

SC45A-SF2L(Y)F(DXX) Collinear omni, 10 dBd, low PIM, 698-806 MHz

- Patent-pending design covers the 698-806 MHz frequency range
- Available with 0, 2, 4, or 6 degrees of downtilt
- Industry leading -150 dBc PIM rating for low noise characteristics, ideal for trunking systems
- Rugged design for harsh environment

The SC45A is Sinclair's next generation of collinear antenna. The patent-pending antenna utilizes a 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. Unbeatable, heavy-duty construction along with the enhanced wind rating, means these antennas can last for years in the most challenging environments. The new SC45(x) series is ideal for public safety applications as it offers reliability, durability, and easy installation in a lightweight and compact package.

When ordering, please refer to the chart below for specific part# and configurations. Downtilt and low PIM are subject to various list price. Contact your Sinclair Sales Representative or Customer Service Representative for details.

Part#	Connector	Downtilt	PIM
SC45A-SF2LDF(D00)	7/16 DIN(F)	0°	-150 dBc
SC45A-SF2LDF(D02)	7/16 DIN(F)	2°	-150 dBc
SC45A-SF2LDF(D04)	7/16 DIN(F)	4°	-150 dBc
SC45A-SF2LDF(D06)	7/16 DIN(F)	6°	-150 dBc
SC45A-SF2LNF(D00)	N(F)	0°	-139 dBc



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Product Specification Sheet		SC45A-SF2L(Y)F(DXX)	Issue: 1	Dated: 24-01-22

Electrical Specifications

Frequency Range	MHz	698 to 806	
Bandwidth	MHz	108	
Connector		7/16 DIN-Female	
Gain (nominal)	dBd (dBi)	10 (12.1)	*1
Input VSWR (max)		1.5:1	
Polarization		vertical	
Impedance	Ω	50	
Pattern		Omni-directional	
3dB beamwidth, horizontal	degrees	360	
3dB beamwidth, vertical	degrees	5	*2
Average Input Power (max)	W	500	
Passive intermod. (2x20W, 3rd ord.)	dBc	-150	
Lightning protection		DC ground	
Electrical tilt (available)		0, 2, 4, 6	

Notes

- *1 : ±0.5 dBd
- *2 : ±1°
- *3 : ±5%
- *4 : Qty 2
- *5 : Not included. Must be ordered separately.

Ordering Information

Clamps must be purchased separately.

Mechanical Specifications

Width	in (mm)	2.5 (64)	
Depth	in (mm)	2.5 (64)	
Length/ Height	in (mm)	182 (4623)	*3
Base pipe diameter	in (mm)	2.5 (64)	
Base pipe mounting length	in (mm)	14 (356)	
Radiating element material		PCB copper	
Radome material		fiberglass (UV protected)	
Weight	lbs (kg)	19 (8.63)	
Mounting configurations		upright	
Mounting Hardware (Optional)		Clamp005X or Clamp130	*4
Kit For Offset Side Mount (straight tower leg)		SMK-325-A3 or SMK-325-A7	*5
Estimated Shipping Weight	lbs (kg)	44 (19.98)	
Shipping dimensions	in (mm)	195x4x4 (4953x102x102)	

Environmental Specifications

Temperature range	°F (°C)	-40 to +140 (-40 to +60)
Wind Loading Area (Flat Plate Equivalent)	ft² (m²)	1.9 (0.18)
Wind Loading Area (1/2" ice)	ft² (m²)	2.7 (0.25)
Rated wind velocity (no ice)	mph (km/h)	155 (250)
Rated wind velocity (1/2" radial ice)	mph (km/h)	120 (193)
Lateral Thrust (100 mph No Ice)	lbs (N)	73 (324.7)
Bending moment (100 mph No Ice)	ft-lbs (Nm)	458 (618.3)
Tip deflection (100 mph No Ice)	degrees	4.3

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