

## SC381-HL- PIM Certified Collinear omni antenna, 6 dBd gain, low PIM, 380-512 MHz

- · Corporate feed design provides excellent pattern control
- Ideally suited for trunked or multichannel UHF systems
- Recommend using the SMK-345-A7 side mounting kit.

The SC381-HL is a collinear omni antenna featuring low passive intermod performance with 6 dBd gain. 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.

The SC381-HL is enclosed in a fiberglass radome to also minimize tip deflection and coverage variations in severe wind conditions. This family is fabricated to meet the most stringent wind and ice loading requirements.

Due to its wide band and high power handling capability, this antenna is ideally suited for UHF trunking applications or multi-channel operation. With it's low PIM rating, the probability of interference caused by intermodulation is low.

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

Model	Description	Pattern
SC381-HF1LDF	6 dBd gain, 7/16 DIN (female) connector, 380-420 MHz	Omni-directional
SC381-HF2LDF	6 dBd gain, 7/16 DIN (female) connector, 403-470 MHz	Omni-directional
SC381-HF3LDF	6 dBd gain, 7/16 DIN (female) connector, 450-512 MHz	Omni-directional
SC381-HF4LDF	6 dBd gain, 7/16 DIN (female) connector, 430-490 MHz	Omni-directional



< Home < Family



Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
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Product Specificatio	n Sheet	SC381-HL- PIM Certified		Dated: 05-02-10

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## Antennas UHF and Tetra Antennas SC381-HL- PIM Certified Series

	SC381-HF1LDF	SC381-HF2LDF	SC381-HF3LDF	SC381-HF4LDF
Electrical Specifications				
Frequency Range, MHz	380 to 420	403 to 470	450 to 512	430 to 490
Gain (nominal), dBd (dBi)	6 (8.1)	6 (8.1)	6 (8.1)	6 (8.1)
Input VSWR (max)	1.5:1	1.5:1	1.5:1	1.5:1
Polarization	vertical	vertical	vertical	vertical
Pattern	Omni-directional	Omni-directional	Omni-directional	Omni-directional
Vertical beamwidth, degrees	11.5	11.5	18	11.5
Average Power Input (max), W	500	500	500	500
Passive intermod. (2x20W, 3rd ord.), dBc	-150	-150	-150	-150
Lightning protection	DC ground	DC ground	DC ground	DC ground
Bandwidth, MHz	40	67	62	60
Mechanical Specifications				
Connector	7/16 DIN (female)	7/16 DIN (female)	7/16 DIN (female)	7/16 DIN (female)
Width, in (mm)	4.5 (114)	4.5 (114)	5 (127)	4.5 (114)

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Width, in (mm)	4.5 (114)	4.5 (114)	5 (127)	4.5 (114)
Depth, in (mm)			5 (127)	
Base pipe diameter, in (mm)	5 (127)	5 (127)	5 (127)	5 (127)
Base pipe mounting length, in (mm)	24 (610)	24 (610)	24 (610)	24 (610)
Weight, Ibs (kg)	47 (21.3)	44 (20)	44 (20)	47 (21.3)
Weight iced, lbs (kg)	99 (44.9)	82 (37.2)	82 (37.2)	99 (44.9)
Actual Shipping weight, lbs (kg)	110 (49.9)	110 (49.9)	75 (34.1)	110 (49.9)
Shipping dimensions, in (mm)	171x6x6 (4343x152x152)	171x6x6 (4343x152x152)	165x6.5x6.5 (4191x165x165)	171x6x6 (4343x152x152)
Length, in (mm)	159.3 (4046)	148.3 (3767)	148.3 (3766)	160 (4064)
Mounting hardware	clamps not supplied	clamps not supplied	#6C Clamp	clamps not supplied

Environmental Specifications					
Temperature range, °F (°C)	-40 to +140 (-40 to +60)	-40 to +140 (-40 to +60)	-40 to +140 (-40 to +60)	-40 to +140 (-40 to +60)	
Wind Loading Area (Flat Plate Equival	ent), ft <sup>2</sup> (m <sup>2</sup> ) 3.33 (0.31)	3.33 (0.31)	3.33 (0.31)	3.33 (0.31)	

## SINCLAIR TECHNOLOGIES

MEASURED RADIATION PATTERN VERTICAL POLARIZATION

> Elevation Relative Gain - 10 dB per Division

> > SC381-HF1LDF

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Product Specification	n Sheet	SC381-HL- PIM Certified		Dated: 05-02-10