

[www.niccomp.com/series/NGPM](http://www.niccomp.com/series/NGPM)



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## NGPM Series

### High Precision Ceramic Patch Antennas

NIC offers high-performance ceramic patch antennas for high-precision positioning applications that utilize multi-band GNSS satellite signals. With a monolithic design and ceramic body, this antenna offers a more compact and affordable alternative to traditional stacked patch antennas.

These antennas are optimized for reception of multiple GNSS bands, including G1, L1, L2, and L5. With the ability to achieve locational accuracy within a few centimeters, its an excellent choice for applications utilizing RTK technology. Plus, the monolithic design simplifies the production process and ensures consistent performance stability.

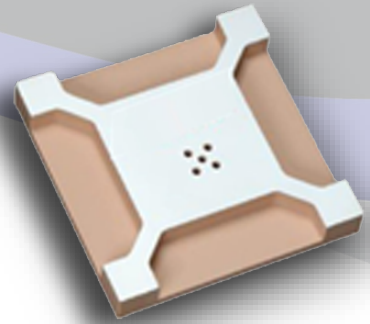
### Antenna Characteristic Comparison

Standard Patch	NGPM
<ul style="list-style-type: none"> <li>• Circular Polarization</li> <li>• High Directivity</li> <li>• Meter-Level Positioning</li> <li>• Chip = one Band Only</li> <li>• Stacked = Multiple Bands</li> </ul>	<ul style="list-style-type: none"> <li>• High Precision</li> <li>• GNSS L1 &amp; L2 / L1 &amp; L5 / L1 &amp; L2 &amp; L5</li> <li>• Monolithic Design</li> <li>• Superior axial-ratio</li> <li>• Low Profile</li> </ul>

**For Use In** real time kinematic (RTK) application including high-end land surveying, autonomous vehicles, and unmanned aerial vehicles for construction and agriculture.



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## NGPM Standard Part Numbers

Passive High Precision Patch Antenna						
Part Number	Size (mm)	Polarization	G1 1602 MHz	L1 1575.42 MHz	L2 1227.6 MHz	L5 1176.45 MHz
			Peak Gain (typical)			
<a href="#">NGPM1818PU1R176G3AF</a>	18x18	Circular (RHCP)	2.0 dBi	3.1 dBi	-	-0.8 dBi
<a href="#">NGPM2525PU1R176G2AF</a>	25x25		-	4.26 dBi	-	3.3 dBi
<a href="#">NGPM3030DU1R176G2AF</a>	30x30		-	5.0 dBi	-	3.0 dBi
<a href="#">NGPM4040PU1R176G2AF</a>	40x40		-	5.4 dBi	-	5.4 dBi
<a href="#">NGPM4040PU1R227G3AF</a>			5.1 dBi	5.8 dBi	5.1 dBi	-
<a href="#">NGPM5050DU1R176G2AF</a>	50x50		-	5.3 dBi	-	6.3 dBi
<a href="#">NGPM5050DU1R227G2AF</a>			-	4.5 dBi	6.2 dBi	-
<a href="#">NGPM5050DU1R575G3AF</a>			-	5.3 dBi	2.3 dBi	2.7 dBi

Active High Precision Patch Antenna						
Part Number	Size (mm)	Polarization	G1 1602 MHz	L1 1575.42 MHz	L2 1227.6 MHz	L5 1176.45 MHz
			Peak Gain (typical)			
<a href="#">NGPMA2525BU1R176G3X100AF</a>	25x25	Circular (RHCP)	2.0 dBi	2.0 dBi	-	-1.1 dBi
<a href="#">NGPMA4040BU1R176G3X100AF</a>	40x40		4.2 dBi	4.7 dBi	-	2.3 dBi
<a href="#">NGPMA5050BU1R227G3C102HF</a>	50x50		0.69 dBi	2.48 dBi	-11.69 dBi	-

Above parameters are based on standard test fixture and setup. Patch antenna requires tuning based on the ground plane shape and dimensions to achieve optimal performance. Please contact NIC for part number identification with tuning.