

AXS-CPE150-15

5GHz BAND CPE

- Cost-effective and easy to install
- Ultra-compact and energy-efficient
- QoS guarantee
- 35Mbps net throughput
- Home-Gateway functionality



PRODUCT OVERVIEW

The AXS-CPE150-15 user terminal has been designed by Albentia Systems to cover deployment needs in wireless access networks in the 5GHz band.

It is a cost-effective easy to install CPE for residential use, which allows the ISP to offer equivalent services to those provided by cable networks. Designed with aerDOCSIS technology, it is completely interoperable with other 802.16 implementations.

Featuring Home-Gateway functionality, AXS-CPE150-15 offers an easy to configure web interface for end users and allows for cost savings as it eliminates the need for a home router.

APPLICATIONS

- Internet service
- Rural broadband access
- VoIP and videoconferencing
- Leased lines for corporate access
- Extension of fiber optic networks
- IPTV
- Smart-metering



RADIO PARAMETERS

Frequency band	4900-5875MHz
Channel step	1MHz
Net capacity	35Mbps
Channel bandwidth	10 / 7 / 5 / 3.5 / 1.75 MHz
Net spectral efficiency	3,5bps/Hz
BPSK sensitivity	-92dBm @ 10MHz -99dBm @ 1.75MHz
64QAM sensitivity	-75dBm @ 10MHz -82dBm @ 1.75MHz
Max. transmission power	23dBm
Antenna	15 dBi
Modulation	OFDM 256 subcarriers
Subcarrier modulation	Adaptive BPSK, QPSK, 16QAM y 64QAM (7 levels depending on FEC combination)
FEC	Yes, concatenated Reed-Solomon and convolutional code
DFS	Yes
Downlink/Uplink	From 100/0 to 0/100
Access control protocol	Synchronous TDMA with hardware implementation
Duplexing technique	TDD (Time Domain Duplexing)

QUALITY OF SERVICE (QoS)

QoS control	5 QoS levels (BE, nRTPS, eRTPS, RTPS, UGS). Separate queues per service and user
Service differentiation	Layer 2: MAC source/destination address, EtherType, VLAN tag Layer 3: DSCP ToS, IP source/destination address, subnet, protocol Layer 4: TCP or UDP source/destination port
Max. number of services	Unlimited

NETWORKING AND SECURITY

Layer 2 functionality	Bridging (IEEE 802.1)
VLAN	802.1q, 802.1p, q-in-q support, unlimited VLANs
Layer 3 functionality	Dynamic/static routing, NAT, DHCP server/client
Encryption	AES128/256
Latency	5ms
X.509 certificates	Yes
Data interface	Ethernet 10/100 Base T
Max. packet size	2048 bytes

MANAGEMENT

Local	ACC-HU port
Remote	Web, SSH, XML-RPL, SNMP v1, 2 & 3
Advanced	SMC channel support, double IP data/management

PHYSICAL FEATURES

Dimensions	275 x 137 x 650 mm (packaged)
Weight	0,68 kg
PoE supply (not included)	110-240 ACV 50/60Hz input 24DCV output (Optional DC input 10-24V)
Power consumption	< 4.5 W
Temperature range	From -30°C to +55°C (working environment temperature)

STANDARDS

Protocol	aerDOCSIS compatibility with 802.16-2012
Radio	ETSI EN 302 326-2
Environment	ODU: IP55 (protection), ETSI EN 60950-1: 2006 (security) IDU: IEC 61000-4-2 (ESD), IEC 61000-4-5 (Surge)

