

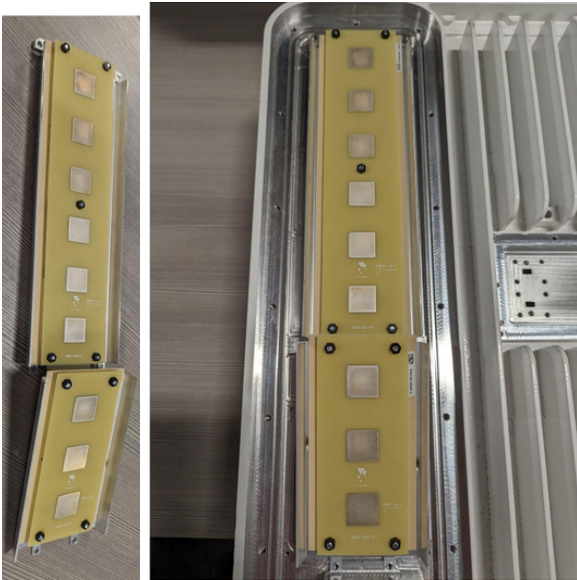


Starry Titan 5GHz Antenna (540-00647) Datasheet

Revision 2.0

Starry, Inc.

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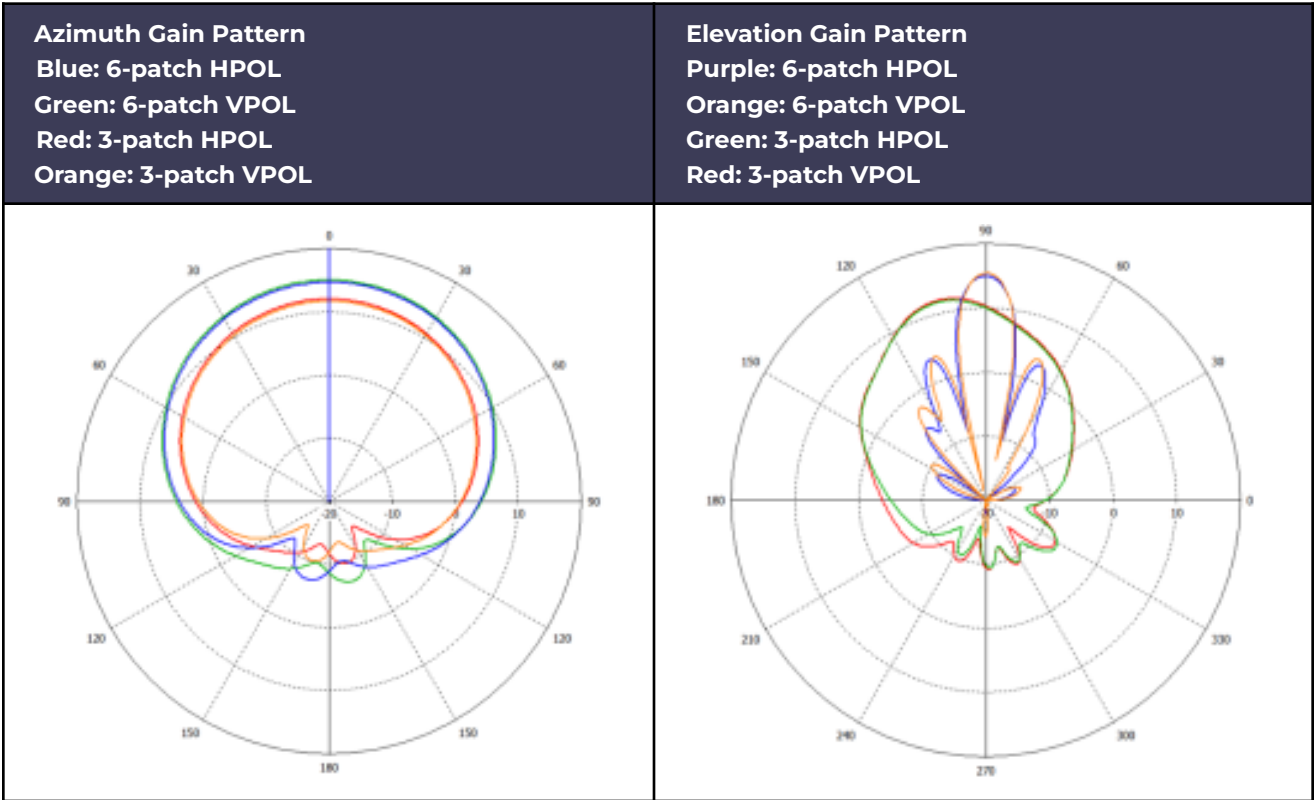
Base dual patch array antenna assembly (left) and antenna assembly installed in Titan radio (right).

Description	
The Starry 540-00647 antenna consists of two dual-polarization patch arrays operating from 5.1 to 5.9 GHz. Each patch column has two MCX connectors, each of which drives the entire column in one polarization (HPOL or VPOL). The 3-patch array is physically offset from the 6-patch array by 13 degrees in elevation.	

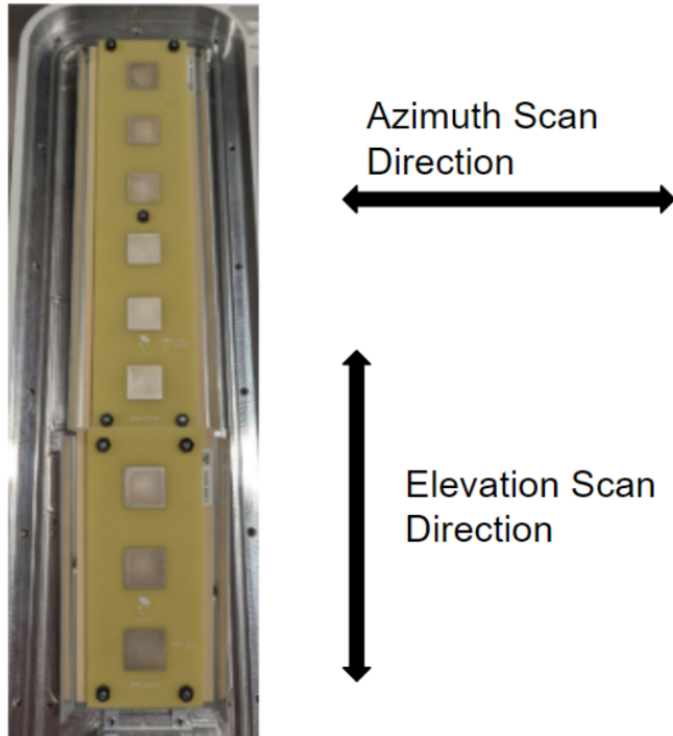
General	
Antenna Archetype	Patch Array
Polarization	Dual-linear (horizontal and vertical)
Operating Frequency Range	5.1 - 5.9 GHz
Interface	MCX (x4)
Port Impedance	50 Ohm (nominal)



Performance Specifications	
All values are typical performance at mid-band	
Peak Gain (6-patch, HPOL)	15 dBi
Peak Gain (6-patch, VPOL)	15 dBi
Azimuth Half-power Beamwidth (6-patch)	60 deg
Elevation Half-power Beamwidth (6-patch)	10 deg
Peak Gain (3-patch, HPOL)	12 dBi
Peak Gain (3-patch, VPOL)	12 dBi
Azimuth Half-power Beamwidth (3-patch)	60 deg
ElevationHalf-power Beamwidth (3-patch)	30 deg (Boresight offset 13 deg compared to 6-patch)



Elevation and azimuth gain pattern plots for each patch array and polarization © 2022 Starry,



Definition of azimuth and elevation scans relative to antenna orientation



5GHz Antenna Mount Drawings

