Inventec NX-R2028

Open, Smart, Agile

Highlights

- 5G integrated small cells.

- Standard NR FR1 Band n79.

- Support up to 400 UE connections.

- Supports Stand Alone (SA) mode.

- 3GPP R15 standard effectively improves network performanc e and provides high-quality services.

Introduction

Inventec NX-R2028 helps operators to enhance the coverage performance of 5G networks effectively, improve the capacity of 5G networks and eliminate the blind district, it also can help to reduce the system power consumption.

Provide 5G advantage for strengthening variety of applications

The new generation 5G ISC (Integrated Small Cell) NX-R2028 has a transmission power that complies with regulatory limit and enhances performance for meeting high density network requirement. User can obtain low latency and up to 400 UE connections. It is the best 5G integrated small base station in telecom industry. NX-R2028 integrates CU, DU and RU into a lightweight all-in-one machine which greatly reduces the complexity of network deployment and has comprehensive advantages such as flexibility and rapid deployment.

Tiny, easy to install, does not take up a lot of space

NX-R2028 is able to fulfill efficient and regional wireless communication coverage, such as offices; communities or shopping malls. Adopting the latest 5G technology, it provides faster network speeds and more stable connection quality with the advantages of low latency and high capacity. NX-R2028 is very compact in size and lightweight, making installation simple and convenient. It does not take up a lot of space, so it can be easily installed and deployed anywhere. In addition, small base stations also have good scalability and reliability, and can effectively cope with simultaneous access by a large number of users and improve the stability and availability of the network. Therefore, small base stations have become one of the important components in the 5G era, bringing people a faster, more stable and convenient wireless communication experience.

About Inventec

Since its founding in 1975, Inventec has grown from an early manufacturer of computers and telephones to a leading design manufacturer of notebooks, servers, and wireless communication products. With the advent of the 5G generation, Inventec is expanding its capabilities in 5G private network system integration and architecture, transforming its world-class manufacturing facilities into 5G smart factories.

Inventec Corporation

No.66, Hougang St., Shilin Dist., Taipei City 111059, Taiwan
Tel：886-2-2881-0721　Ext：23464
Email：CCS5G_support@inventec.com

Learn more of Inventec 5G Smart Factory

NX-R2028 | Product Specifications

Standard	5G NR TDD (3GPP R15)
Frequency Band	n79 (4800 MHz – 4900 MHz)
Channel Bandwidth	n79: 20/40/60/100 MHz
Multiplexing	2x2 MIMO (DL : 2L, UL : 2L)
Security	Radio : SNOW 3G/AES-128 Backhaul : IPsec (X.509 AES-128, AES-256, SHA-128, SHA-256)
User Capacity	Up to 400 UE connections
Latency	Round-trip delay (RTD) less than 10 milliseconds
Receive Sensitivity	-95 dBm (per channel)
Modulation	UL : MCS0 (QPSK) to MCS27 (256QAM) DL : MCS0 (QPSK) to MCS27 (256QAM)
Transmit Power Range	0 to 40 dBm per channel (combined +43dBm, configurable) (1 dB interval)
Quality of Service	Complied with 3GPP standard 5G QoS Identiþer (5QI)
ARQ/HARQ	Supported
Synchronization	GPS
Ethernet Interface	1 x optical (SFP+) 1 x RJ-45 Ethernet interface (1 GE)
Power Supply	90VAC to 264VAC, 47Hz to 63Hz or -40VDC to -57VDC, nominal -48VDC
Protocols Used	IPv4/IPv6, UDP, TCP, ICMP, NTP, SSH, IPsec, TR-069, HTTP/HTTPs, DHCP
Network Management	IPv4 / IPv6, HTTP / HTTPs,TR-069, SSH, Embedded 5GC
VLAN/V x LAN	802.IQ / VxLAN

LED Indicators	4 x status LED PWR / ACT / RUN / ALM
External RF Antenna	2T2R N-Type connectors for external high-gain antenna
Integrated RF Antenna	N79 2T2R 14.5dBi antenna • Horizontal Beam width: 65±5° • Vertical Beam width: 15° Polarization: ±45°
GPS Antenna	External GPS antenna, N-Type connector
MTBF	≥ 150000 hours
Surge Suppression	Network interface : 1KV Power Interface : Differential mode : 2KA; Common mode : 4KA
Lightning Protection	Power Interface : Differential mode : ±10 KA; Common mode : ±20 KA
MTBF	≥ 150000 hours
MTTR	≤ 1 hour
Ingress Protection Rating	IP65
Operating Temperature	-22° F to 131° F / -30° C to 55° C
Storage Temperature	-40° F to 149° F / -40° C to 65° C
Humidity	2% to 95% RH
Atmospheric Pressure	70 kPa to 106 kPa
Power Consumption	Maximum 150W
Weight	With bracket : about 16.5lbs / 7.5kg Without bracket : about 15.9lbs / 7.2kg
Dimensions (HxWxD)	13.1 x 9.4 x 4.3 inches 333 x 240 x 109 millimeters
Dimensions (HxWxD)	Pole or wall mount

NX-R2028 | Peak Data Rate with UL256QAM

100 MHz	DL (Mbps)	UL (Mbps)
DDDSUUDDDD (S 6:4:4)	648	160
DDDS1U UDS2UU (S1 6:4:4, S2 10:4:0)	445	406