

# Ka-Band SATCOM ANTENNA SPECIFICATION

## 12.0" (30.48 cm) Aperture

### P/N 501410

<b><u>Frequency Bands</u></b>	<b>Band 1</b>	<b>Band 2</b>
Receive	19.2 to 20.2 GHz	20.2 to 21.2 GHz
Transmit	29.0 to 30.0 GHz	30.0 to 31.0 GHz
<b>IF Receive &amp; Transmit</b>	950 to 1950 MHz	950 to 1950 MHz
<b>10 MHz reference</b>	Needs to be supplied by Modem	
<b>Bias Voltage</b>	Supplied by Rantec ACU	
<b><u>Antenna Polarization</u></b>	<b>Receive/Transmit</b>	
	LHCP or RHCP – Orthogonal Receive to Transmit	
<b><u>Receive G/T</u></b>	11 dBi/K at 30° elevation	
<b><u>Receive Amplification</u></b>	72 dB relative to feed input	
<b><u>Transmit EIRP</u></b>	46.75 dBW at P1 dB nominal	
<b><u>Transmit Power</u></b>	11 W typical into feed port	
<b><u>Weight</u></b>		
Antenna	26 pounds maximum	
ACU	4 pounds maximum	
<b><u>Power Requirements</u></b>	28 Volts DC, 7 Amps	
<b><u>Elevation Performance</u></b>		
Travel Range	5 degrees to 85 degrees relative to mounting plate in aircraft tail	
Velocity	30 degrees per second minimum	
Acceleration	40 degrees per second per second	
<b><u>Azimuth Performance</u></b>		
Travel Range	Continuous	
Velocity	30 degrees per second minimum	
Acceleration	40 degrees per second per second	
<b><u>Polarization Performance</u></b>		
Travel Range	270 degrees total, ± 90 degrees from vertical or horizontal	
Velocity	30 degrees per second minimum	
Acceleration	40 degrees per second per second	
<b><u>Environmental</u></b>		
Operating Temperature	-55°C to +70°C	
Environmental	RTCA/DO-160G	



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