

SC466D-HF1LDF(DXX-I40-PIP) Collinear omni, 6.5 dBd, dual ports, low PIM, PIP rated, 746-869 MHz

- Aurora™ dual collinear antennas with 6.5 dBd gain and PIP rated
- 1.5:1 VSWR to provide excellent coverage
- Designed to operate in extreme environmental conditions.
- Provides 40 dB port-to-port isolation.

Sinclair's new line of high isolation multiple port antennas, the SC466D's are collinear, omni-directional antennas are available with various gains (0, 3, and 6.5 dBd), and also come as single, dual, or triple antennas all within the same radome. Designed according to IEC62305 Part 1-4, VDE0855-300, and fulfilling the requirements of lightning protection class II, these antennas are fully DC-grounded and protected with a lightning spike through the top of the radome.

Peak Instantaneous Power (PIP):

PIP produced by in-phase peak powers in a multicarrier system is much higher than a single carrier system. Multipaction and other effects in such a system will cause loss and distortion of the RF signal (the increase of noise figure or bit-error-rate) and can damage RF components or subsystems. Sinclair antenna PIP rating is quantified by an indoor antenna and 12 channel combining system at Motorola Campus, Schaumburg. This system provided typical 110 Watts input average power per channel and a combined 575 Watts minimum average power at the antenna input port. At this level, a 25KW PIP is achieved from the calculation.

It is recommended that enough margin should be applied in the system design in order to compensate the effect of the elevation, humidity, temperature and other environmental factors to the PIP handling of an antenna.

When ordering, please refer to the chart below for the model number. Downtilt configurations are subject to various list price. Null fill versions are also available. Please contact your Sinclair Sales Representative or Customer Service Representative for more information.

Model Number	Downtilt
SC466D-HF1LDF(D00-I40-PIP)	0°
SC466D-HF1LDF(D01-I40-PIP)	1°
SC466D-HF1LDF(D02-I40-PIP)	2°
SC466D-HF1LDF(D03-I40-PIP)	3°
SC466D-HF1LDF(D04-I40-PIP)	4°
SC466D-HF1LDF(D05-I40-PIP)	5°
SC466D-HF1LDF(D06-I40-PIP)	6°
SC466D-HF1LDF(D07-I40-PIP)	7°
SC466D-HF1LDF(D08-I40-PIP)	8°
SC466D-HF1LDF(D09-I40-PIP)	9°
SC466D-HF1LDF(D10-I40-PIP)	10°



Region	United States	Europe, Middle East, and Africa	Canada, Caribbean, and Latin America	Asia-Pacific
Telephone	1 800 263 3275	+44 (0) 1487 84 28 19	Canada: 1 800 263 3275 International: +1 905 726 7676	+1 905 727 0165
E-mail	salesusa@sinctech.com	salesuk@sinctech.com	salescan@sinctech.com	salesasia@sinctech.com

Electrical Specifications

Frequency Range	MHz	746 to 869	
Bandwidth	MHz	123	
Connector		7/16 DIN-Female	
Gain (nominal)	dBd (dBi)	6.5 (8.6)	*1
VSWR (max)		1.5:1	
Polarization		vertical	
Impedance	Ω	50	
Pattern		Omni-directional	
Vertical beamwidth (typ)	degrees	13	*2
Average Input Power (max)	W	500	
Number of ports		2	
Isolation port to port (Typ)	dB	40	*3
Passive intermod. (2x20W, 3rd ord.)	dBc	-150	
PIP(KW, max)		25	
Lightning protection		DC ground	

Notes

- *1 : ± 0.5 dB.
*2 : ±2°
*3 : ± 5 dB.
*4 : Qty:2

Ordering Information

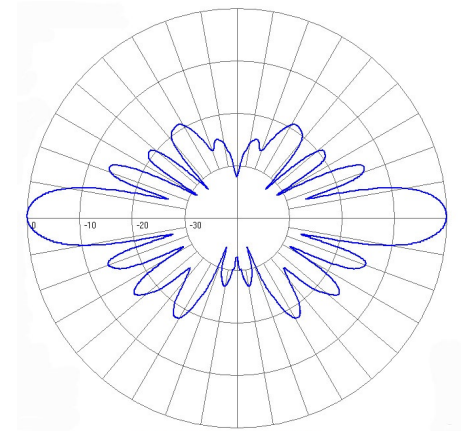
Clamps must be purchased separately.

Mechanical Specifications

Width	in (mm)	3.5 (89)	
Depth	in (mm)	3.5 (89)	
Length/ Height	in (mm)	175 (4445)	
Base pipe diameter	in (mm)	3.5 (89)	
Base pipe mounting length	in (mm)	16 (406)	
Radiating element material		prntd circuit bd + Aluminum	
Radome material		fiberglass	
Weight	lbs (kg)	37 (16.8)	
Weight iced (1/2" ice)	lbs (kg)	66 (29.96)	
Mounting Hardware (Optional)		Clamp006B, or Clamp147	*4
Mounting configurations		upright	
Actual shipping weight	lbs (kg)	76 (34.5)	
Shipping dimensions	in (mm)	190x6x6 (4826x152x152)	

Environmental Specifications

Temperature range	°F (°C)	-40 to +140 (-40 to +60)
Wind Loading Area (Flat Plate Equivalent)	ft² (m²)	2.5 (0.23)
Wind Loading Area (1/2" ice)	ft² (m²)	3.3 (0.31)
Rated wind velocity (no ice)	mph (km/h)	190 (306)
Rated wind velocity (1/2" radial ice)	mph (km/h)	160 (258)
Lateral Thrust (100 mph No Ice)	lbs (N)	99 (440.4)
Bending moment (100 mph No Ice)	ft-lbs (Nm)	562 (758.7)
Tip deflection (100 mph No Ice)	degrees	1.6



Vertical, 0° downtilt

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Product Specification Sheet		SC466D-HF1LDF(DXX-I40-PIP)	Issue: 2	Dated: 02-12-20
EPR				Dated: 01-12-20
Customer Tech Manual				