

SP33C1V-SF2P70L(ZZ)(DXX-YYY) Radiant™ panel, 12 dBd, 70° HPBW, low PIM, 450-512 MHz

- UHF panel with highly stable pattern over the whole frequency range
- -150dBc PIM rating for low noise characteristics, ideal for wideband or trunking systems
- Vertical polarization and one port

The Radiant™ SP family is Sinclair's next-generation panel antenna. Specifically, the SP33 series is designed for mission-critical applications where reliability and durability are a concern. It provides outstanding gain with a range of flexible configurations for different applications, including various beamwidth, PIP, null fill, etc. The antenna is enclosed in a rugged fiberglass radome for optimal protection against the elements. It is carefully designed and tested so that the electrical performance is highly stable across the whole operating band, which also results in excellent beam control, isolation, upper sidelobe suppression, front-to-back ratio, ensuring the overall performance. The internal components of the antenna are fully DC grounded which offers excellent lightning protection. This antenna also features an industry-leading -150 dBc PIM rating for low noise characteristics, ideal for wideband and trunking systems.

When ordering, please refer to the chart below for the specific part# (subject to different price). Null-filled version is also available. Please contact your Sinclair Sales Representative or Customer Service Representative for more information.

Part#	Electric downtilt	PIP*
SP33C1V-SF2P70LDF(D00-PIP)	0°	25 kW
SP33C1V-SF2P70LDF(D05-PIP)	5°	25 kW
SP33C1V-SF2P70LDF(D10-PIP)	10°	25 kW
SP33C1V-SF2P70LDF(D00)	0°	-
SP33C1V-SF2P70LDF(D05)	5°	-
SP33C1V-SF2P70LDF(D10)	10°	-

Note:
* PIP: peak instantaneous power



Antenna may not appear exactly as picture

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
Product Specification Sheet		SP33C1V-SF2P70L(ZZ)(DXX-YYY)	Issue: 0	Dated: 03-03-22

Electrical Specifications

Frequency Range	MHz	450 to 512	
Bandwidth	MHz	62	
Connector		7/16 DIN-Female	
Gain (nominal)	dBd (dBi)	12 (14.1)	*1
Input VSWR (max)		1.5:1	
Polarization		vertical	
Impedance	Ω	50	
Pattern		Directional	
Horizontal beamwidth (typ)	degrees	70	
Vertical beamwidth (typ)	degrees	18	*2
Average Input Power (max)	W	500	*3
Number of ports		1	
Passive intermod. (2x20W, 3rd ord.)	dBc	-150	
USLS, First Lobe (Typ)	dB	15	*4
Front-to-back ratio (Typ)	dB	25	*5
Lightning protection		DC ground	
Electrical tilt (available)		0, 5, or 10 degrees	

Notes

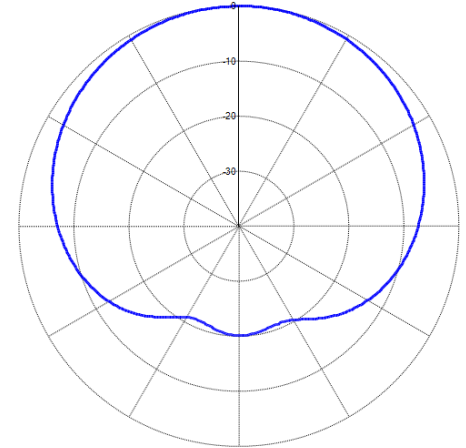
- *1 : ±1 dB
- *2 : ± 5°
- *3 : <50°C ambient temperature. 400W @ 50-60°C
- *4 : ±3 dB
- *5 : ± 5dB
- *6 : Excluding bracket
- *7 : Excluding connector
- *8 : Qty: 1 set, with mechanical downtilt, ranging 0-10°, weight 15 lbs/7 kg.

Ordering Information

Clamps must be purchased separately.

Mechanical Specifications

Width	in (mm)	16.7 (424)	
Depth	in (mm)	6.5 (165)	*6
Length/ Height	in (mm)	79.2 (2012)	*7
Radome material		Fiberglass (UV resistant)	
Reflector material		aluminum	
Weight	lbs (kg)	43.5 (19.75)	
Weight iced (1/2" ice)	lbs (kg)	66 (29.96)	
Mounting configurations		upright	
Mounting Hardware (Optional)		Clamp180M	*8
Actual shipping weight	lbs (kg)	60.5 (27.47)	
Shipping dimensions	in (mm)	83.3x21x12.3 (2116x533x312)	
Radome Colour		Light Gray	



Environmental Specifications

Temperature range	°F (°C)	-40 to +140 (-40 to +60)
Wind Loading Area (Flat Plate Equivalent)	ft² (m²)	9.2 (0.85)
Wind Loading Area (1/2" ice)	ft² (m²)	9.8 (0.91)
Rated wind velocity (no ice)	mph (km/h)	150 (242)
Rated wind velocity (1/2" radial ice)	mph (km/h)	120 (193)
Lateral Thrust (100 mph No Ice)	lbs (N)	229 (1018.6)

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