albentia systems

AXS-CPE130-RS

3.3-3.9GHz BAND CPE

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

aerDOCSIS TECHNOLOGY

PRODUCT OVERVIEW

The AXS-CPE130-RS user terminal has been designed by Albentia Systems to cover deployment needs in wireless access networks in the 5GHz band.
Its reduced size and RP- SMA connector allows for long distance links minimizing costs. 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-CPE130-RS 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

arba access

Specications

RADIO PARAMETERS

Frequency band	3000-3900MHz
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	RP-SMA connector
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 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	185x85x20mm (packaged)
Weight	300gr (packaged)
PoE supply	Pasive PoE 12-18 VDC 4/5+, 7/8-
Power consumption	3W typ, 5W max (100% traffic)
Temperature range	From -30ºC to +55ºC (working environment temperature)

STANDARDS

Protocol	aerDOCSIS compatibility with 802.16-2012
Radio	ETSI EN 302 326-2
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)

All Albentia Systems products are designed and manufactured in the EU

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