Specification

	AP (Access Point)	RT (Remote Terminal)
RF Performance		
Frequency Range	5 GHz：4910 ~ 5970 MHz	
Channel Spacing	10 | 20 | 40 | 80 MHz	
Modulation Schemes	MCS0-MCS9	
RF Functions	GPS Synchronization;DFS (Dynamic Frequency Selection);AM (Adaptive Modulation)	
Antenna gain	17bBi	16bBi
Throughput	Up to 750 Mbps	Up to 250 Mbps
System Performance		
Ports	1*GE(o)，1* GE(e)，1*GE (PoE)	1*GE (PoE)
Dimensions(H x W x D)	204 mm x 204 mm x 65 mm	241 mm x 168 mm x 52 mm
Weight	2.7 kg	1.8 kg
Power Consumption	25W, typical	10W typical
Power Supply	AC/DC/PoE	
Lightning Protection	10KV (EN 61000-4-5)	
Dying gasp	Support	
Ethernet Performance		
Service Type	E-Line , E-LAN	
VLAN	IEEE 802.1q , IEEE 802.1p	
QinQ	Supported	
QoS	• Service classification by DSCP,CoS • SP+WRR • Port shaping • 8-class QoS	• Service classification by DSCP,CoS • SP • Port shaping • 8-class QoS
Ethernet OAM	802.1ag, 802.1ah, Y.1731	
Network Management		
NMS	Web LCT, Mobile App	
Environment		
Protection class	IP67	
Operation Temperature	-40℃ ~ +60℃	
Corrosion resistance of salt mist	Comply IEC 60068-2-11, with highest standard of 4 weeks of salt mist corrosion test, applicable to the offshore scene	
Security		
Encryption	AES 128bit	
RT access control	MAC address-based white list	
Authentication	RADIUS	

Scan this QR code for further details

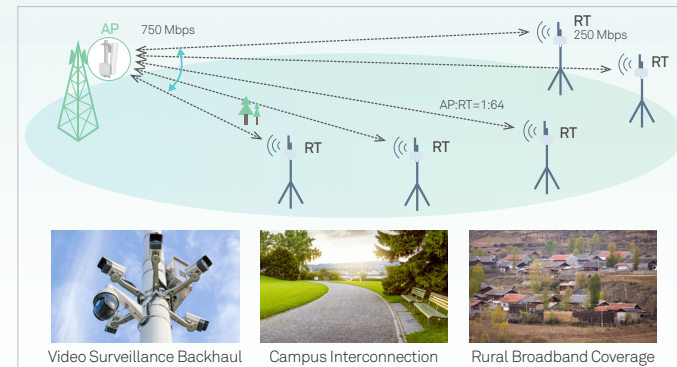 http://e.huawei.com

 ican_e@huawei.com

Huawei Unlicensed PMP Microwave Solution

RTN510

![HUAWEI logo]

Overview

The industry large quantities tail sites access typically like video surveillance in safe city, demands the high efficient transmission solution with quick deployment, lower cost and plentiful bandwidth capabilities. Huawei unlicensed PMP (Point to Multi-point) microwave solution RTN510 presents the advantages of large bandwidth, strong anti-interference, environment adaptation, simple operation and maintenance, enhanced Ethernet , becomes the most suitable radio transmission solution for massive sites access.

| Video Surveillance Backhaul | Campus Interconnection | Rural Broadband Coverage |

Huawei unlicensed PMP microwave RTN510 is networked by one AP (Access Point, including AP equipment and sector antenna) connecting with up to 64 RTs (Remote Terminals), and each AP could provide total max. 750 Mbps capacity. It works in 4.91 to 5.97 GHz unlicensed frequency, can be flexible deployed in LOS (Line-of-Sight) and NLOS (Non-Line-of-Sight) scenarios, strong anti-interference capability makes the radio transmission more stable and reliable.

Video surveillance backhaul

• Ultra large bandwidth, supporting smooth evolution to UHD

• Simple installation and maintenance, fast service deployment

Campus interconnection

• Superior multi-service access capability to guarantee different service quality

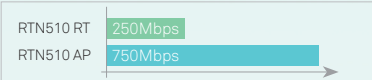• Super anti-interference in complex wireless environment
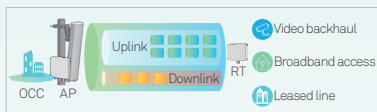
Rural broadband coverage

• Wide coverage to ensure reliable access of remote sites

• Long-term stable working in rainy and dusty outdoor environment

Large throughput satisfy multiple services backhauling
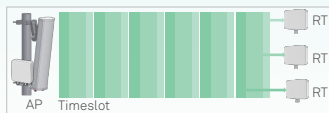
AP 750 Mbps, RT 250 Mpbs, industry's maximum bandwidth

RTN510 RT — 250Mbps
RTN510 AP — 750Mbps

Configurable bandwidth ratio of uplink and downlink, suits for various scenarios.

Uplink
Downlink
OCC   AP   RT

- Video backhaul
- Broadband access
- Leased line

Strong anti-interference, complex wireless environment deployment

The services are transmitted precisely based on TDMA, to solve the problem of multi-terminal concurrency conflicts, ensuring a continuous and reliable connection among multiple RT and AP.

AP   Timeslot
RT
RT
RT

Super environmental adaptation, suit for harsh environment

IP67 completely dustproof and anti-soaking

Huawei patent anticorrosion alloy shell, achieving long term normal working under the high salt mist seashore.

10kV Surge Protection

Highest level in industry, failure rate less than 0.1% on lightning.

-40 ℃ ~ +60 ℃ Wide Temperature

Reliable running in global areas from Siberia to Desert in Middle East.

Simple O&M, site deployment efficiency greatly improved

RT Plug & Play

- 10 mins quick installation
- Configuration free, plug & play

RT Installation
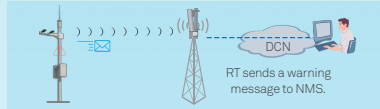
AP Simple Configuration

- Automatic scanning, select best frequency
- Built-in Wi-Fi module, mobile App configuration

AP Installation

Support dying gasp, accurately locate power failure

The operator can quickly distinguish power failure or transmission failure based on the power failure alarming, to avoid invalid maintenance times.

DCN
RT sends a warning message to NMS.

Mobile App Software MDT

It supports wizard mode and advanced mode, and completes the debugging, acceptance and daily operation on mobile app.

- Wizard mode: Based on the configuration wizard, choose frequency configuration, DHCP server configuration and white list, complete AP site configuration in three steps.
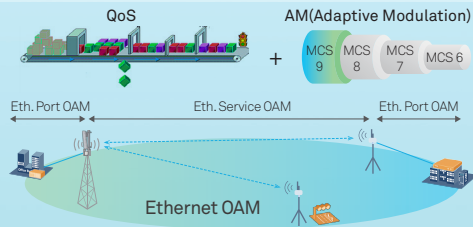- Advanced mode: real-time check device status, service status and other information.

MDT

Powerful Enhanced Ethernet, suitable for multiple services demand

Most Powerful Ethernet Features in Industry

- E-Line / E-LAN / QinQ for Enterprise Interconnections
- 8 levels QoS + AM, support flexible throughput
- Eth. OAM offers fast link diagnosis

QoS
AM(Adaptive Modulation)
MCS 9   MCS 8   MCS 7   MCS 6

Eth. Port OAM   Eth. Service OAM   Eth. Port OAM

Ethernet OAM

Successful Stories

China Chongqing Police Video Cloud Innovation Center Project

Requirements

- China Chongqing Public Security Bureau started Video Cloud Innovation Center project, cooperated with 30+ partners to build a E2E video cloud solution.

Huawei Solution

- Huawei PMP microwave RTN510 provides UHD video backhaul in Taibai road intersection
- Only 10 minutes to complete the equipment installation

Benefits

- Huawei PMP microwave guarantees reliable video backhauling, which is most efficient wireless transmission solution for Video Cloud Innovation Center.
- The solution is highly praised by customer and partners because of stable link.

Madagascar Organisation Internationale de la Francophonie Summit Project

Requirements

- Over 80 chiefs of government would attend Organisation Internationale de la Francophonie Summit, Madagascar officially invited Huawei to build the safe city project for video surveillance.
- Poor fiber resources for backhaul network especially in key and important areas.

Huawei Solution

- Huawei delivered PMP microwave solution for HD video backhaul to command center.

Benefits

- Dozens of sites deployment within 3 days, high definition video guarantees summit security.
- Strong anti-interference based on TDMA achieves complex terrain NLOS transmission.
- The microwave links have been running steadily in harsh typhoon environment.