



ANTENNA EXPERTS

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Model SAT-225-406C 225 – 406 MHz. 10 dBic. Gain

UHF SATCOM GROUND-TO-AIR CIRCULAR POLARIZED YAGI ANTENNA

DESIGN FEATURES: SAT-225-406C rugged, high gain, all weather crossed elements yagi antenna is designed for satellite communication (SATCOM) application with right hand circular polarization. When the array is mounted on the rotator (not supplied), the crossed elements array makes an angle of 45 degrees with respect to horizontal plane. A crossed member can be supplied with the array for necessary mounting arrangement on a Rotator. SAT-225-406C right hand circular polarized SATCOM array can be used with most tactical Multi-Band, Multi-Mode Receivers (MBMMR) and ground transceivers that accept 50 ohms antenna impedance.

CONSTRUCTIONS: The right hand circular polarized SATCOM antenna uses a 6063T6 ultra corrosion resistant architectural aluminum alloy and supplied with powder coating to protect it further from severe environment conditions. The RHCP SATCOM antenna termination uses N-Female connector fixed on the antenna dipole. The SATCOM array is supplied with complete mounting hardware balanced at its center of gravity for mounting on a rotator for azimuth and elevation plane scanning. The mounting hardware supplied is of marine grade stainless steel fasteners. If user does not have rotator, a crossover mounting plate to mount the antenna on top of the mast can be supplied.

ELECTRICAL SPECIFICATIONS:

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|--|----------------|
| Frequency Range | 225 - 406 MHz. |
| Gain | 10 dBic. |
| Bandwidth | Entire Band. |
| Polarization | RHCP |
| Input Impedance | 50 Ohms. |
| Horizontal Beam-width –Half Power Points | 55 Degrees |
| Vertical Beam-width –Half Power Points | 50 Degrees |
| Axial Ratio | 3 dB. |
| Cross Polarization Discrimination | 15 dB. |
| Front to Back Ratio | 17 dB. |
| VSWR – Equal to or better than | 2.5 : 1 |
| RF Power Handling Capacity | 250 Watts. |
| Input Termination | N-Female |

MECHANICAL SPECIFICATIONS:

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|--------------------------------------|----------------------|
| Mounting Hardware | Stainless Steel |
| Gross Weight | 4 Kgs. |
| Wind Rating | 170 Km/Hr. |
| Overall Length | 1.5 Meters |
| Shipping Length | 1.6 Meters |
| Support Boom-Materials-Cross Section | Aluminum -Round Tube |
| Elements - Materials - Cross Section | Aluminum -Round Tube |
| Maximum Mount Pipe Diameter | 52mm (2 Inches) |

ENVIRONMENTAL SPECIFICATIONS:

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|-----------------------|------------------------------|
| Operating Temperature | (-)30 to +70 Degrees Celsius |
| Storage Temperature | (-)40 to +80 Degrees Celsius |
| Humidity | 0 to 95% RH |

Note: All information contained in the datasheet is subject to change without any prior notice.