

InfiNet Wireless R5000-Lmc

InfiMAN 2x2 Family

Unit Description

The R5000-Lm, which is comprised of an Outdoor Unit and an Indoor Unit, is to be used as a CPE with external antenna using two N-type connectorized, high-capacity interfaces in InfiMAN 2x2 Point-to-Multipoint wireless network. Deployed with external higher gain antennas, a net capacity of 35Mbps can be delivered at distances in excess of 30km in Point-to-MultiPoint scenario. The R5000-Lmc model is perfect for mid-to-long range Point-to-Multi point deployments.



R5000-Lmc

Applications

- High-speed 35Mbps external antenna CPE

Radio

- Modulation types: OFDM with BPSK, QPSK, QAM16, QAM64
- Frequency ranges: 2.3 - 2.4 GHz, 4.8 - 6.0 GHz
- Channel widths supported: 40 MHz, 20 MHz, 10 MHz, 5 MHz
- Maximal net throughput: 35Mbps net aggregated

Wired Interfaces

- Wired network connection: Ethernet 10/100BaseT (RJ-45)
- Wired network interface: IEEE 802.3 CSMA / CD and Ethernet Blue Book
- Serial interface System Console Port

Antenna Connection

- Two N-type connectors for dual-polarity antenna or two V/H external antenna

Radio Interface Features

- Superpacketting (voice/RTP aware)
- Channel Time Adjustment
- DFS (where applicable)
- "Long" mode for long distances
- Automatic bit-rate control
- Special efficiency up to 5.3 bit/Hz

MAC-layer Features

- Proprietary dynamic adaptive polling:
 - Centralized marker grant mode
 - Dynamically takes into account low activity of the subscribers
 - Permanent channel testing
- ARP protocol support
- rSTP/STP protocol support (Spanning Tree Protocol)
- MAC/IP filtering
- Full-fledged 2nd layer switch:
 - Multiple switching groups

Operating frequencies

2.312 - 2.412 GHz
 2.412 - 2.482 GHz
 4.950 - 4.990 GHz
 5.150 - 5.250 GHz
 5.250 - 5.350 GHz
 5.470 - 5.725 GHz
 5.725 - 5.845 GHz
 5.920 - 6.060 GHz

Output power

up to 63 mW (18 dBm)

Sensitivity

-74 dBm .. -101 dBm

Common distances

- 60+ km in Point-to-Point
 - 25+ km in Point-to-Multipoint

- Full VLAN support (IEEE 802.1q)
- Trunk groups support
- Pseudo-radio interface support (connecting backhauls via wired interfaces)

Networking Features

- RIPv2 / OSPFv2 /static routing
- Tunneling (Ethernet over IP capable)
- IP-Firewall
- NAT (multipool, H.323-aware)
- DHCP client/server/relay
- Quality-of-Service:
 - 16 priority queues
 - IEEE 802.1p support
 - IP TOS / DiffServ support
 - Full voice support
 - Traffic limiting (absolute, relative, mixed)
 - Traffic redirection

Security Features

- Over-the-air encryption
- Storm / flood protection
- Password protection
- Protocol messages encryption

Management Features

- SNMPv1 / SNMPv3 support (MIB II, private MIB)
- Configurable SNMP Traps
- Telnet
- Graphical User Interface (for Windows)
- Web-interface Configurator
- Remote Shell

General Features

- Frequency / IP-roaming for CPE between Base Stations
- Automatic over-the-air firmware upgrade

Form Factor and Dimensions

- Outdoor Unit (ODU):
 - Dimensions: 240 x 240 x 51 mm
 - Weight: 2.6 kg
- Indoor CPE (IDU-5000-CPE)
 - Dimensions: 85 x 76 x 36 mm
 - Weight: 0.15 kg

Power

- Up to 15 Watts
- Consumption: 110-240 VAC @ 50/60 Hz

Environmental

- Outdoor Units: -40..+60C, 100% humidity, condensing
- Indoor Unit: 0..+40C, 95% humidity, non-condensing

