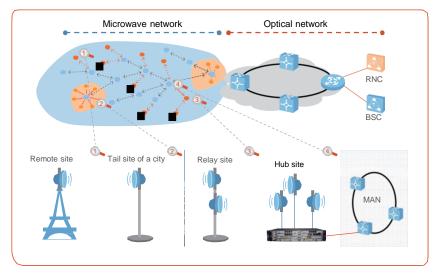


The RTN 320F is a full-outdoor dual-channel microwave device that provides 5Goriented software expansion. It features split design, flexible deployment, and convenient capacity expansion. It provides 2 Gbps microwave backhaul links for mobile backhaul networks and supports zero footprint installation. It can be deployed at tail, aggregation, and relay sites.

Application Scenarios



Ultra-High Bandwidth and High Spectral Efficiency

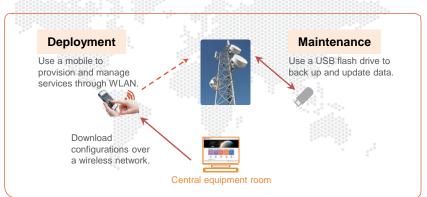
- Large capacity: provides 2.5 Gbps service capacity per link.
- High bandwidth:
 ETSI: 7 MHz, 14 MHz, 28 MHz, 40 MHz, 56 MHz, 112 MHz
 FCC: 30 MHz, 40 MHz, 50 MHz
- High modulation scheme: provides a modulation scheme of up to 8192QAM.
- AM: supports adaptive modulation (AM) to ensure the transmission of highpriority services.
- Frame header compression: supports use of the frame header compression function to significantly increase bandwidth utilization for Ethernet services carried over microwave links.
- Flexible deployment: supports collaboration between the OAU 2F and the dualchannel XMC-5D ODU or the single-channel RTN XMC-3/3H/2 ODU, as well as integrated installation (only for XMC-3/3H/5D ODUs) and split installation.
- Scalability: supports use of XPIC, CA (hardware ready), and MIMO (hardware ready) to increase the capacity of a single frequency. This facilitates network upgrade and improves spectrum efficiency.
- Software-based capacity expansion: When the OAU 2F works with the dualchannel ODU, 1+0 can be upgraded to 2+0/XPIC through software. This simplifies configuration and facilitates capacity expansion.

Flexible Link Configuration and Full-Range Protection

- Link configuration: 1+0, 2+0, 2 x (1+0), XPIC
- Link-level protection: 1+1 HSB/SD/FD, PLA/EPLA
- Service-level protection: LAG protection
- Network-level protection: ERPS

Easy Deployment & Maintenance

- Supports zero footprint installation, quick deployment, and easy maintenance.
- Supports connection to NEs at a site through WLAN, implementing contactless maintenance.
- Supports mobile commissioning and configuration during site deployment, making operations convenient.
- Supports use of the U2000 to implement E2E management, such as service deployment and real-time performance monitoring.



Specifications

| Microwave Type | IP microwave over Native Ethernet |
|-------------------|---|
| Frequency Band | 6–42 GHz |
| Channel Spacing | ETSI: 7 MHz, 14 MHz, 28 MHz, 40 MHz, 56 MHz, 112 MHz FCC: 30 MHz, 40 MHz, 50 MHz |
| Modulation Scheme | QPSK strong–8192QAM |
| Capacity | Air-interface capacity: 2 Gbps Air-interface throughput: 2.5 Gbps Switching capacity: 30 Gbps |
| RF configuration | 1+0, 2+0, multi-direction, 1+1 HSB/SD/FD, XPIC |
| | Auxiliary port USB port, NMS port, MIMO/CA cascade port (hardware ready) |
| Port Type | Service port • Two 10 GE SFP ports • Two FE/GE fixed electrical port |
| | IF port Two IF ports |
| | Power port DC port |
| Service Type | E-Line and E-LAN |
| NMS | U2000, Web LCT, SNMP |
| ETH OAM | IEEE 802.1ag, IEEE 802.3 ah, ITU-T Y.1731 |
| Key Features | AM, XPIC, Bandwidth Notification, PLA/EPLA, ERPS, Frame Header Compression, ATPC, QoS/HQoS |
| Clock Features | Supported clock sources: microwave link clock, synchronous Ethernet clock |
| Power Supply Mode | DC power supply |
| Antenna | Dish antenna: 0.2–3.7 m |
| Dimensions | 220 mm x 300 mm x 60 mm |
| Weight | 4.3 kg |
| Environment | Temperature: -33°C to +55°C Humidity: 5% to 100% Protection class: IP66 |