



NYBSYS N28 B28 2 Port, 102" 694-960MHz, 65° Panel Antenna with eRET Tilt

Overview

The N28 B28 is a two-port 65° sector antenna designed for wireless network operators who demand top-tier performance. This innovative antenna boasts remote electrical tilt (eRET) technology to fine-tune coverage and optimize signal delivery for any deployment scenario. It offers maximum throughput and user experience with its eRET.

N28 B28 ultra-wide low band antenna covers a massive 694-960 MHz range by significantly expanding network capacity and easily handling the data demands. And with its rugged construction, compact design, and flexible mounting options, the device is built for both ease of use and long-lasting performance.



Key Features

- Remote Electrical Tilt (eRET) for Precision Coverage:
 - Adjust the antenna's electrical tilt remotely for optimal signal distribution in any environment.
 - Optimize coverage for specific deployment scenarios and user needs.
- Ultra-Wide Low Band Antenna (694-960 MHz) for Unparalleled Capacity:
 - Broaden your bandwidth and increase network capacity to support growing data demands.
 - Handle high-traffic areas and applications with ease.
- Two Ports for 2x2 MIMO Operation:
 - Enhance data rates and throughput for a seamless user experience.
 - Maximize the efficiency of your wireless network.
- Rugged and Weatherproof Construction:
 - Withstand harsh weather conditions and demanding environments.
 - Ensure long-lasting performance and reliability.
- Compact and Lightweight Design:
 - Simplify installation and maintenance processes.
 - Easily integrate into various deployment scenarios.
- Mounting Bracket with Variable Elevation Tilt:
 - Customize antenna positioning for optimal signal coverage.
 - Adapt to different site requirements and terrain challenges.

Applications

Applications	Benefits
Private LTE and 5G Networks:	<ul style="list-style-type: none"> • Deploy secure and dedicated networks for enterprises, industrial IoT, and other specialized applications. • The N28 B28's low band coverage is ideal for supporting the initial rollout of 5G networks. • Its flexibility and performance make it a valuable asset for building future-proof private network solutions.
Macro Cell Coverage	<ul style="list-style-type: none"> • Expand network reach and deliver reliable connectivity in urban and suburban areas.

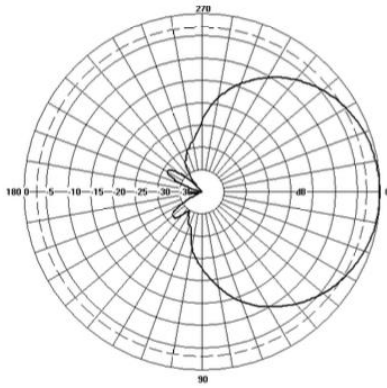


	<ul style="list-style-type: none"> Utilize eRET to fine-tune coverage in specific neighborhoods or address signal gaps. The ultra-wide low band antenna ensures strong signal penetration even through buildings and foliage.
Rural Network Expansion	<ul style="list-style-type: none"> Bridge the digital divide and connect remote communities with robust, long-range coverage. Utilize the N28 B28's weatherproof construction to withstand harsh rural environments. Flexible mounting options allow for easy installation on towers or other structures.
Enterprise and Industrial Connectivity	<ul style="list-style-type: none"> Enhance network performance for campuses, factories, and other large-scale deployments. Utilize MIMO technology to deliver high-speed data transfers for critical applications. The compact design and flexible mounting options make the N28 B28 ideal for various indoor and outdoor installations.
Hotspot Optimization	<ul style="list-style-type: none"> Boost capacity and improve user experience in high-traffic areas like stadiums, airports, and convention centers. eRET allows for precise signal targeting within the hotspot, minimizing interference and maximizing throughput. The compact design makes it ideal for discreet placement in crowded environments.

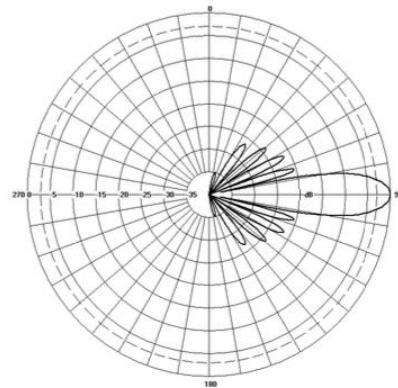
Technical Specifications

Electrical Specifications				
Frequency Range	MHz	694 – 806	806 - 880	880 - 960
Polarisation	Degree	+/- 45°		
Gain	Basta	dBi	16.3±0.5	16.7±0.5
	Max	dBi	16.8	17.2
Azimuth Beamwidth	Degree	68°	65°	62°
Elevation Beamwidth	Degree	8.5°	7.5°	6.7°
Electrical Downtilt	Degree	T2° - T10°	T2° - T10°	T2° - T10°
Electrical Downtilt Deviation	Degree<	1°	1°	1°
Impedance	Ohms	50	50	50
VSWR	<	1.5	1.5	1.5
Return Loss	dB>	14	14	14
Isolation	dB>	25	25	25
Front to Back Ratio: Total Power +/-30°	dB>	22	22	22
Upper Sidelobe Suppression, Peak to 20°	dB>	14	14	14
Cross-Polar Discrimination (0°)	dB>	15	15	15
Maximum Effective Power Per Port	W	300	300	300

Representative Pattern Files



Azimuth



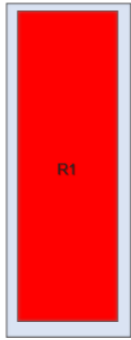
Elevation

Technical Specifications

Mechanical Specifications		
Dimensions	mm (in)	2585 (101.8) x 295 (11.6) x 145 (5.7) - (LxWxD)
Packing Size (LxWxD)	mm (in)	2800 (110.2) x 385 (15.2) x 250 (9.8) (LxWxD)
Net Weight (antenna)	kg (lb)	25 (55)
Net Weight (mount)	kg (lb)	5.2 (11.5)
Shipping Weight	kg (lb)	35 (77)
Connector Type (Female)	-	4.3-10
Connector Quantity	-	2
Connector Position	-	Bottom
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	1046 (235)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	541 (122)
Survival Wind Speed	Km/h (mph)	200 (125)
Radome Material	-	FRP, grey
Radome Color	RAL	7035 (light grey)
Product Compliance Environmental	-	RoHS
Lightning Protection	-	DC Grounded
Cold Temperature Survival	°C (°F)	-40 (-40)
Hot Temperature Survival	°C (°F)	70 (158)



Array Layout and RET Information



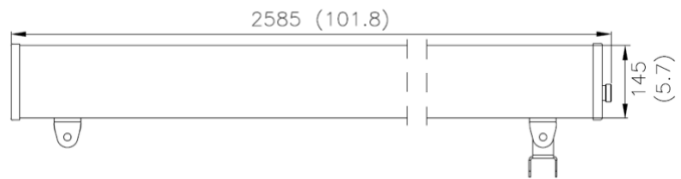
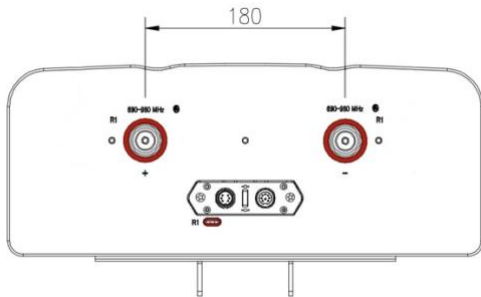
Note: Coloured box sizes do not represent antenna sizes.

Array	Frequency MHz	Ports	RET ID
R1	698 – 960	1 – 2	1

Configuration	
698-960 MHz	One RET for array: R1
Total Quantity	One RET Motor Controller
Location and Interface	
RET Controller Location	Inside antenna radome housing
RET Interface	Pair of AISG 8 Pin DIN connectors, one male, one female
RET Interface Quantity	One pair of AISG 8 Pin DIN connectors
RET Interface Location	On connector plate located at bottom of antenna
Electrical	
Input Voltage	10 – 30V
Power Idle Mode	< 1W
Power Active Mode	< 10W
Protocol	3GPP / AISG 2.0

Mechanical Illustration

All measurements are in mm (in)

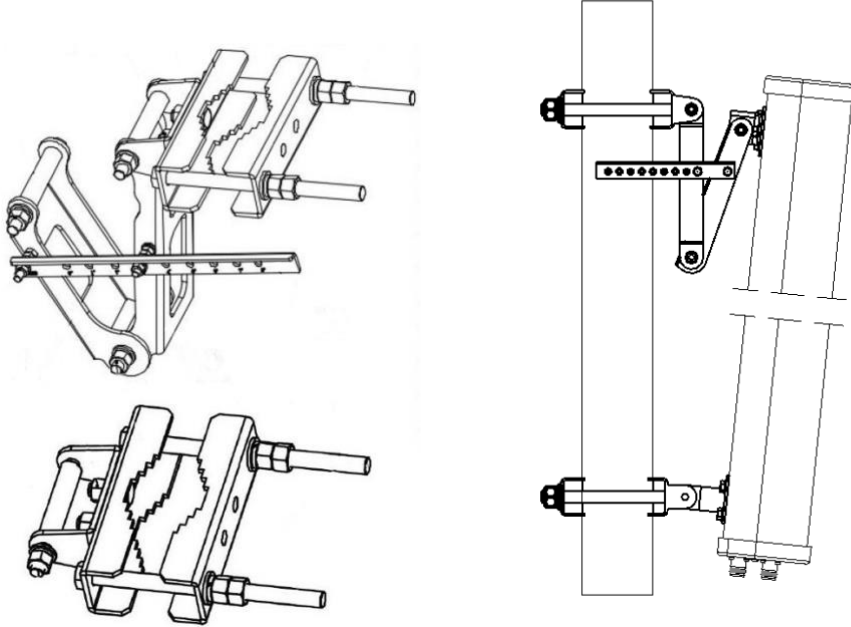




Technical Specifications

Mounting Bracket Kit

CL-V-164 Adjustable Mount Kit (Mount Kit included with antenna)



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
+0° to -10°	Stainless Steel	50mm-115mm (2" to 4.5")