

MicroMAXd



MicroMAXd Base Station

MicroMAXd is a single mode, 802.16d, highly integrated micro-cell base stations with all-in-one outdoor packaging of RF and base-band components. Ideal for Fixed WiMAX applications, the MicroMAXd offers performance optimized variants for high density roof-top deployments and cost optimized variants for low density/rural deployments are available.

MicroMAXd is a complete standalone base station, sharing the same system architecture as our tried and tested ASWipLL product line.

The MicroMAXd base station is highly modular in design and consists of two main components: the all-outdoor Base Station Radios (BSR) and the indoor aggregator Base Station Distribution Unit (BSDU), or the single channel Data Adaptor.

Each base station site can contain up to 16 BSRs, depending on the amount of available spectrum. Each BSR is connected to the BSDU via a 100BaseT interface operating over a

CAT5 cable, which carries both data and power. Each BSDU can support up to 8 BSRs.

MicroMAXd is designed to support lower density, rural broadband access, enterprise applications and DSL in-fill scenarios in both licensed (700 MHz, 1.5 GHz, 3.3 GHz, 3.5 GHz, 3.7GHz, 4.9 GHz) and unlicensed (5.1 GHz, 5.4 GHz, 5.8 GHz, 5.9 GHz) bands.

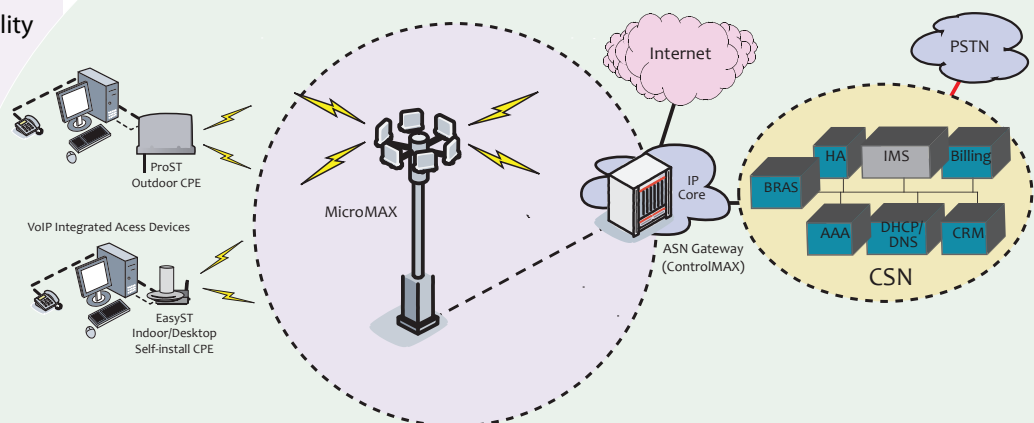
One of the key features of the MicroMAX BSR is that it requires less than 28W power, making it ideally suited for those rural deployments where power generation and supply may be a problem.

MicroMAXd operating in unlicensed bands can be used by Wireless ISPs to deploy WiMAX easily and cost effectively wherever the need is identified.

Both MicroMAXe and MicroMAXd base stations are managed by Netspan, Airspan's SNMP based element management platform.

Main Features

- Cost optimized for lower density applications
 - Modular and scalable architecture
 - All outdoor integrated baseband digital processing, radio and antenna
 - Up to 16 radios per mast
 - Radios connected to indoor aggregator using Cat5
 - Cat5e (100m), up to 300m with Cat5 repeater
- Sophisticated radio implementation
- Supports WiMAX Forum™ profiles in 700 MHz, 1.5 GHz, 3.3 GHz, 3.5 GHz, 3.7 GHz, 4.9 GHz, 5.1 GHz, 5.4 GHz, 5.8 GHz and in 5.9 GHz bands
- BPSK/QPSK/16QAM/64QAM adaptive modulation
- Full duplex FDD and TDD operation
- Advanced software features
 - Full IEEE 802.16 QoS service classes
 - Full 802.1d transparent bridging
 - IEEE 802.1Q/p VLAN tagging/untagging
 - Bridging and routing functionality



MicroMAX Base Station Technical Summary

	MicroMAXd
Mobile WiMAX	No
Fixed WiMAX	Yes
Standards Compliance	IEEE802.16-2004
Form Factor	Split Indoor / Outdoor
Frequency Bands	1.5GHz, 3.3GHz, 3.5GHz, 3.7GHz, 4.9GHz, 5.1GHz, 5.4GHz, 5.8GHz, 5.9GHz
Channel Size	10MHz, 5MHz, 3.5MHz, 1.75MHz
FFT	256
Duplex Method	TDD, FDD
Tx Power (Frequency band dependant)	+27dBm
Maximum EIRP per sector	44dBm
GPS Synchronisation	Distributed
STC	No
MRC	No
MIMO	No
MIMO Matrix Type	No
CSM	No
Beamforming	No
Uplink Sub-Channelization	Yes
PUSC	No
Fractional Frequency Reuse	No
Dynamic Frequency Selection (DFS)	Yes
Ethernet CS	Yes
IP CS	No
IP version support	IPv4
Network Interface	100bT Ethernet
End to End VLAN (802.1Q)	Yes
Network VLAN Traffic Segregation	Yes
ASN Profile	No
Supported Usage Scenarios	Nomadic, Fixed
Handover Supported	No
Encryption	DES, AES
Authentication	PKM
Environmental (outdoor elements)	ETS 300 019-1-4 Class 4.1E
Environmental (indoor elements)	ETS 300 019-1-3 Class 3.2

Note: Specifications are subject to change without notice and are for information purposes only.



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