

ExcelMax Half Duplex FDD (HD-FDD)/TDD CPE

Point to Multipoint

Key Features

- WiMax-2004 Compliant - NLOS operation
- Totally integrated, easy to install, outdoor CPE
- Half Duplex FDD or TDD support
- Supports data, voice and video services
- Comprehensive Quality of Service (CIR, PIR, Priority) and VLAN support

Benefits

- Maximizes revenues (multi-service, differentiated SLAs)
- Easy and quick to install (integrated unit with Pocket PC Installation Wizard)
- Robust, field proven platform

Applications

- Data applications (High speed Internet access, VPN, VLAN, Video Conferencing)
- VoIP applications (SIP, CAC)



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 ExcelMax™ broadband wireless platform bridges the last mile, currently replacing the local loop for corporate and small business subscribers and migrating to the residential market and will be certified WiMax compliant. Axxcelera is a principal member of the WiMax Forum.

EXCELMAX HD-FDD/TDD CPE OVERVIEW

Axxcelera's ExcelMax HD-FDD/TDD CPE is a Point to Multipoint (PMP) CPE designed to operate in the 3.3-3.8 GHz spectrum and supports a Half Duplex FDD (Frequency Division Duplex) or a TDD (Time Division Duplex) architecture. The WiMax-2004 compliant CPE allows service providers to offer broadband wireless services to customers in Non Line of Site (NLOS) locations. The ExcelMax CPE 3300 supports a strong suite of Quality of Service (QoS) features, including Committed Information Rate (CIR), Peak Information Rate (PIR) and Best Effort services. The CPE supports Call Admission Control (CAC) features, which allows for scalable carrier class VoIP services and the IGMP protocol which supports Video Broadcast services. All CPEs in a service provider network are completely manageable remotely by Axxcelera's carrier-class Network Management System using SNMP protocol.

REASONS TO BUY EXCELMAX HD-FDD/TDD CPE

ExcelMax HD-FDD/TDD CPE offers service providers an excellent return on investment. Its multi-service capabilities and QoS features allow service providers to offer reliable, high quality, revenue generating applications (data, VoIP and video broadcast) to different customer types (residential, SoHo, MDU and SME). The mature CPE architecture has been deployed in large data, voice and video networks and ensures reliable operations in the field. Axxcelera provides a suite of management, installation, provisioning and configuration tools which make the installation and maintenance of the CPE extremely simple.



RF SPECIFICATIONS

Frequency Band	3.3-3.8 GHz
Air Interface Standard	IEEE 802.16-2004
Architecture	Point to Multipoint (PMP)
Duplex Scheme	Half Duplex FDD/TDD
Duplex Spacing	100 MHz typical
RF Channel Sizes	7 MHz, 3.5 MHz and 1.75 MHz
Modulation Types	64QAM, 16QAM, QPSK, BPSK
Coding Rates	1/2, 2/3 and 3/4
Net Throughput	20 Mbps (7 MHz channel size)
Transmit Power (at antenna port)	+22.0dBm
Receive Sensitivity	-100dBm
Antenna Beam Width	60 degrees
Antenna Gain	14 dBi 18 dBi (planned)

ENVIRONMENTAL CHARACTERISTICS

Operating Temperature	-33°C to +55°C (outdoor unit) -5°C to +40°C (indoor unit)
Operating Humidity	10-100% condensing (outdoor) 10-90% non-condensing (indoor)
Power supply	120-240 VAC 50-60 Hz
Power consumption	15 Watts nominal
Dimensions	10" x 10" x 5" (outdoor unit)
Weight	7 lbs (outdoor unit)

STANDARDS SUPPORTED

Air Interface	IEEE 802.16-2004
NLOS Enhanced Features	Uplink Sub-channelization; Space Time Coding (Planned Q1'06)
Prioritization	IEEE 802.1p (8 different prioritization levels)
VLAN	IEEE 802.1Q
VoIP	SIP, MGCP, H323, Call Admission Controller
Video Broadcast	IGMP
Security/Encryption	BS and SS authentication via x.509 certificates, CBC-Mode 56-bit DES, AES-CCM mode
Interfaces	10/100 Base T Full Duplex
Network Management	SNMP
International Standards	Wireless performance ETSI EN 301 753 and EN 301 021 Antenna performance ETSI EN 302 085 CE Compliance via European R&TTE Directive Annex IV Self-Declaratory process Emissions: EN55022 (CISPR 22) to Class B; EN61000-3-2 and EN61000-3-3 Susceptibility: EN300 489 (includes EN61000 series) EN60950 (IEC 950): Including amendments 1-4
EMC	
Safety	



Axxcelera
B R O A D B A N D W I R E L E S S

a **Moseley** company.

111 Castilian Dr. Santa Barbara CA 93117 USA
tel 408-894-0160 fax 408-894-9831
e-mail: sales@axxcelera.com
web site: www.axxcelera.com

Axxcelera products are manufactured under a quality system certified to ISO 9001. Axxcelera reserves the right to make changes to specifications of products described in this data sheet at any time without notice.
© 2005 Axxcelera Corp. 4.04