

## R5000-Smn 19 dBi

3.4 - 3.7 GHz

**Description** InfiLINK 2x2 Lite Medium -capacity lightweight Integrated 19 dBi Dual-polarization Antenna Point-to-Point Backhaul

**Performance**

- 8 Mbps (up to 8 Mbps net)
- 50 Mbps (up to 50 Mbps net)
- 300 Mbps (up to 180 Mbps net)
- License upgradeable

**Distances** up to 5-10 km

**Radio**

- Radio technology: MIMO 2x2 with OFDM 64/128
- Modulation types: BPSK 1/2 to QAM64 5/6
- Transmit power: up to 18 dBm
- Receiver sensitivity: -67..-97 dBm
- Frequency bands: 4.9-6.0 GHz
- Channel bandwidth: 5/10/20/40 MHz
- 19 dBi dual-pol integrated antenna

**Wired Interfaces** • 1x Fast Ethernet (10/100 Base-T) RJ-45 connector

**Power Consumption**

Consumption:

- Up to 7 Watts

Power options:

- 110-240 VAC @ 50/60 Hz
- +9..56 VDC

**Form Factor and Dimensions** • Outdoor Unit (ODU):



207 x 207 x 67 mm, 1.0 kg

• Indoor Unit (IDU-CPE): 85 x 76 x 36 mm, 0.15 kg

| Part Number Options | R500-Smn/ | Freq. Band | Bitrate | Output Power | Ant. | Capacity |
|---------------------|-----------|------------|---------|--------------|------|----------|
|                     |           | 49         | 300     | 2x63         | 2x19 | 8        |
|                     |           | 52         |         |              |      | 50       |
|                     |           | 53         |         |              |      | 300      |
|                     |           | 54         |         |              |      |          |
|                     |           | 58         |         |              |      |          |

**Part Number Example** R5000-Smn/52.300.2x63.2x19|50

# Features

## RADIO

- **Voice/RTP Aware Superpackaging**
  - to minimize jitter and latency for multimedia applications
- **DFS**
  - intelligent search for a cleanest channel and interference avoidance
  - radar detection (depending on regulatory domain)
  - continuous background spectrum monitoring (for Instant DFS enabled units only)
  - seamless channel change in case of congestion or radar detection (for Instant DFS enabled units only)
- **Automatic Bitrate Control**
  - to ensure a 100% stable link irrelevant of changes in external conditions
- **Automatic Transmit Power Control**
  - to track and keep optimal input signal level to maximize performance for each link and reduce overall interference within a given transmit power and EIRP limitations
- **Automatic Distance Learning**
  - to optimize performance for any link distances from dozens of meters to 100 km and above
- **Channel Time Adjustment**
  - to improve performance on heavily loaded links
- **Spectrum Analyzer mode**
  - interference detection
  - non-invasive spectrum analysis (for Instant DFS enabled units only)
- **Channel testing tools**
  - channel performance measurement
  - advanced diagnostics

## MAC

- **Dynamic adaptive Polling**
  - Centralized marker grant mode
  - Dynamically takes into account channel activity
  - Permanent channel testing
- **Pseudo-radio Interface**
  - unique InfiNet Wireless feature to join InfiNet Wireless networks via 3rd party equipment (Wired Ethernet segments, IP clouds)
- **Automatic over-the-air firmware upgrade**

## MANAGEMENT FEATURES

- **Web-interface**
  - basic settings
  - channel diagnostics: spectrum analysis, antenna alignment, channel throughput measurement
  - unit and RF links monitoring
  - maintenance: firmware upgrade, license and configuration import/export
  - tech support diagnostic reports generation
  - command-line access
- **Command-line interface for in-depth configuration and diagnostics accessible via:**
  - secure shell (SSH)
  - telnet
  - serial port
  - remote shell
- **SNMPv1 / SNMPv3 support** (MIB II, private MIB)
- **Configurable SNMP Traps**

## STANDARD COMPLIANCE

- **Radio**
  - EN 301 893 v.1.5.1
  - EN 302 502 v.1.2.1
  - FCC part 15.247
- **EMC**
  - EN 301 489-1
  - EN 301 489-17
  - FCC Part 15 Class B
- **Safety**
  - EN 60 950-1:2006
- **RoHS**
  - Directive 2002/95/EC

## NETWORKING

- **Ethernet-over-IP tunneling**
- **ARP protocol support**
- **MAC/IP filtering**
- **Full-fledged 2nd layer switch:**
  - Transparent transport for any type of Ethernet traffic including MPLS, stacked VLANs, etc.
  - Multiple switching groups
  - Full VLAN support including Q-in-Q (IEEE 802.1q and 802.1ad)
  - STP/rSTP support
  - IGMP Snooping with Querrier mode
  - Trunk groups support
- **RIPv2 / OSPFv2 /static routing**
- **Tunneling** (Ethernet-over-IP, IP-over-IP)
- **L2/L3 Firewall**
- **NAT**(multipool, H.323-aware)
- **DHCP client/server/relay**

## SECURITY FEATURES

- **Storm / flood protection**
- **Password protection**
- **Protocol messages encryption**
- **Secure command-line access via SSH protocol**

## QUALITY-OF-SERVICE

With many QoS permutations, QoS implementation works transparently in the network based on IEEE802.1p standard as well as ToS/DiffServ, guaranteeing optimal performance under any load conditions and lowest jitter/delays for priority traffic.

### Quality-of-Service features:

- **16 priority queues**
- **IEEE 802.1p support**
- **IP TOS / DiffServ support**
- **Full voice support**
- **Traffic limiting** (absolute, relative, mixed)
- **Traffic redirection**

## ENVIRONMENTAL

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

© 2012 InfiNet Wireless Ltd. All rights reserved.

All product and service names referenced herein are registered trademarks or trade names of InfiNet Wireless Ltd. All other trademarks are the property of other owners. The content herein is subject to change without further notice.

InfiNet Wireless Ltd.  
E-mail: [sales@infinetwireless.com](mailto:sales@infinetwireless.com)  
Website: [www.infinetwireless.com](http://www.infinetwireless.com)