5G NR-U Integrated Base Station

JTlink 5800

JTlink5800 adopts an integrated and compact design, supports 4T4R and 5G band n46. Featuring high integration, large capacity, high performance and easy deployment, it can meet the 5G deployment requirements of operators, WISPs, industrial private networks and other scenarios. It is widely used in transportation hubs, stadiums, exhibition halls, large shopping malls, office buildings, rural networks, hospitals, campuses, factories and other scenarios.

JTlink5800 adopts advanced wireless technologies and an integrated architecture design, utilizing multi-input multi-output (MIMO) technology and distributed antenna systems. It supports SA (Standalone) networking and 4×4 MIMO. Based on a fully self-developed protocol stack and system software, the product performance and network quality are significantly improved.

Main Functions

Integrated base station, supporting the following main functional features:

- Supports 5G NR standard SA architecture.
- Supports 1 NR cell with 100 MHz bandwidth and 4T4R configuration.
- Supports 10 Gbps SFP+ optical fiber backhaul interface.
- Maximum output power of the whole system: 4 × 5 W
- Supports multiple clock synchronization modes, including GPS, BeiDou, and IEEE 1588v2.
- Supports operation and maintenance through network management systems (OMC/LMT): configuration management, fault management, performance management, version management, foreground-background communication management, etc.
- Optional AC 110 V/220 V power supply mode.

Product Highlights

- **High integration, small size, easy installation and deployment**

Adopting an integrated design of 5G baseband processing unit and radio frequency unit, the product features high integration, small size and light weight, which facilitates installation and deployment. Equipped with external antennas, it supports multiple installation methods such as pole mounting, tower mounting and wall mounting. It enables efficient and rapid deployment without complex construction, thus reducing construction difficulty and cost. The product is suitable for various scenarios, and its lightweight design also makes transportation and installation extremely convenient.

- **4T4R design, large capacity, high rateWith multi-antenna technology**

It can support higher data transmission rates, process more user connections and data transmissions simultaneously, and improve network capacity to support more concurrent online users. It supports full-IP transmission and 10 Gbps backhaul throughput to meet the rapid growth of future eMBB mobile data traffic demands.

- **Low cost, plug-and-play, convenient operation and maintenance**

Through fully independent R&D and optimized hardware and software production and design processes, costs are further reduced, enabling operators and vertical industries to build 5G networks at a lower cost. It supports plug-and-play and remote configuration and maintenance, reducing on-site installation, commissioning, O&M time and workload.

- **Low power consumption, natural heat dissipation, green and energy-saving**

Adopting high-efficiency natural heat dissipation and energy-saving technology, no additional cooling fan is required, featuring low power consumption, zero noise, and green energy efficiency.

JATON TEC

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NR-U n46

Technical Specifications

Physical	
Dimensions	H 468mm x W 373.5mm x D 113.85mm
Weight	15 Kg
Output Power	4*5W
Peak Power Consumption	180W
Power Supply	AC: 110V/220V (85V ~ 275V), Optional AC or DC power supply mode
Ingress Protection	IP67
Color	Silver Gray
Environmental	
Operating Temperature	-40℃ to 55℃
Storage Temperature	-45℃ to 85℃
Humidity	5-100%
Wireless Radio Interface	
Working Bandwidth	40/60/80/100MHz
Frequency Band	N46 (5725MHz~5925MHz or 5925~6125MHz)
Receive Sensitivity	<-96 dBm @100MHz
Capacity Indicators	
Maximum Number of Connected Users	1200
Maximum Number of Active Users	400
Peak Throughput	
@100M DDDDDDDSUU	DL: 1.5Gbps, UL: 216Mbps
@100M DDDSUDDSUU	DL: 1.1Gbps, UL: 310Mbps
@100M DSUUU	DL: 580Mbps, UL: 630Mbps
External interfaces located at the bottom of the device and inside the side window	
Power	Power interface, for connecting to AC/DC power supply
OPT1	Optical fiber interface (SFP+), for data backhaul
OPT2	Optical fiber interface (SFP), for data backhaul
LAN	Ethernet port (GE), for local maintenance
GPS	External GNSS antenna interface, N-type connector
ANT0 ~ ANT3	External antenna interface, N-type connector
Tansmission Interfaces Connect to the core network through the optical fiber backhaul interface, and interconnect with the local LMT via the Ethernet port as the local maintenance port. For detailed interface descriptions, refer to the table below.	
OPT1 - SFP+	10Gbps
OPT2 - SFP	1Gbps
LAN - RJ45	1Gbps