

# AXS-CPE350-15

HIGH CAPACITY CPE IN 5GHz BAND

- 100Mbps net throughput
- Great protection against interference
- Cost-effective and easy to install
- Ultra-compact and energy-efficient
- QoS guarantee
- Home-Gateway functionality
- 15dBi integrated antenna



## PRODUCT OVERVIEW

The AXS-CPE350-15 user terminal has been designed by Albentia Systems to cover deployment needs in wireless access networks in the 5GHz band. This equipment is especially indicated for situations in which greater capacity and speed are needed.

It is a CPE for residential use, high capacity and easy installation, which allows the operator to offer services equivalent to those of wired access networks. Designed with aerDOCSIS technology, provides the operator with all advantages of the new technology tripling its capacity with respect to the AXS-CPEI50-15 and it is completely interoperable with other 802.16 implementations.

Featuring Home-Gateway functionality, AXS-CPE350-15 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
- Smart-metering



## RADIO PARAMETERS

Frequency band	4900-5875MHz
Channel step	1MHz
Net capacity	100Mbps DL / 35Mbps UL
Channel bandwidth	10 / 7 / 5 / 3.5 / 1.75 MHz
Net spectral efficiency	3,5bps/Hz
BPSK sensitivity	-91dBm @ 10MHz -98dBm @ 1.75MHz
64QAM sensitivity	-73dBm @ 10MHz -81dBm @ 1.75MHz
Max. transmission power	23dBm
Antenna	15dBi integrated antenna
Modulation	Carrier aggregation 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 12% to 95%
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	220 x 85 x 120 mm (packaged)
Weight	370gr (packaged)
PoE supply (not included)	Passive PoE 12 - 18 VDC 4/5 + , 7/8 -
Power consumption	9w typ, 10w max (100% traffic)
Temperature range	From -30°C to +55°C (working environment temperature)

## STANDARDS

Protocol	aerDOCSIS compatibility with 802.16-2012
Radio	ETSI EN 301 893 V1.7.1 ETSI EN 302 502 V1.2.1
Environment	IP55 (protection) ETSI EN 60951-1 (security) UNE EN 60068-1-1/2/11/14/30 (environment) ETSI EN 301 489-1 V1.9.2 (EMC) ETSI EN 301 489-17 V2.2.1 (EMC)

