

# NanoCom AM2150-O MK2

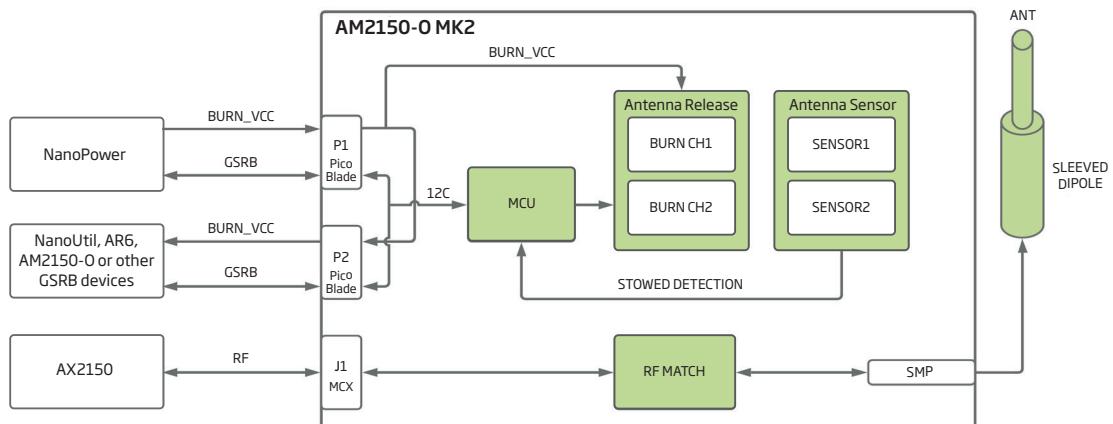
GOMSPACE



The NanoCom AM2150-O MK2 is an S-band antenna solution for systems requiring near omni-directional radiation patterns. It is designed to complement AX2150 low power radio transceiver and other radio systems.

Depending on the orientation of the antenna and interaction with the exterior of the spacecraft, the antenna gives a near omni-directional radiation pattern. The antenna can be used stand-alone or in combination with other antennas like the NanoCom AM2150-PS.

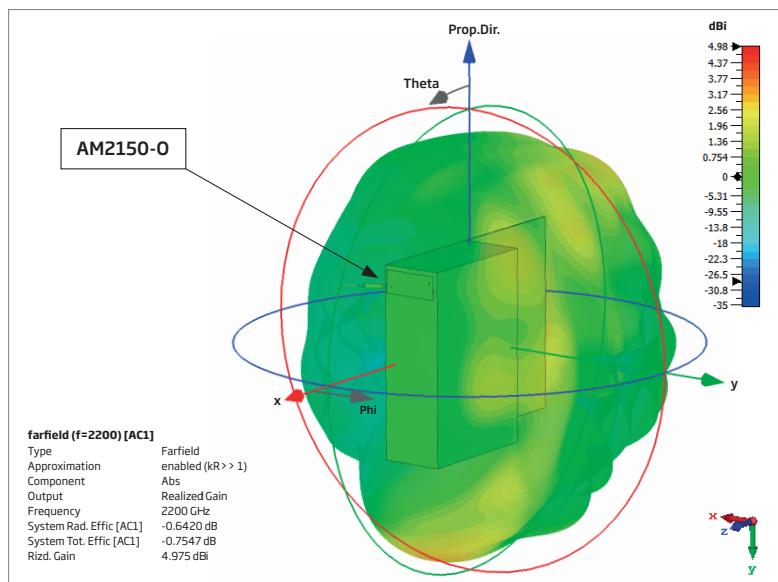
The antenna system consists of a single deployable sleeve dipole type of antenna with a flight proven hold down and release mechanism. NanoCom AM2150-O MK2 includes all circuitry necessary to perform and monitor antenna release.



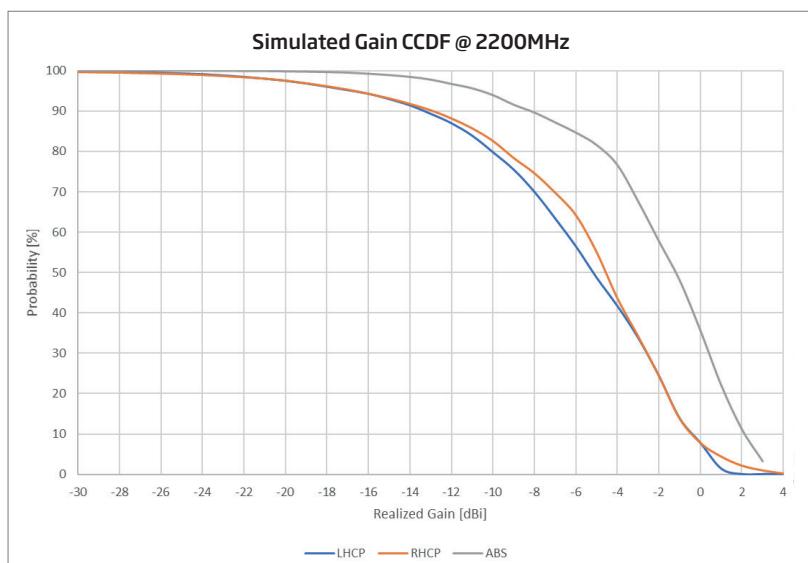
## Technical Information

### NANOCOM AM2150-0 MK2 - KEY FEATURES:

Features	<ul style="list-style-type: none"> <li>Deployable antenna designed with low loss materials</li> <li>Coverage 2025 - 2290 MHz</li> <li>Radiation pattern: near omni-directional depending on placement</li> <li>Redundant release mechanism</li> <li>Compatible with AR6 antenna release functionality embedded in GomSpace NanoPower P60 and P80</li> </ul>
Performance	<ul style="list-style-type: none"> <li>Matching <math> S_{11}  &lt; -10\text{dB}</math></li> <li>Antenna gain: <ul style="list-style-type: none"> <li>Circular Polarized gain <math>&gt; -12 \text{ dBi}</math> for <math>&gt; 80\%</math> of directions</li> <li>ABS gain <math>&gt; -12\text{dBi}</math> of <math>&gt; 95\%</math> of directions</li> </ul> </li> </ul>
Mounting	<ul style="list-style-type: none"> <li>Choice of mounting plates for different mounting locations.</li> <li>The mounting plates have a selection of interface to other GomSpace modules such as: GPS, Flight preparation panel, Fine sun sensor, etc.</li> </ul>
Interfaces	<ul style="list-style-type: none"> <li>MCX Coaxial connector for RF</li> <li>Pico Blade for GSRB I2C and burn voltage</li> </ul>
Mass	<ul style="list-style-type: none"> <li><math>&lt; 100</math> gram pr. module excluding harness</li> </ul>



Simulated system radiation pattern example for AM2150-0 MK2 mounted on 6U nano satellite structure with deployable solar panels



Gain probability function (CCDF) for the satellite configuration shown above evaluated for all  $1^\circ$  solid angles.

GomSpace can provide simulated gain plots for specific satellite configurations upon request. Contact GomSpace sales for further information.