

# AB-Full Access II™

## Consecutive Point

### Key Features

- Aggregate rate over 210 Mbps
- Highest system gain
- Scalable and spectrally efficient
- ISM 5.8 GHz Unlicensed Band
- Adaptive power control
- 1 + 1, 2 + 0 redundancy
- Integrated 2, 8, or 16 E1/T1

### Benefits

- No monthly leased line fees means quick payback
- Easily deployed and activated
- Ring architecture minimizes interruptions

### Applications

- Connect Buildings, Campuses, etc.
- Backhaul/Extend IP Networks, SANs
- Utility Monitoring, Control, Data Network Aggregation
- Enterprise
- Cyber Cafes



## AXXCELERA BROADBAND

Axxcelera Broadband Wireless is a data networking solutions company developing leading-edge technology for the deployment of broadband wireless communications over the Internet. The AB-Full Access II™ backhaul products provide point to point network connectivity in support of small business access and long distance distribution applications.

## AB-FULL ACCESS II OVERVIEW

AB-Full Access II™ consists of a Software Defined Indoor Unit (SDIDU) and Outdoor Unit (ODU). The AB-Full Access II™ radios are spectrum and data rate scalable, which enables service providers to have greater flexibility in network planning and future growth. AB-Full Access II™ delivers aggregate rates up to 210 Mbps within the 5.7 - 5.8 GHz ISM band for distances of up to 20 miles. The integrated E1/T1 and Ethernet interfaces allow for any combination of TDM and Ethernet packet data to be combined up to the maximum throughput.

## REASONS TO BUY AB-FULL ACCESS II

AB-Full Access II offers service providers an excellent return on investment. Customers realize a quick return on their investment through the elimination of leased lines. The AB-Full Access II™ Consecutive Point Architecture supports a ring/consecutive point configuration with a single IDU per site, additionally creating a self-healing redundancy that is more reliable than traditional point-to-point networks.

Transmit power is adjusted in discrete increments in response to RF interference. This results in significant cost savings through simplified deployment, and through more efficient network management. Denser deployment strategies are enabled resulting in enhanced revenue growth.

## SPECIFICATION SUMMARY

<b>Frequency Range</b>	5.725 – 5.850 GHz
<b>Capacity Options</b>	Up to 100Mbps full duplex plus 2 E1/T1 wayside
Ethernet	8 or 16 E1/T1 with up to 40Mbps full duplex Ethernet wayside depending on model and E1/T1 configuration
E1/T1	<i>Ethernet and E1/T1 capacity also includes additional 2 Mbps full duplex Ethernet capacity for NMS traffic</i>
<b>Modulation</b>	QPSK, 16-QAM, 32-QAM, 64-QAM
<b>Encryption</b>	Encryption based upon a 128-bit key is available for select markets and is applicable for all models
<b>FEC</b>	Trellis Coded Modulation concatenated with Reed-Solomon Coding
<b>Average Output Power</b>	+5 to +23 dBm RMS
<b>Max EIRP</b>	+46 dBm RMS (with integrated antenna)
<b>Receive Sensitivity</b>	-84dBm to -80dBm (E1/T1) -84dBm to -70dBm (Ethernet) <i>Receiver sensitivity varies per selected frequency and modulation</i>
<b>Antenna Gain</b>	23 dBi (integrated antenna)
<b>Regulatory</b>	FCC Part 15 IC: RSS210
<b>Antenna Connector</b>	N-Type Female for optional external antenna
<b>Distance</b>	20 miles (or greater, depending on antenna)
<b>Power</b>	-48 volts $\pm$ 10%, <70 watts; Optional 100-240 Volts AC, 47-63 Hz power supply
<b>Optional Features</b>	Integrated cross connect for E1/T1; add / drop mux for SDH; single chassis 1 + 1, 2 + 0 option.

PRODUCT NAME	THROUGHPUT	DATA INTERFACE	WAYSIDE
AB Full Access II 50/8T1/E1 1+0 or 1+1/2+0	100 Mbps Aggregate	100 Base TX (50 Mbps full-duplex)	2 E1/T1
	8 E1/T1	1-8xE1/T1	Scaleable Ethernet up to 50 Mbps
AB Full Access II 100/16T1/E1 1+0 or 1+1/2+0	200 Mbps Aggregate	100 Base TX (100 Mbps full-duplex)	2 E1/T1
	16 E1/T1	1-16xE1/T1	Scaleable Ethernet up to 40 Mbps

## CUSTOMER DATA INTERFACE

<b>Physical</b>	
- Ethernet	100BaseTX
- N x E1/T1	Full duplex E1/T1
<b>Connector</b>	
- Ethernet	RJ-45
- N x E1/T1	2 x RJ-48C, HD60
<b>Compliance</b>	
- Ethernet	IEEE 802.3
- SONET/OC-3	Telcordia
- N x E1/T1	ITU-T

## AUXILIARY CONNECTIONS

<b>Wayside Channels</b>	T1/E1
<b>Interface</b>	DSX-1
<b>Connector</b>	RJ-48C
<b>Alarm Port</b>	vTwo Form C relay alarm outputs, 2 TTL outputs
<b>Voice Service Channel</b>	6 wire, PTT handset
<b>Data Service Channel</b>	64kbps

## NETWORK MANAGEMENT

<b>Support</b>	SNMP, built-in web browser
<b>Connector</b>	RJ-45, 10/100BaseTX

## ENVIRONMENTAL

<b>Temperature</b>	
- IDU	-5° to 55°C
- ODU	-30° to 55°C
<b>Relative Humidity</b>	
- IDU	0 to 95%, non-condensing
- ODU	Up to 100% at 45°C
<b>Altitude</b>	IDU/ODU both 4500 m

## MECHANICAL

<b>Size</b>	
- IDU	1RU, ETSI compliant (445 x 238.5 x 44.5 mm) rack mount (19 inches, 48.2 cm)
- ODU	39.5 x 36.5 x 5.5 cm
<b>Weight</b>	
- IDU	7 lbs.
- ODU	15 lbs.



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Axxcelera Broadband Wireless is certified to the ISO 9001:2000 Quality Management System standard.  
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