

NANE13X165WTJW2R45G2MF

WIFI External Whip Antenna: 2.4 & 5 GHz



Description

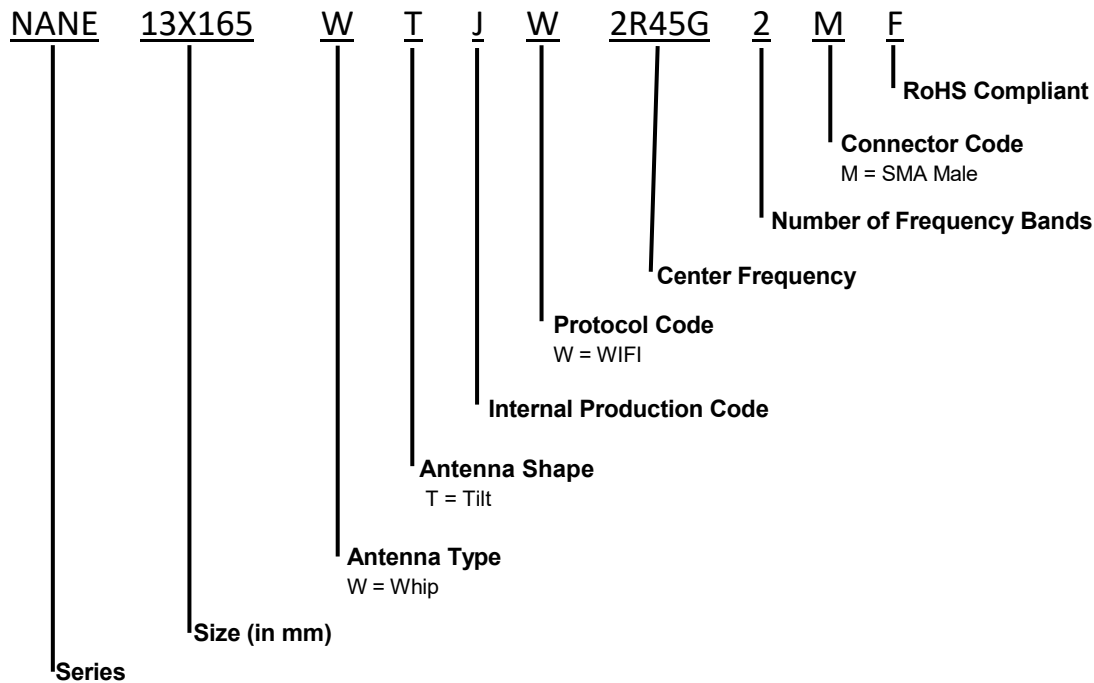
NANE13X165WTJW2R45G2MF is an External Whip Antenna designed for WIFI applications. It operates within the frequency range of 2400 ~ 2500MHz and 5000 ~ 5800 MHz making it perfect for Gateways, Meters and Routers

Features

- 2.4 & 5 GHz WIFI Band
- Hinged design with detents for straight, 45 degree and 90 degree positioning
- RoHS Complaint



Part Number Breakdown



Part Numbers Options

Part Number	Protocol	Connector
NANE13X165WTJW2R45G2MF	WIFI	SMA Male

The table represents assembled part numbers available on www.niccomp.com. For options not listed above please contact NIC

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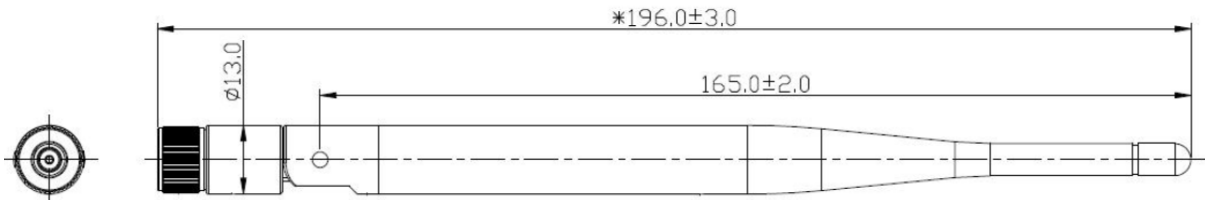
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Specifications

Electrical	
Frequency Range	2400 ~ 2500 MHz 5000 ~5800 MHz
Gain	5 dBi
V.S.W.R	≤ 2.0
Polarization	Linear
Impedance	50Ω
Environmental	
Operating Temperature	-40°C~+85°C
Vibration	10 to 55Hz with 1.5mm amplitude 2hours
RoHs Compliant	Yes

Dimension Drawing

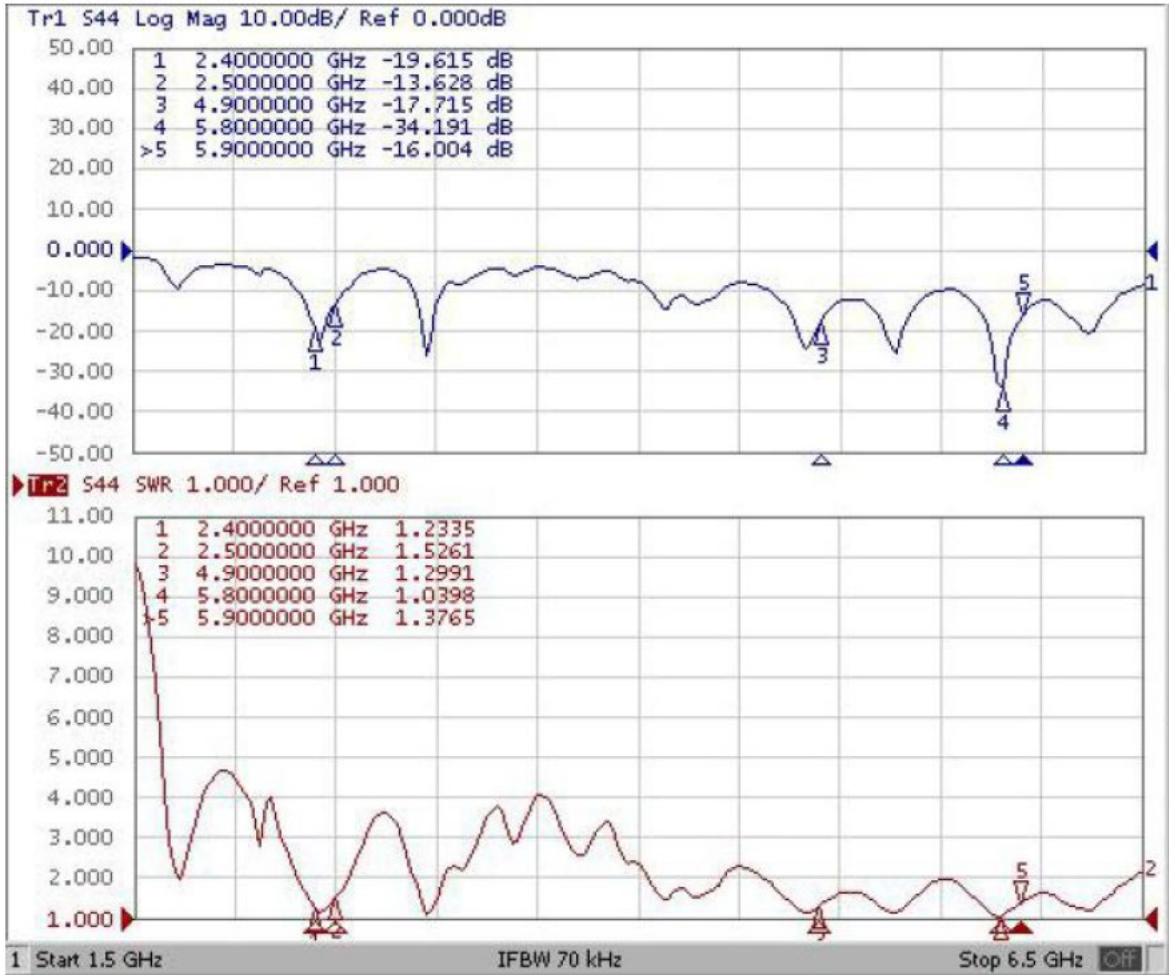


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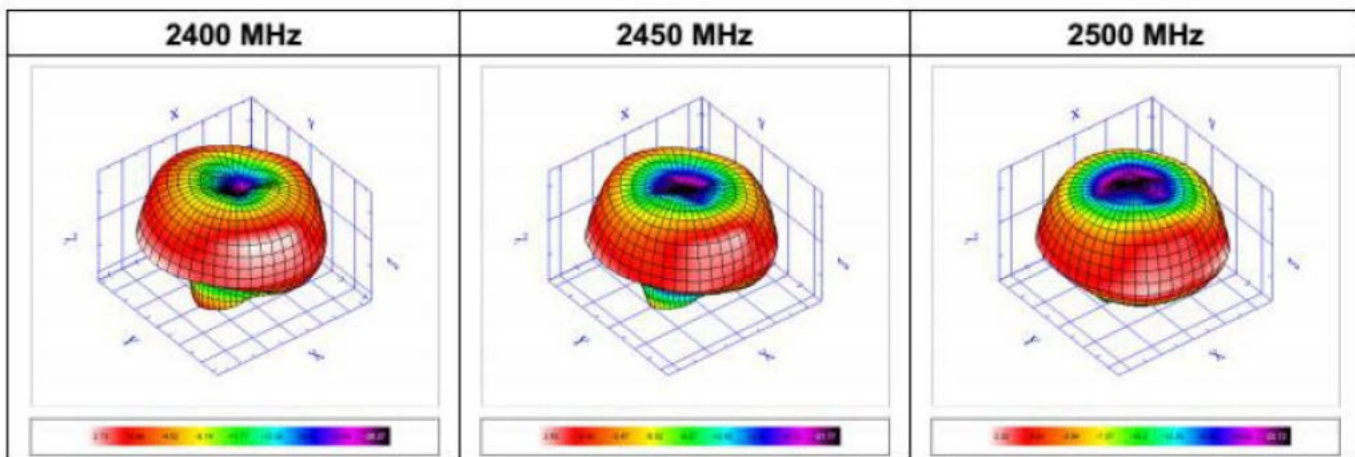
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VSWR



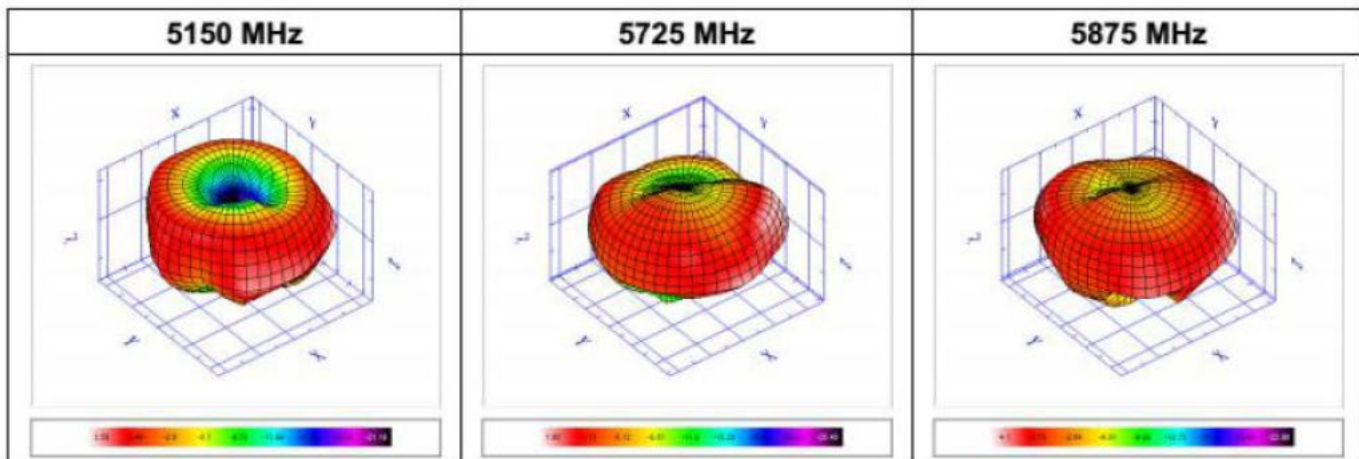
Radiation Patterns



Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
TRP (dBm)	-1.13	-1.17	-1.2	-1.24	-1.3	-1.13	-1.23	-1.13	-1.38	-1.34	-1.25
Peak EIRP (dBm)	2.73	2.57	2.53	2.55	2.48	2.63	2.73	2.59	2.53	2.72	2.32
NHPRP $\pm 45^\circ$	-1.4	-1.44	-1.46	-1.5	-1.55	-1.39	-1.51	-1.59	-1.65	-1.62	-1.51
NHPRP $\pm 30^\circ$	-1.64	-1.68	-1.69	-1.72	-1.76	-1.56	-1.65	-1.72	-1.79	-1.74	-1.65
E-Theta Peak Gain (dBi)	-8.07	-9	-9.3	-9.69	-9.85	-10.33	-11.52	-11.7	-12.32	-13.15	-14.4
E-Phi Peak Gain (dBi)	2.72	2.55	2.52	2.54	2.47	2.62	2.73	2.59	2.53	2.71	2.32
E-Total Peak Gain (dBi)	2.73	2.57	2.53	2.55	2.48	2.63	2.73	2.59	2.53	2.72	2.32
Directivity (dBi)	3.86	3.74	3.73	3.79	3.77	3.75	3.97	3.91	3.9	4.06	3.57
Efficiency (%)	77.11	76.38	75.84	75.14	74.21	77.14	75.28	73.89	72.85	73.38	74.99



Radiation Patterns Continued...



Frequency	5150	5250	5350	5470	5600	5725	5750	5800	5825	5850	5875
TRP (dBm)	-1.3	-1.03	-1.6	-1.1	-2.25	-2.9	-2.04	-1.95	-1.4	-1.02	-0.82
Peak EIRP (dBm)	3.59	4.3	4.28	4.74	2.6	1.65	2.59	2.49	3.82	3.9	4.1
NHPRP $\pm 45^\circ$	-1.63	-1.35	-1.93	-1.5	-2.79	-3.47	-2.55	-2.41	-1.81	-1.41	-1.21
NHPRP $\pm 30^\circ$	-1.53	-1.32	-1.96	-1.55	-2.87	-3.62	-2.78	-2.68	-2.17	-1.78	-1.58
E-Theta Peak Gain (dBi)	-10.72	-10.03	-10.12	-9.85	-10.6	-9.25	-9.28	-8.74	-9.99	-8.47	-8.27
E-Phi Peak Gain (dBi)	3.58	4.29	4.24	4.6	2.45	1.48	2.36	2.41	3.72	3.81	4.01
E-Total Peak Gain (dBi)	3.59	4.3	4.28	4.74	2.6	1.65	2.59	2.49	3.82	3.9	4.1
Directivity (dBi)	4.89	5.33	5.89	5.84	4.85	4.55	4.63	4.44	5.22	4.92	4.92
Efficiency (%)	74.07	78.94	69.14	77.69	59.53	51.29	62.47	63.86	72.47	79.09	82.81