



Antennas Low Band, Aviation, and VHF Antennas SC251-HL-PIM/PIP Certified Series

SC251-HF3LDF(D00-G4)

Collinear omni antenna, 3.5 dBd gain, low PIM, PIP rated, HD, 148-168 MHz

- · Wideband 3.5 dBd gain collinear omni antenna
- 500W power handling with low PIM and high PIP rating
- Rugged fiberglass radome provides superior environmental protection
- 0, 2, 4, or 6 degrees of electrical downtilt available

A side mounting kit is Mandatory when offset mounting the antenna. The SMK-345-A7 for Offset Side Mount is available separately.

The SC251-HL is a 3.5dBd collinear omni featuring low passive intermed performance with single or dual port configuration option available. Fabricated using durable components, this series of antennas is designed for ease of installation. The foam wrapped brass construction provides a light and durable structure housed in a UV protected fiberglass radome ensuring superior resistance to harsh environmental conditions. This family is fabricated to meet the most stringent wind and ice loading requirements.

Due to its wide band and high average power and PIP power handling capability, this antenna is ideally suited for VHF trunking applications or multi-channel operations.

The reliability and durability of this antenna makes it suitable for mission critical applications such as public safety and law enforcement.





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Electrical Specifications		
Frequency Range	MHz	148 to 168
Bandwidth	MHz	20
Connector		7/16 DIN-Female
Gain (nominal)	dBi (dBd)	5.6 (3.5)
Input VSWR (max)		1.5:1
Polarization		vertical
Impedance	Ω	50
Pattern		Omni- directional
Vertical beamwidth (typ)	degrees	22
Average Power Input (max)	W	500
Passive intermod. (2x20W, 3rd ord.)	dBc	-150
Lightning protection		DC ground
PIP(KW, max)		25
Electrical tilt (available)		0. 2. 4. or 6 degrees

Ordering Information

Order mounting clamp 006C and side mounting kit SMK-345-A7 separately.

Mechanical opecinications		
Width	mm (in)	127 (5)
Depth	mm (in)	127 (5)
Length/ Height	mm (in)	5080 (200)
Base pipe diameter	mm (in)	127 (5)
Base pipe mounting length	mm (in)	660 (26)
Radome material		fiberglass (UV protected)
Weight	kg (lbs)	33.6 (74)
Weight iced (1/2" ice)	kg (lbs)	57.2 (126)
Weight iced (1" ice)	kg (lbs)	85.81 (189)
Mounting Hardware (Optional)		Clamp006C
Actual shipping weight	kg (lbs)	46.31 (102)
Shipping dimensions	mm (in)	5385x152x152 (212x6x6)
Number of ports		1
Mounting configurations		Universal mount
Recommended For Offset Side Mount:		SMK-345-A7
Radome Colour		Light Blue

Environmental Specifications		
Temperature range	°C (°F)	-40 to +60 (-40 to +140)
Wind Loading Area (Flat Plate Equivalent)	m² (ft²)	0.4 (4.3)
Wind Loading Area (1/2" ice)	m² (ft²)	0.48 (5.2)
Wind Loading Area (1" ice)	m² (ft²)	0.57 (6.1)
Rated wind velocity (no ice)	km/h (mph)	362 (225)
Rated wind velocity (1/2" radial ice)	km/h (mph)	314 (195)
Rated wind velocity (1" radial ice)	km/h (mph)	290 (180)
Lateral thrust (100 mph No Ice)	N (lbs)	747.3 (168)
Bending moment (100 mph No Ice)	Nm (ft-lbs)	1360.8 (1008)
Tip deflection (100 mph No Ice)	degrees	0.8