

Pre-Wi Max/OFDM LONG RANGE

MAKAIR mms MAX



RADIO BRIDGE & ROUTER

Data Rate up to 30 Mbps in 2.3-2.7GHz and 70 Mbps in 4.9-6.1GHz

Operational Range – 100kms



FEATURES

- Pre WiMAX / OFDM
5Mhz & 10Mhz
- Any Point to Any point and
Multipoint to Multipoint.
- IP Routing
- OLSR & OSPF
- Ultra Secure Wireless
256 bit AES, WPA and
WPA2 encryption, Security,
VPN and firewall
- GUI, Telnet, SNMP Remote
Management
- QOS with Traffic Shaping
- 3 level Watch Dog Timer
- Sensitivity of (-)105 XR Rate
(Best in the Industry)
- Firewall with packet filter
& NAT
- Upto 76 non overlapping
Channels in 2.3 to
2.7GHz (14non
overlapping in ISM Band)
- Upto 237 non overlapping
in 4.9-6.1 GHz
- Transmit Power Control
- Dynamic Frequency Select
- Multiple RF interfaces
[OPTIONAL]
- RS-232/422/485 3-in-1
serial port [OPTIONAL]

MMS balances enterprise-scale security, management and Quality of Service features with high performance.

FEATURES BENEFITS

The MMS Radio Bridge & Router is a any Point to Multipoint and Multipoint-to Multipoint OFDM Radio Bridge Equipment for High Bandwidth connectivity of up to 30Mbps in 2.3-2.7GHz and up to 70Mbps in 4.9-6.1 GHz bands. It has a range of up to 100kms with the possibilities of other interfaces like E1/E2 in addition to Ethernet.

HOTSPOT

Built-in HOTSPOT and plus PPPOE server/client

BUILT-IN ROUTER SPECIFICATIONS :

BASIC NETWORK PLATFORM

TCP/IP protocol suite

FIREWALL AND NAT

Packet filtering, source and destination NAT, source MAC addresses, ports, protocols, protocol options, interfaces.

ROUTING

RIP 1 / 2, OSPF v2, OLSRD, BGP v4, equal cost multi-path routing, Policy based routing, firewall marked packet routing

BRIDGING

Spanning tree protocol, multiple bridge interfaces, bridge firewall

BANDWIDTH MANAGEMENT

Per IP / protocol / subnet / port, CBQ, RED, SFQ, byte limited queue, packet limited queue

PPPoE

Access Concentrator (server)

TUNNELS

PPTP, EoIP (Ethernet over IP)

OPEN VPN support for super secrecy

MULTICASTING support (Optional)

VLAN, Virtual LAN support

NTP Network Time Protocol server and client



QOS

Full Scale QOS with traffic shaping and user friendly presets .

DNS CLIENT/SERVER

Name resolving for local use, Dynamic DNS Client

MONITORING/ACCOUNTING

IP traffic accounting, firewall actions logging

SNMPV2

read only access

ADMINISTRATION

GENERAL

History, undo / redo /display, multiple administrator connections real time updates in, real time Configuration

WEB/GUI

Uses HTTP/ HTTPS for remote administration, graphing of traffic, statistics, and resource

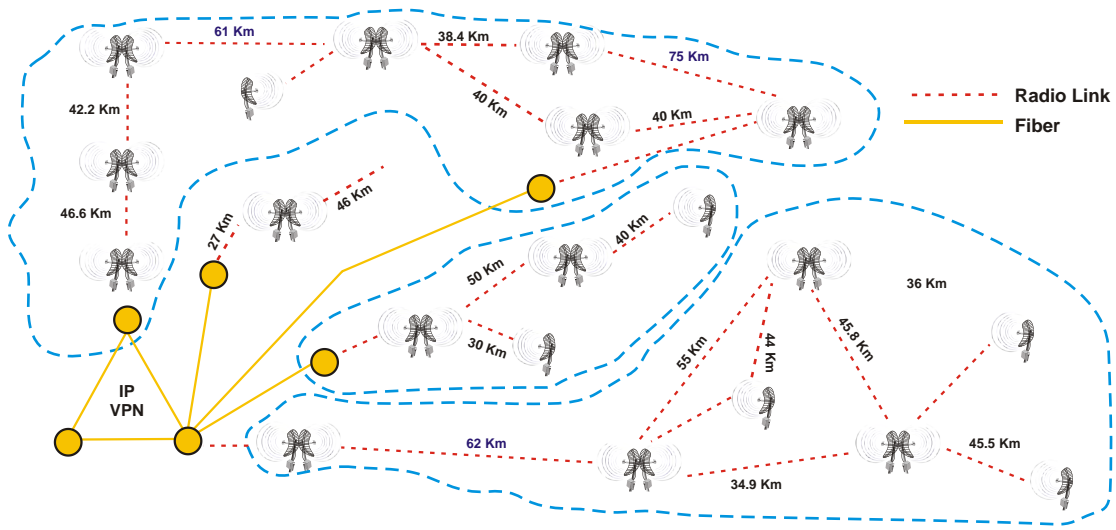
monitoring multiple internal configuration windows Terminal Console standard keyboard and monitor connection, scripting import /export of configuration scripts to screen / file command history, hierarchical command structure monitoring of interface status and traffic, context specific hints.

TELNET/ SSH

All terminal console features, SSH option, cut/paste of configuration UPGRADING

Remote Firmware Upgrade

WAN NETWORK



RADIO TECHNICAL SPECIFICATIONS

Frequency Range	2.30 -2.70 GHz, 4.9 - 6.1 GHz	Bandwidth Management	Yes
Number of Channels	76 non overlapping (2.3-2.5 GHz) 237non overlapping (4.9-6.1 GHz)	Router	Yes
Channel Width	(+/-) 2.5 MHz, 5 MHz, 10 MHz, 20 MHz	Monitor/Control	HTTP, TELNET
Pre WiMax	Yes, 5 MHz & 10 MHz	Packet Format	IEEE 802.3 and Ethernet II
Receive Sensitivity (1e-6 BER)	XR -105 dBm 1 Mbps -98 dBm 2 Mbps -96 dBm 6 Mbps -94 dBm 9 Mbps -93 dBm 11 Mbps -92 dBm 12 Mbps -91 dBm 18 Mbps -90 dBm 24 Mbps -86 dBm 36 Mbps -83 dBm 48 Mbps -77 dBm 54 Mbps -74 dBm	Network Connection	10 /100 Base T RJ Female Ethernet Connection
Max Receive Level	0 dBm (no damage)	Bridge Functionality	Intelligent Local Packet Filtering (self-learning), Node by node user configurable data rates (CIR and MBR)
Processing Gain	> 10 dB	Network Topologies	Any point-to Multipoint Multipoint-to Multipoint
Antenna Connector	N Female (2 antenna connectors)	Repeater Mode	Built-in Mode
RF Interface	Yes, upto 4	RF Collision Management	Combined TDD and FEC
Option of Additional Ethernet 10/100 Interface	Yes, upto 2	Security	256 bit AES, WPA and WPA2 encryption, Security, VPN and firewall
Wireless Data Rate	54 Mbps, 108 Mbps	Data Security Password	Network attachment is password protected
Super fast Mode upto 108 Mbps	Yes	Remote Management	http ,Telnet
RF Modulation Scheme	QAM64, QAM16, QPSK, BPSK, CCK (OFDM, DSSS)	Management Port	Ethernet using HTTP, TELNET
Duplex Format	TDD, FDD	SNMP	MIB2
Certification	FCC,ISO 9001-2000	Management Port Functionality	Full configuration/management from any station through a command line
Range	Up to 100 Km	Software Upgrade	Via HTTP, FTP, TFTP firmware updates
Output Power	0-27dBm	Power Adapter Requirement	110 VAC or 220 VAC , 7V - 18V DC, 48V DC
Software controllable	Yes	Power Consumption	Less than 20W (fully loaded)
Extended Range (XR)	Best in the industry (-) 105 dBm	Height x Width x Depth Weight	7" x 11" x 5" 3Kg
Watch Dog Timer	Software/Hardware/Temperature	Operational Temperature	-40C° to +80C°
QOS/COS/GOS	Yes	Humidity	Humidity 0-95% non condensing, Outdoor weatherproof enclosure