



A Norsat Company in Norsat

SC432T-SF6LDF(D0-I30-G6-E5749)

Triple collinear omni, 6 dBd, low PIM, PIP rated, 746-869 MHz

- Triple port collinear antenna with 30 dB port-to-port isolation with 6 dBd gain.
- · Designed to operate in extreme environmental conditions.
- · Low PIM and PIP rated

Sinclair SC432T-SF6LDF(D6-I30-G6-E5749) antenna is a tripple port antenna that comes with outstanding isolation which means precious tower space can be saved. It is the go to antenna for multi-channel systems, it features with low intermodulation products, highly rated average power and peak instantaneous power (PIP). The SC432 series antennas are enclosed in a rugged, UV protected fiberglass radome designed to withstand severe wind and ice conditions.

Other options are also available, such as higher or lower gain. Please contact Sinclair for details.

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 (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 environment factors to the PIP handling of an antenna.



Region	United States	Europe, Middle East, and Africa	Canada, Caribbean, and Latin America	Asia-Pacific
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Product Specification Sheet EPR 018260 Customer Tech Manual 006011



## **Antennas** 700-1000 MHz Antennas SC432T-L PIM Certified Series

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Electrical Specifications		
Frequency Range	MHz	746 to 869
Connector		7/16 DIN-Female
Gain (nominal)	dBd (dBi)	6 (8.1)
Input VSWR (max)		1.5:1
Polarization		vertical
Impedance	Ω	50
Pattern		Omni-directional
Vertical beamwidth (typ)	degrees	12.7
Average Input Power (max)	W	500
Isolation between sections (nom)	dB	30
Passive intermod. (2x20W, 3rd ord.)	dBc	-150
PIP(KW, max)		25
Lightning protection		DC ground
Electrical tilt (available)		0.2.4. or 6 degrees

Notes

\*1 : Qty 2 \*2: Not included.

Mechanical Specifications

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Width	in (mm)	3.5 (89)	
Depth	in (mm)	3.5 (89)	
Length/ Height	in (mm)	214.5 (5448)	
Base pipe diameter	in (mm)	3.5 (89)	
Base pipe mounting length	in (mm)	30 (762)	
Radiating element material		brass	
Radome material		fiberglass (UV protected)	
Weight	lbs (kg)	43 (19.52)	
Weight iced (1/2" ice)	lbs (kg)	87 (39.5)	
Mounting configurations		upright	
Mounting Hardware (Optional)		Clamp006B	*1
Kit for Offset Side Mount (straight tower leg)		SMK-335-A3 or SMK-335-A7	*2
Actual shipping weight	lbs (kg)	92 (41.77)	
Shipping dimensions	in (mm)	252x6x6 (6401x152x152)	

$\equiv$	Environmental Specifications		
<u></u>	Temperature range	°F (°C)	-40 to +140 (-40 to +60)
S	Wind Loading Area (Flat Plate Equivalent)	ft² (m²)	3.06 (0.28)
	Wind Loading Area (1/2" ice)	ft² (m²)	4.05 (0.38)
7	Rated wind velocity (no ice)	mph (km/h)	140 (225)
æ	Rated wind velocity (1/2" radial ice)	mph (km/h)	115 (185)
7	Lateral Thrust (100 mph No Ice)	lbs (N)	132 (587.1)
$\geq$	Bending moment (100 mph No Ice)	ft-lbs (Nm)	983 (1327.1)
-=	Tip deflection (100 mph No Ice)	degrees	4.2
S			
WWW.			
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Region **United States** Europe, Middle East, and Africa Canada, Caribbean, and Latin America Asia-Pacific +1 905 727 0165 1 800 263 3275 +44 (0) 1487 84 28 19 Canada: 1 800 263 3275 Telephone International: +1 905 726 7676 E-mail salesusa@sinctech.com salesuk@sinctech.com salescan@sinctech.com salesasia@sinctech.com Dated: 26-05-22 Dated: 26-05-22 Product Specification Sheet SC432T-SF6LDF(D0-I30-G6-E5749) Issue: 2

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