 [MHz]	1695-2700 [MHz]	3300-4000 [MHz]	4800-6000 [MHz]
	P1	22.5	16.5	2.63	1.77	1.69
vswr	P2	23.1	16.8	2.81	1.89	1.86
	Р3	22.8	16	2.71	1.85	1.66
	P4	22.9	16.5	2.67	1.91	1.86

VSWR data with antenna CMAX-OMF7-43-UWI53 on metal ceiling with absorber

		617-698 [MHz]	698-960 [MHz]	1695-2700 [MHz]	3300-4000 [MHz]	4800-6000 [MHz]
vswr	P1	1.62	1.77	1.41	1.38	1.52
	P2	1.49	1.82	1.41	1.48	1.63
	Р3	1.62	1.85	1.45	1.47	1.5
	P4	1.57	1.96	1.52	1.53	1.71

Material Specifications

Material Type ASA | PC

COMMSC PE®

7850475

Environmental Specifications

UV Resistance UV stabilized

Packaging and Weights

 Height, packed
 40 mm | 1.575 in

 Width, packed
 375 mm | 14.764 in

 Length, packed
 375 mm | 14.764 in

Packaging quantity 1

 Weight, gross
 850 g | 1.874 lb

 Weight, net
 700 g | 1.543 lb