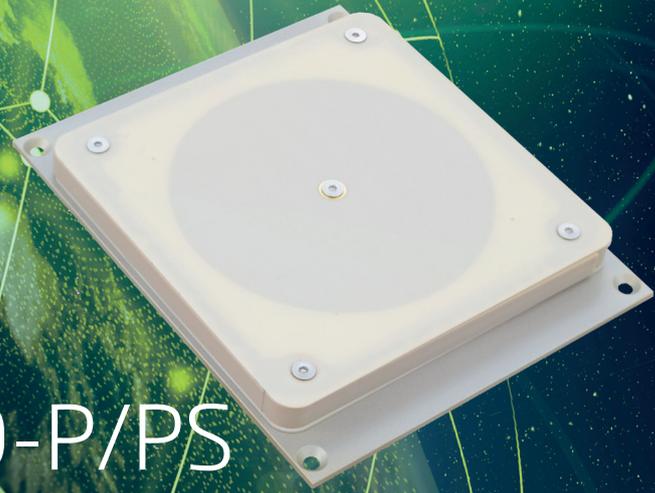


NanoCom AM2150-P/PS



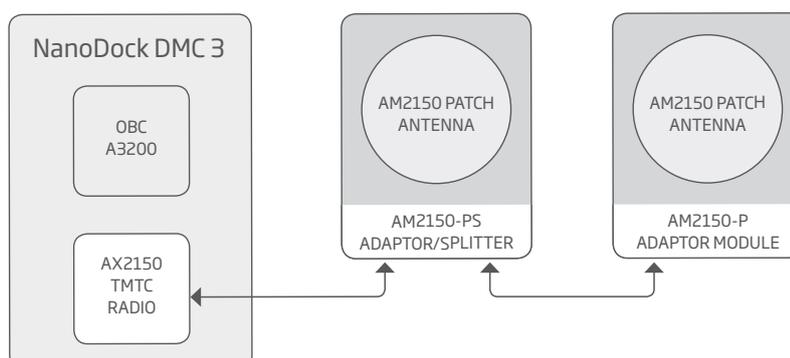
The NanoCom AM2150-P/PS is an S-band antenna solution for systems requiring near omni-directional radiation pattern and circular polarization. It is designed to complement AX2150 low power radio but will work with other radio systems.

The combination of two patch antennas mounted on opposite faces of a nano satellite gives a near omni-directional radiation pattern without the need for deployable structures.

The patch antenna modules have been used in ANT2000 products which has been extensively space proven with a long and successful flight heritage by GomSpace and our customers worldwide since 2017.

The antenna system consists of two flight proven patch antenna modules and two adaptor modules as shown below.

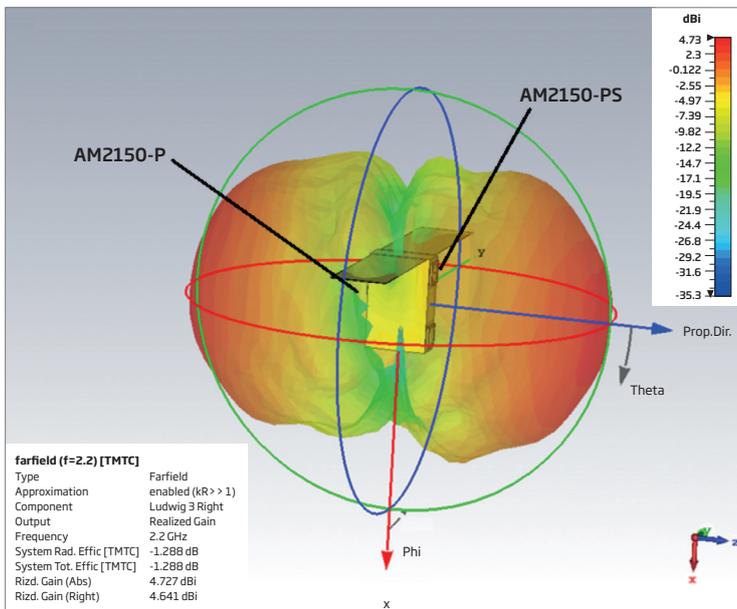
The adaptor modules include hybrid couplers to create circular polarization with the two-port patch antenna modules and is using MCX RF connectors to match the AX2150 product.



Technical Information

NANOCOM AM2150-P/PS - KEY FEATURES:

Features	<ul style="list-style-type: none"> Advanced stacked patch antenna designed with low loss materials Coverage 2025 – 2290 MHz Radiation pattern: near omni-directional RHCP Circular polarization All metallic parts connected to ground No restrictions on coax cable. System not sensitive to feed phase.
Performance	<ul style="list-style-type: none"> Matching $S_{11} < -10\text{dB}$ Antenna gain: <ul style="list-style-type: none"> $> -12\text{ dBi}$ for 85% of directions $> 0\text{ dBi}$ for 20% of directions
Mounting	<ul style="list-style-type: none"> Choice of mounting plates (as ANT2000) for different mounting locations. MCX Coaxial connectors
Mass	<ul style="list-style-type: none"> $< 100\text{ gram}$ pr. module excluding harness



Simulated system radiation pattern example for AM2150P/PS mounted on 6U nano satellite structure with deployable solar panels.

Gain probability function (CCDF) for the antenna system shown to the left evaluated for all 1° solid angles.

