

## About Allgon Microwave



Allgon Microwave is part of the Advantech AMT Group and is a supplier of digital microwave point-to-point transmission solutions in the 4-38 GHz frequency bands. The solutions, which are of carrier class quality, deploy some of the most value-adding features on the market. Our Ethernet solution, featuring an integrated Ethernet/E1 interface, was the first on the market when launched in 1999. AMR Ethernet Radio is the only radio available that handles true end-to-end flow control.

Allgon Microwave also supplies one of the most preferred solutions for SDH/SONET high-speed, high-capacity backhaul applications. The SDH/SONET solution operates seamlessly with SDH/SONET Fiber networks and offers best-in-class carrier grade availability and performance

Allgon Microwave is the only supplier of fully seamless IP/Ethernet microwave solutions. We have the longest in-field experience of IP based backbone transport and offer the most complete solutions. Take advantage of our excellence and experience for an effortless roll-out of your WiMAX network!



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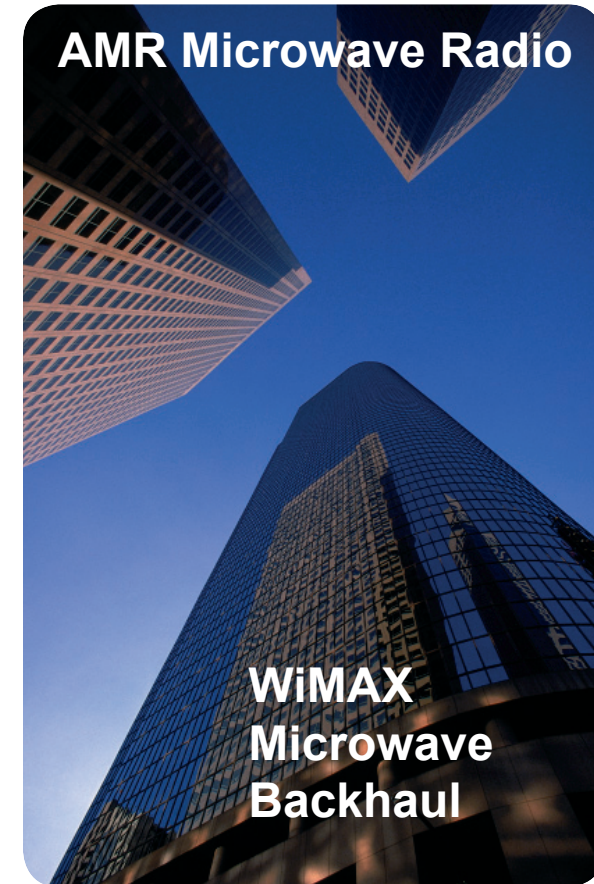
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## AMR Microwave Radio



SEAMLESS WIRELESS IP BACKBONE



## AMR Microwave Radio outperforms the rest



WiMAX broadband access system could be used, with Allgon Microwave links, to provide the backhaul to sites where no fibre is available. The product's internal network switch significantly reduces the need for additional external equipment at so-called tail sites:

*"Though we know that many radio link products can be used initially, we are convinced that the Allgon Microwave true Ethernet solution offered by Advantech AMT, is the only one on the market to maintain low latency and flat throughput whilst we will put the network under load."*

Eric Ford,  
Strategy Director and Co-Founder of Simply Broadband Ltd.



## The obvious solution for WiMAX Backhaul

### ➤ Native Ethernet interface with four switched ports

A direct Ethernet connection is the most cost efficient implementation of the transport network. The Ethernet technology eliminates the need for costly PDH/SDH multiplexers. The AMR Ethernet Radio offers four Native Ethernet ports that allow the operator to connect three WiMAX base stations per site and use one port to interconnect the backbone without adding any external equipment on site.

### ➤ Sub-millisecond latency

In order to deliver high quality Voice over IP (VoIP) service to the customers it is essential to minimize the end-to-end latency in the network. Each network element adds to the total latency so it is important to select equipment with very low latency. The AMR Ethernet Radio has such a low latency that the contribution to the total amount is negligible. By eliminating the need of external switches on site, the added latency of these switches is eliminated as well.

Latency is also an important parameter for TCP-based transport. With high latency in the network the overall throughput drops dramatically so keeping the latency to a minimum will maximize the throughput and the revenues.

### ➤ Full support for IEEE 802.1p and high level QoS

The AMR Ethernet Radio has full support for prioritization and Quality of Service (QoS), which is of interest in a network where the traffic is mixed (data and voice). Different levels of priority for VoIP over data traffic can be configured.

### ➤ Superior throughput with flat behaviour for all packet sizes

The AMR Ethernet Radio is the only microwave radio equipment on the market that offers the same throughput for all packet sizes. ISP statistics shows that the average packet size in the regular Internet traffic is low (below 300 bytes). For other vendors equipment both license-free as licensed the throughput falls dramatically at heavy load and for small packets.

### ➤ Full VLAN support to separate WiMAX base station connections

VLAN separation is a cost-effective solution that increases the security of the network. The AMR Ethernet Radio has the ability to tag/untag the incoming/outgoing packets, which means that a centralized router can be used instead of Layer 3 switches or external Layer 2 switches on both sites.

