

# WiMAX TECHNICAL TRAINING

## Evolution<sup>TM</sup> WiMAX DM256 Workshops

### DESCRIPTION

A unique four-day training program in IEEE 802.16-2004 (WiMAX) network technology, covering the PHY and MAC layers for both sub and base stations.



“The best way to deploy an 802.16d/e solution successfully is to understand the whole picture and not just the buildup. End users seeking to develop WiMAX for their organizations can greatly improve their planning, configuring, deployment, and maintenance components by attending this four-day training sessions and workshops.”

Greg Phillips, CEO, AirTegrity Wireless

### WHO SHOULD ATTEND?

This training is ideally designed for hardware and software engineers planning to develop WiMAX equipment based on Wavesat's DM256 but is also suited for technical people wanting an in-depth coverage of IEEE 802.16-2004 network technology, benefits, operation, planning and deployment. Wavesat's WiMAX Technical Training is given by Wavesat's application engineering staff and includes a series of hands-on workshops using Wavesat's Development Platform including the DM256 configuration and testing.

### COURSE PRE-REQUISITE

Attendees should have digital, hardware or software design experience, preferably in modem technology

“We are taking WiMAX from concept to deployment for our customers and partners. Through these hands-on and highly technical training courses, our partners and customers can effectively cut through the hype and grasp the fine points and details of the technology and standard.

These sessions are equally valuable to Manufacturers, Operators, Universities and Regulators. “

*Vijay Dube, Wavesat's VP Marketing and Business Development.*

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### SEMINAR CONTENT

#### DAY 1

##### IEEE 802.16-2004

Standards overview  
What is OFDM?  
Market and applications overview  
Wavesat solutions and roadmap

##### IEEE 802.16-2004 Implementation

Base Station, MAC, PHY, RF  
Sub Station, MAC, PHY, RF

#### DAY 2

##### Understanding Wavesat PHY: DM256

Architecture  
Registers  
Configuration  
Workshop

##### Understanding Wavesat MAC Architecture for BS and SS

Software MAC versus hardware MAC  
BS architecture  
SS architecture  
Workshop

#### Dates

Wavesat's WiMAX Technical Training will be held on a quarterly basis.  
The next training is scheduled for May 15-18 2007 in Montreal, Canada.

#### DAY 3

##### Software Development Tools Installation

Timesys tool suite  
Installation and compilation  
Modifying the scripts  
Workshop

##### Implementation of Hardware MAC Netlist in FPGA

Netlist integration into Xilinx Spartan 3  
How to add features to the MC236 netlist  
RF Interface

##### DM256 Reference Kit Hardware Architecture

#### DAY 4

##### Measurement tools: VSA, ESG, Channel Simulator

Simulation of OFDM signal: E signal generator  
Analysis of an OFDM signal: vector signal analyser  
SUI models and channel simulator

##### Workshops

DM256 configuration and test  
MC236 / DM256 testing using the DM256 Reference Kit  
Software change using the DM256 Reference Kit  
Frame simulation and measurement using the VSA and ESG



For more information about the training, please contact [ondrej.gavura@codico.com](mailto:ondrej.gavura@codico.com)

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