

OptiX RTN 905 2F



The OptiX RTN 905 2F is a new generation integrated microwave transmission system developed by Huawei, which can be installed easily and configured flexibly. It supports two radio links, and supports multiple protection schemes. The OptiX RTN 905 2F provides a generic platform for TDM/Hybrid/Packet/Routing microwave transmission.

The platform provide various service interfaces, large bandwidth, and easy scalability. It provides a seamless microwave transmission solution for mobile communication network or private networks.

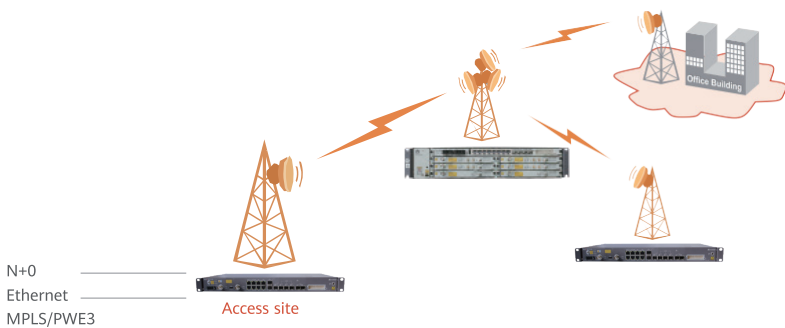
Architecture



The OptiX RTN 905 2F adopts an integrated chassis with 1 U height. It belongs to Huawei RTN 900 split IP microwave series that consist of an indoor unit (IDU) and an outdoor unit (ODU). The OptiX RTN 905 2F provides various types of interfaces to flexibly support multiple services and two radio directions.

Applications

The OptiX RTN 905 2F is located at an access site to access multi-service microwave links or for large-capacity service backhaul.



Highlights

- Supports a full spectrum of 6-42 GHz, a channel spacing of 3.5-112 MHz, and a modulation scheme of up to 4096QAM.
- Unified platform for TDM, Hybrid, Packet, and Routing services; provides various ports (E1/SDH/FE/GE/2.5GE/10GE).
- Provides an air-interface throughput of up to 2.5 Gbit/s per carrier. Provides anti-theft to ensure high security.
- Supports unique four-layer Ethernet frame header compression to provide a large throughput for IP services.
- Supports CA for future huge-capacity requirements.
- Supports the Super Dual Band (SDB) solution for TCO-optimized capacity expansion.
- Provides a leading 13-grade hitless adaptive modulation technology to ensure high availability.
- Supports use of a web-based NMS. You can use it to manage a local or remote NE by entering the IP address of the NE on the address bar in a browser.

Easy Deployment and O&M

- OptiX RTN 905 2F can be easily installed in any standard indoor or outdoor cabinet.
- The portable Web LCT can be used for NE-layer management, and the NCE can be used for complete network management.

Specifications

Network Layer	Access layer
Frequency	6 to 42 GHz
Channel Spacing	3.5/7/14/28/40/56/112 MHz
Modulation Mode	QPSK Strong, QPSK, 16QAM Strong, 16QAM, 32QAM, 64QAM, 128QAM, 256QAM, 512QAM, 512QAM Light, 1024QAM, 1024QAM Light, 2048QAM, 4096QAM
Number of RF Directions	2
Service Interface	<ul style="list-style-type: none"> • 16 x E1+2 x STM-1 (e/o)+4 x GE (e)+2 x 2.5GE (o)+4 x 10GE (o) • The 10GE8, 10GE9, and 10GE10 ports can be used as COMBO ports for cascading purposes.
Switching Capacity	60 Gbit/s
TDM Cross-connect Capacity	8 x 8 VC-4
Air-Interface Capacity	1166 to 2500 Mbit/s per carrier (none-XPIC)
RF Configuration Mode	<ul style="list-style-type: none"> • 2 x (1+0) • 2+0 • 1+1 • XPIC • 2 CA
Ethernet Function	<ul style="list-style-type: none"> • Ethernet II, IEEE 802.3, and IEEE 802.1q/p service format adding or deleting, and exchange VLAN tags (IEEE 802.1q/p) • Supports flow control (IEEE 802.3x) • Supports link aggregation groups (IEEE 802.3ad LAG and L1 LAG) • RMON (IETF RFC 2819)
Service Type	Native Ethernet services (E-Line service and E-LAN service) PW-carried Ethernet services, MPLS/PWE3, Hierarchy VPN
Key Feature	Sync. Ethernet, PLA/EPLA, 1+1, XPIC, AM, TDM, PWE3/MPLS, SDB, CA
IDU Weight	2.8 kg
IDU Dimensions	442 mm x 220 mm x 44 mm
Environment	<ul style="list-style-type: none"> • Temperature: IDU -5 °C to +60 °C; ODU -33 °C to +55 °C • Humidity: IDU 5% to 95%; ODU 5% to 100%
Power	-38.4 V to -57.6 V
Typical Power Consumption (IDU+ODU)	88.8 W (1 x IDU 905 2F + 2 x XMC-3 ODU)
Certificate	CE, RCM, FCC, IC, ETL, MCMC

*This document is based on the product specifications of V100R020C10. For details, see the product documentation.