

## SA-300 Specification

Physical Characteristics	
<b>Construction:</b>	Polycarbonate radome enclosure, sealed with weatherproof rubber O-ring in-between; Center fed with TNC connector for antenna output
<b>Antenna Dimensions:</b>	4.5" in diameter & 2.9" in height
<b>Weight:</b>	220 grams w/o cable
<b>Color:</b>	White
Cable & Connector	
<b>Cable Length:</b>	10 m RG58 A/U with 15-50 m optional; Cable connectors hermetically molded plastics for waterproof and stain relief
<b>Connector Available:</b>	TNC (standard), other types (optional)
Mounting	
<b>Standard Mounting:</b>	External flagpole type mast mount 1"-14" threaded mast
<b>Optional Mounting:</b>	Cabin roof-mount with stainless steel base & shaft Rail side mount with stainless rod
Antenna Element	
<b>Polarization:</b>	R.H.C.P. (Right Hand Circular Polarization).
<b>Absolute Gain @ Zenith:</b>	+5 dBi typically
<b>Azimuth Coverage:</b>	360°
<b>Gain @ 10° Elevation:</b>	-1 dBi typically
<b>Azimuth Coverage:</b>	360°
<b>Axial Ratio:</b>	3 dB max.
<b>Output VSWR:</b>	1.5:1 max.
Amplifier Element	
<b>General:</b>	L1 frequency, 1575.42 MHz +/-1.023 MHz
<b>LNA Gain:</b>	30 dB typically
<b>Bandwidth:</b>	2 MHz min.
<b>Noise Figure:</b>	2.0 max.
<b>Out-of-Band Attenuation:</b>	30 dB min. @ Fo +/- 50Mhz
<b>Current Consumption:</b>	27mA +/- 3mA
Overall Performance	
<b>Center Frequency:</b>	1575.42 MHz
<b>Gain:</b>	27 dB typ.
<b>Noise Figure:</b>	2.0 max.
<b>Axial Ratio:</b>	3dB max.
<b>VSWR:</b>	2.0 max.
<b>Output Impedance:</b>	50 Ω
Electrical Characteristics	
<b>Supply Voltage:</b>	4.5-5.5V DC
<b>Power Consumption:</b>	27mA @ 4.5 volts, 0.12 watts typ. < 0.2 watts max.
Environmental Characteristics	
<b>Operating Temperature:</b>	-30° to +85° C
<b>Storage Temperature:</b>	-40° to +90° C
<b>Operating Humidity:</b>	95% RH, non-condensing
<b>Waterproof:</b>	100% waterproof at the rating of IP66