








# Wideband Fractal Omni Antenna, 150-6,000 MHz

Optimized for the teamSENTINEL family of RF sensors, this advanced single-band antenna utilizes fractal geometry to deliver consistent high gain performance across an extreme 40:1 frequency bandwidth (150 to 6,000 MHz). Packaged as a highly compact circuit board, the fractal antenna is designed to fit into the transit case lid of a teamSENTINELnano™ V/U/SHF wideband sensor. Polarization (vertical or horizontal) of the omnidirectional antenna response can be affected simply by reorienting the rectangular element between portrait to landscape.

Extreme wideband frequency coverage, combined with compact and versatile packaging, make this an ideal monitoring antenna for the transportable teamSENTINEL family of wideband V/U/SHF interactive recording sensors.

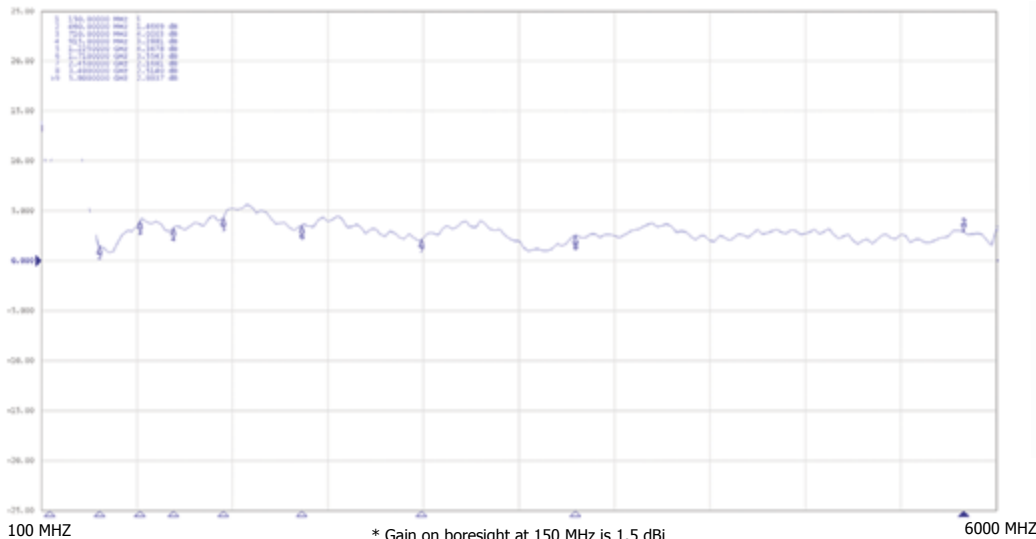
-  **Purpose-built for the teamSENTINEL family of wideband RF sensors**
-  **Extreme Frequency Bandwidth Ratio of 40:1 (Mid-VHF through C-band range)**
-  **Conveniently housed in the lid of the teamSENTINELnano transit case**
-  **Lightweight, portable**
-  **Quick Deployment**



Patents pending and US patents 659862, 6985122, 7345642 and 7659862

SYSTEM SPECIFICATIONS	
Full Performance Range	150-6,000 MHz
Antenna Center Frequency	3,075 MHz
Frequency Bandwidth Ratio	40:1
Nominal Gain	5 dBi, boresight
VSWR (Typical)	≤ 3:1
Nominal Impedance	50 Ω
Reduced Performance Range	100-150 MHz
Antenna Response Pattern	Omnidirectional around axis
Polarization in Portrait Mode	Linear, Vertical
Polarization in Landscape Mode	Linear, Horizontal
Dimensions	19.25" x 13.5" x 0.062"
Connector	SMA (female)
Temperature Range	-30 to +70 deg C

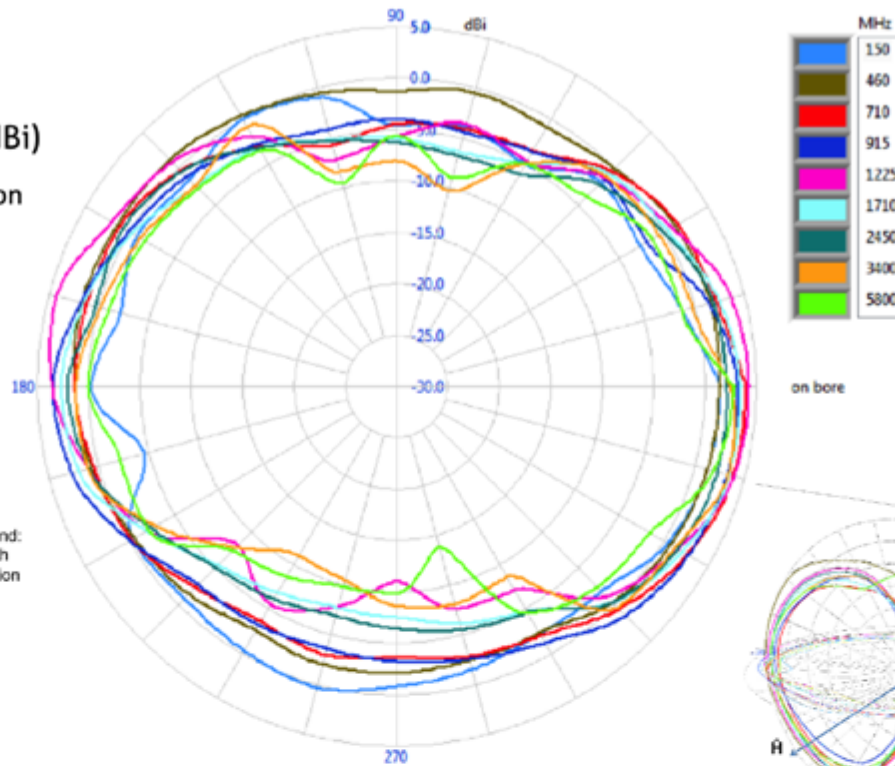
Boresight Gain\* (dbi)



## Exceptional Wideband Performance

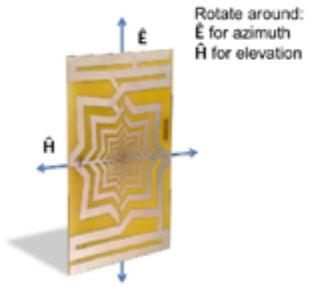
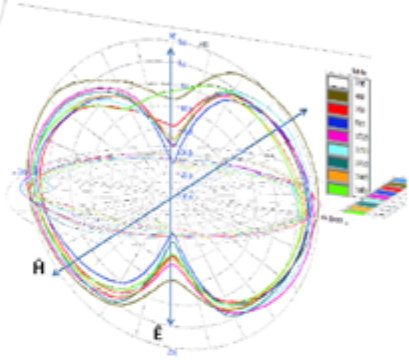
Typical gain performance of 5 dBi± can be expected from ~150 MHz up to 6 GHz, allowing a single antenna to effectively cover a frequency range that would otherwise require multiple traditional antennas.

**Azimuth patterns (dBi)  
at zero degrees elevation**

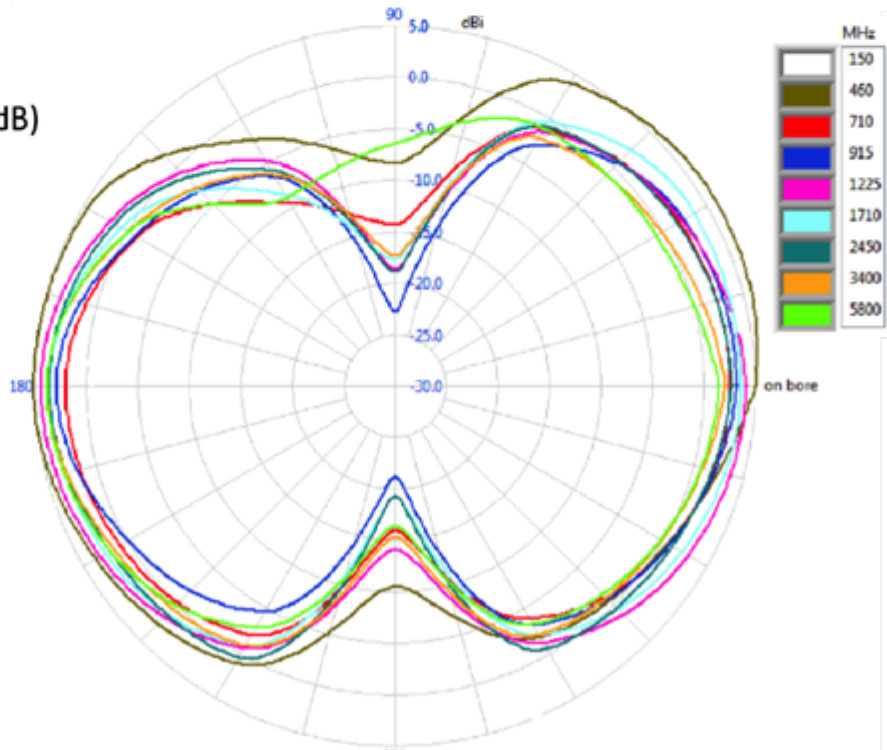


Color	Frequency (MHz)
Blue	150
Olive	460
Red	710
Dark Blue	915
Magenta	1225
Cyan	1710
Teal	2450
Orange	3400
Green	5800

on bore



**Elevation patterns (dB)  
at zero degrees azimuth**



Color	Frequency (MHz)
Blue	150
Olive	460
Red	710
Dark Blue	915
Magenta	1225
Cyan	1710
Teal	2450
Orange	3400
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on bore



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