

SC466M-HF1LDF(DXX) Aurora™ collinear omni, 6.5 dBd, Marine grade, 746-869 MHz

- Patent-pending Aurora™ balanced design covers the 746-869 MHz frequency range
- Industry-Leading -150 dBc PIM rating for low noise characteristics, ideal for trunking sys.
- Heavy-duty construction with outstanding 240 mph wind rating for harsh environments
- Hardened marine grade antenna with gel-coated radome and other enhancement

The Aurora™ SC family is Sinclair's next generation of collinear antennas. The patent-pending antenna utilizes cutting-edge, field-proven balanced design to deliver an unparalleled combination of higher gain, wider bandwidth, highly consistent RF pattern, higher wind rating and lighter weight, all in a small form factor. 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. Unbeatable, heavy-duty construction along with the enhanced wind rating, means these antennas can last for years in the most challenging environments. The new Aurora SC series is ideal for public safety applications as it offers reliability, durability, and easy installation in a lightweight and compact package.

The SC466M antennas are specially hardened for marine applications. The gel-coated radome, the specially treated base pipe and the reinforced internal elements mean this antenna can withstand the severe demands of marine service. Combined with the outstanding wind rating, the SC466M is the go-to antenna for applications where the corrosive atmosphere and harsh weather are a concern.

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	Mounting Configuration	CTM
SC466M-HF1LDF(D00)	0°	upright / inverted	006787
SC466M-HF1LDF(D01)	1°	upright / inverted	006787
SC466M-HF1LDF(D02)	2°	upright / inverted	006787
SC466M-HF1LDF(D03)	3°	upright / inverted	006787
SC466M-HF1LDF(D04)	4°	upright / inverted	006787
SC466M-HF1LDF(D05)	5°	upright / inverted	006787
SC466M-HF1LDF(D06)	6°	upright / inverted	006787
SC466M-HF1LDF(D07)	7°	upright / inverted	006787
SC466M-HF1LDF(D08)	8°	upright / inverted	006787
SC466M-HF1LDF(D09)	9°	upright / inverted	006787
SC466M-HF1LDF(D10)	10°	upright / inverted	006787

Note:
* Extra customizations are available, such as electrical downtilt, PIP rating, etc. Please contact Sinclair for details.



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

www.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
Input VSWR (max)		1.5:1
Polarization		vertical
Impedance	Ω	50
Pattern		Omni-directional
Vertical beamwidth (typ)	degrees	13
Average Input Power (max)	W	500
Passive intermod. (2x20W, 3rd ord.)	dBc	-150
Lightning protection		DC ground

Notes

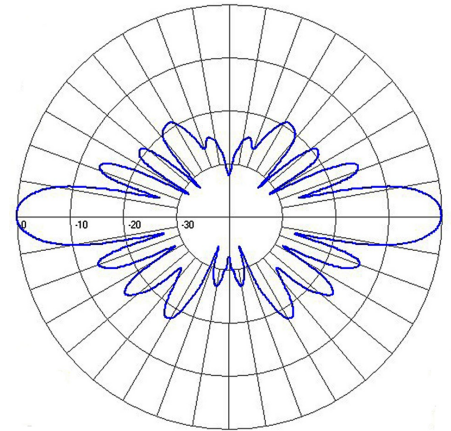
- *1 : Gain variance ±0.5 dB.
- *2 : Length variance ±5%.
- *3 : Weight variance ±3 lb.
- *4 : D00 model can be installed upright or inverted, downtilt models upright only.
- *5 : Qty: 2. The clamp is determined by tower leg, refer to Sinclair Clamp Selection Guide for details.

Mechanical Specifications

Width	in (mm)	3.5 (89)
Depth	in (mm)	3.5 (89)
Length/ Height	in (mm)	89.6 (2276) *2
Base pipe diameter	in (mm)	3.5 (89)
Base pipe mounting length	in (mm)	12 (305)
Radiating element material		copper
Radome material		fiberglass (UV protected)
Weight	lbs (kg)	21 (9.53) *3
Weight iced (1/2" ice)	lbs (kg)	37 (16.8)
Mounting configurations		upright, inverted *4
Mounting Hardware (Optional)		Clamp006B, Clamp147, or Clamp147M *5
Kit for Offset Side Mount (straight tower leg)		SMK-225-A3 or SMK-225-A7
Estimated Shipping Weight	lbs (kg)	30 (13.62)
Shipping dimensions	in (mm)	102x6x6 (2591x152x152)

Ordering Information

Clamps must be purchased separately.



Vertical, 0° DT

Environmental Specifications

Temperature range	°F (°C)	-40 to +140 (-40 to +60)
Wind Loading Area (Flat Plate Equivalent)	ft² (m²)	1.2 (0.11)
Wind Loading Area (1/2" ice)	ft² (m²)	1.8 (0.17)
Rated wind velocity (no ice)	mph (km/h)	240 (386)
Rated wind velocity (1/2" radial ice)	mph (km/h)	200 (322)
Lateral Thrust (100 mph No Ice)	lbs (N)	46 (204.6)
Bending moment (100 mph No Ice)	ft-lbs (Nm)	107 (144.5)
Tip deflection (100 mph No Ice)	degrees	0.1

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