



MC300-2.7 WiMAX 802.16e Mini Card

Your Fast Way to Experience Mobile WiMAX
Service Deployment

The AWB MC300 is a compact designed WiMAX PCI Express Mini Card with USB 2.0 connectivity to provide vendor easy to design-in WiMAX functionality into their products, for example, Notebook, Netbook, MID, and home gateway, etc. It supports Windows XP/Vista/7, MAC OS and Linux OS. Compliant with IEEE802.16e Wave 2 standard, the AWB MC300 performs to be the best way to experience mobile WiMAX connectivity anytime and anywhere.

Key Features

- IEEE 802.16e-2005 Wave 2 compliant
- Direct access internet at any time, anywhere
- Supports Network Discovery and Selection (ND&S) algorithm for automatically and effectively connecting to base station
- Comprehensive Wireless Connection Manager utility for easy management and status monitoring

MC300 WiMAX 802.16e Mini Card

Physical Interfaces		Networking Features	
Form Factor	PCI Express Mini Card	Management / Remote Configuration	WCM (Wireless Connection Manager)
Electrical Interface	USB 2.0	Mechanical Features	
WiMAX Features		Dimensions (H x W x D)	26.8x30x4.3mm (Half size) 51x30x4.3mm (Full size)
Standard Compliant	IEEE 802.16e-2005	Weight	7g
Air Interface	Scalable OFDMA	Power Consumption	<2W
Duplex Mode	TDD/5ms frame	Operating Temperature	0° ~ 60°C
Frequency Band	2.3-2.7GHz	Humidity	10% ~ 90% non-condensing
Channel Bandwidth	5 , 10MHz	Standards & Regulatory	
Modulation	QPSK, 16QAM, 64QAM	Radio Compliance	FCC Part 27 Subpart M EN 302 326-1/-2/-3 NCC PLMN09
MIMO	Matrix A (STC) & Matrix B	SAR Compliance	FCC OET65C CE EN50392
		EMC Compliance	FCC Part 15B Class B CE EN55022 Class B CE EN55024 CE EN301 489-1-4
Tx Diversity	Support	Safety Compliance	EN 60950-1
Transmitting Power	23+/-1dBm@16QAM, 3/4CTC		
Receiving Sensitivity	-94dBm @ QPSK, ½ CTC		
ND&S	Support		
Antenna Connector	2 x I-PEX connectors		
Encryption	128 bit AES/CCM		
Authentication	EAP-TLS (with optional X.509), EAP-TTLS-MSCHAPv2		
QoS Mechanism	UGS, RT-VR, NRT-VR, ERT-VR, BE		
Hand Over	Hard HO / Optimized Hard HO		
Power Management	Idle, Sleep, Active		
OS Support	Windows XP/Vista, Windows 7 32bit and 64 bits , MAC OS and Linux**		

Remark:

- * Representing future release
- ** Available for specific hardware platform
- AWB reserves the right to make changes to product specifications without notices.

Product Configurations

Model Name	Frequency
MC300-2.7	2.3-2.7GHz

DS_MC300_V0.90
2010.11



Accton Wireless Broadband Corp.

No. 1 Creation Rd. III, Science-based Industrial Park Hsinchu 30077, Taiwan, R.O.C. T +886 3 577 0023 F +886 3 578 3821

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Due to the essential high output power natural of WiMAX device, use of this device with other transmitter at the same time may exceed the FCC RF exposure limit and such usage must be prohibited (unless such co-transmission has been approved by FCC in the future).

- **This device is intended only for OEM integrators under the following conditions:**
 - The antenna must be installed such that 20 cm is maintained between the antenna and users, and
 - The transmitter module may not be co-located with any other transmitter or antenna,
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- As long as 2 conditions above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.).

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IMPORTANT NOTE: In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

End Product Labeling

This transmitter module is authorized only for use in device where the antenna may be installed such that 20 cm may be maintained between the antenna and users. The final end product must be labeled in a visible area with the following: “Contains FCC ID: V8YFWE81MC3000W”.

Manual Information To the End User

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user’s manual of the end product which integrates this module. The end user manual shall include all required regulatory information/warning as show in this manual.