



RG211

WiMAX 802.16e Indoor IAD

**Your Straightforward Communication
Solution for WiMAX Service Deployment**

The AWB RG211 is a WiMAX indoor IAD equipped with Ethernet and VoIP connections into one single device. The device is self-installable for end users to install the device in the building easily. For the operator, RG211 provides management flexibility with choices from SNMPv1, v2c, TR-069, to Web-based management. RG211 is an easy and straightforward solution for service providers wishing to deploy fixed or mobile last mile broadband wireless access (BWA).

Key Features

- IEEE 802.16e-2005 Wave 2 compliant
- MIMO (Multiple input, Multiple output) technology improves transmission speed and coverage
- Dual Transmitters and TSD (Tile Switched Diversity) technology increase additional 5dB gain into transmit path
- TR-069 allows for easy remote configuration and over-the-air (OTA) software upgrades
- Friendly LED indicators for best device positioning and status information
- SIP-based VoIP communication provides low cost internet calls (Optional)
- Supports dual-image software upgrade recovery mechanism
- Supports Network Discovery and Selection (ND&S) algorithm for automatically and effectively connecting to base station
- Supports multiple frequency bands for global coverage

RG211 WiMAX 802.16e Indoor IAD

Physical Interfaces

LAN	1 10/100Base-T port
VoIP	1 FXS port (Optional)

WiMAX Features

Standard Compliant	IEEE 802.16e-2005
Air Interface	Scalable OFDMA
Duplex Mode	TDD/5ms frame
Frequency Band	2.3, 2.5, 3.5, 3.8GHz
Channel Bandwidth	3.5, 5, 7, 8.75, 10MHz
Modulation	QPSK, 16QAM, 64QAM
MIMO (2Tx, 2Rx)	Matrix A (STC) & Matrix B Collaborative MIMO (future support) TSD (Tile Switched Diversity)

Beamforming	IO Beamforming
Transmit Power	23+/- 1dBm@16QAM, 3/4CTC
Receiving Sensitivity	-93dBm @ QPSK, 1/2 CTC
ND&S	Support

Antenna Type	External Omni antenna with MRC
Antenna Gain	5dBi for 2.3/ 2.5/ 3.8GHz 6dBi for 3.5GHz

Encryption	128 bit AES/CCM
Authentication	EAP-TLS (with X.509), EAP-TTLS-MSCHAPv2

QoS Mechanism	UGS, RT-VR, NRT-VR, ERT-VR, BE
---------------	--------------------------------

Hand Over	Hard HO / Optimized Hard HO
-----------	-----------------------------

CS Support	Ether-CS and IP-CS support
------------	----------------------------

VoIP Features

Standard Compliant	SIP RFC3261 compliant
Voice Codec	G.711a/u, G.729a/b, G.723
Voice Quality	VAD (Voice Activity Detection), CNG (Comfort Noise Generation), Echo Cancellation G.165/G.168, Jitter Buffer, DTMF Detection and Generation

Call Features	Call Waiting, Call Transfer, Call Forward, Fax(T.38)*, 3-Way Conference Call, STUN(RFC3489), Outbound Proxy Support
---------------	---

Networking Features

Management / Remote Configuration	Web-Based configuration, SNMPv2c, TR-069
Firewall	NAT and NAPT, DoS attack protection*, SPI(Stateful Packet Inspection)*, DMZ control
WAN Connection	Static IP, PPPoE, Dynamic IP, Multiple IPs
DNS	DNS Relay, DNS Client
Bridge Mode	Transparent DHCP
Bridging	802.1D Self Learning Bridge

Mechanical Features

Dimensions (H x W x D)	185x130x35mm
Weight	265g
Power Consumption	<10W
Operating Temperature	0° ~ 40°C
Humidity	5% ~ 95% non-condensing

Standards & Regulatory

Radio Compliance	FCC Part 90 Subpart Z FCC Part 27 Subpart M EN302 326-1/-2/-3
------------------	---

EMC Compliance	FCC part 15B Class B CE EN55022 Class B EN301489-1/-4
----------------	---

Safety Compliance	EN 60950-1 EuP 2009/125/EU
-------------------	-------------------------------

Environmental Compliance	EN300 019
--------------------------	-----------

Remark:

- * Represents future release
- AWB reserves the right to make changes to product specifications without notices.

Product Configurations

Model Name	Data	Voice	Frequency
RG211-2.3/2.5/3.5/3.8-1D	1 10/100Base-T	-	2.3-2.4/ 2.5-2.7/ 3.3-3.6/ 3.6-3.8GHz
RG211-2.3/2.5/3.5/3.8-1D1V	1 10/100Base-T	1FXS	2.3-2.4/ 2.5-2.7/ 3.3-3.6/ 3.6-3.8GHz

DS_RG211_V.23
2009.12



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