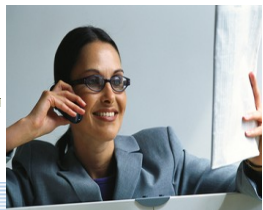




+/- 2.5 MHz
Channel



WiMAX / OFDM BROADBAND BASE STATION

MAKSAT BTS MAX



MAKSAT BTS MAX BROADBAND BASE STATION

Data Rate up to 350 Mbps in 2.3--2.75Ghz and 4.9--6.1Ghz
[Includes ISM - 2.4Ghz Band and UNI ISM - 5.7Ghz Bands]

3 units of 120° Panel Antennas
covering 360° with 3 RF interfaces



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

Features Benefits

The MAKSAT BTS MAX is a 4 Sector 360° Broad Band Base Station with Any Point to Any Point and Multipoint to Multipoint WiMAX/OFDM Technology for High Bandwidth distribution of up to 350Mbps in 2.3-2.7GHz and 4.9-6.1GHz bands and NLOS implementation.

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, 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

IPIP tunnels, EoIP (Ethernet over IP)

IPsec

IP encryption (IPsec)

VLAN, Virtual LAN support

DHCP server per interface, DHCP client

NTP Network Time Protocol server and client

Monitoring/Accounting

IP traffic accounting, firewall actions logging

Tools

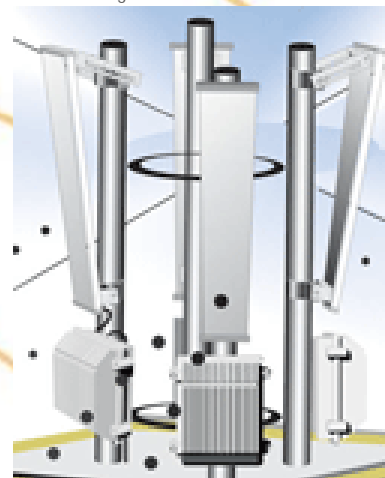
Ping, trace route, bandwidth test, ping flood, telnet

DNS client

Name resolving for local use, Dynamic DNS Client

SNMP

read only access



With inbuilt router and
Network Management System

Caching Features

DNS cache, SQUID caching proxy

Administration

General

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

Web/GUI

Uses GUI tool 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

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

FTP

For uploading upgrade packages, uploading and downloading scripts, Hot Spot authorization.

Upgrading

Remote upgrade by uploading the software packages to the router

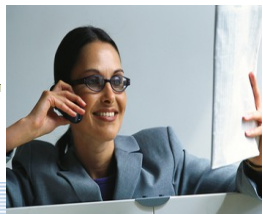
Scripting

Scripts can be scheduled for executing at certain times, periodically, or on events. All Terminal Console commands are supported in scripts.

Features

- Pre WiMAX / OFDM 5Mhz & 10Mhz
- Any Point to Any point and Multipoint to Multipoint.
- Supports Mesh Topology
- Seamless Roaming
- Redundant Networks
- IP Routing
- Wireless Data Rate 108 Mbps per Sector
- Ultra Secure Wireless Mechanism upto 128 bit - TKIP, AES-CCM, WEP, WAP
- 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 (TPC)
- Dynamic Frequency Select (DFS)



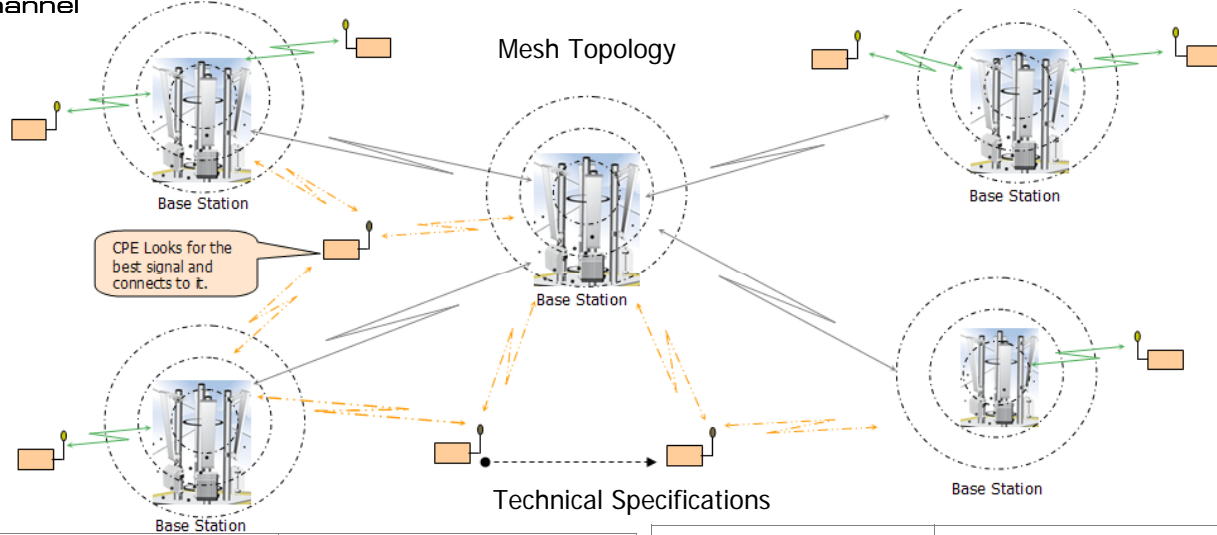


WiMAX / OFDM BROADBAND BASE STATION

MAKSAT BTS MAX



+/- 2.5 MHz Channel



Frequency Range	2.30 -2.75GHz, 4.9 - 6.1 GHz
Number of Channels	76 non overlapping (2.3Ghz-2.75Ghz) 237 non overlapping (4.9-6.1 GHz)
Channel Width	(+/-) 2.5 Mhz, 5 Mhz, 10 Mhz
Pre WiMax	Yes, 5Mhz & 10Mhz
Receive Sensitivity (1e-6 BER)	1 Mbps -97 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
Max Receive Level	0 dBm (no damage)
Processing Gain	> 10 dB
Antenna Connector	N Female (2 antenna connectors)
RF Interface RF Modulation Scheme	upto 4 QAM64, QAM16, QPSK, BPSK, CCK (OFDM, DSSS)
Option of Additional Ethernet 10/100 Interface	Yes, upto 3
Wireless Data Rate	54 Mbps, 108 Mbps
Super fast Mode upto 108Mbps	Yes
Modes of operation	802.11b, 802.11b/g, 802.11g, 802.11g turbo, 802.11a/turbo
Duplex Format	TDD, FDD
Certification	FCC, ISO 9001-2000
Range	Up to 100 Km
Output Power	0-27dBm
Software controllable	Yes (Steps of 1 dB)
Extended Range (XR)	Best in the industry (-) 105 dBm
Watch Dog Timer	Software/Hardware/Temperature
QOS/COS/GOS	Yes

Bandwidth Management	Yes
Router	Yes
Monitor/Control	Through Ethernet port using Winbox/Telnet
Packet Format	IEEE 802.3 and Ethernet II
Network Connection	10 /100 Base T RJ Female Ethernet Connection
Bridge Functionality	Intelligent Local Packet Filtering (self-learning), Node by node user configurable data rates (CIR and MBR)
Network Topologies	Any point-to Multipoint Multipoint-to Multipoint
Repeater Mode	Built-in Mode
RF Collision Management	Combined TDD and FEC
Data Scrambling	Security 128 bit - TKIP, AES-CCM, WEP, WAP
Data Security Password	Network attachment is password protected
Remote Management	Winbox ,Telnet
Management Port	Ethernet using Winbox, Telnet
SNMP	MIB2
Management Port Functionality	Full configuration/management from any station through a command line
Software Management	over RF for firmware updates
Power Adapter Requirement	110 VAC or 220 VAC , 7V - 18V DC
Power Consumption	Less than 20W (fully loaded)
Height x Width x Depth Weight	7" x 11" x 5" 3Kg
Operational Temperature	(-)40C to (+)80C
Humidity	Humidity 0-95% non condensing, Outdoor weatherproof enclosure

