

PRO-SU-1150-N

5 GHz BAND SUBSCRIBER UNIT

Strong protection against interferences

35Mbps net throughput

QoS guarantee

Extraordinary spectral efficiency

Accurate latency control

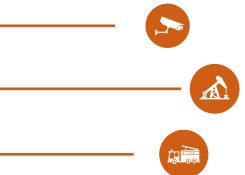
Full-outdoor

High security levels

Robustness and reliabilityg











PRODUCT OVERVIEW

The subscriber unit PRO-SU-1150-N has been designed for professionals applications in the 5GHz band. This equipment provides 35 Mbps net throught that can be distributed among the uplink and downlink, allowing assign up to 100% for surveillance applications.

This subscriber unit implements advanced quality of service mechanisms in order to guarantee capacities for competing differenciated services such as video or VoIP.

It is a very robustness and reliability full-outdoor equipment with high security levels. The subscriber unit PRO-SU-1150-N implements strong protection against interferences, such as ARQ and TBIM, and the use of very narrow channel of 10GHz.

Such advantages make ARBA pro equipment the strongest of marketand assure an adequate transmission in scenarios presenting highly saturated spectrums.

Designed with aerDOCSIS technology, it is completely interoperable with other 802.16 implementations.

APPLICATIONS

- Civic video surveillance
- Traffic control
- Mining and industrial applications
- The hydrocarbon sector
- Corporative connectivity
- Extension of fiber optic networks
- Boarded nomadism
- Transport mobility

RADIO PARAMETERS

	RADIO PARAIVIE I ERS
Frequency band	4900-5875MHz
Channel step	1MHz
Net capacity	35 Mbps
Channel bandwidth	10 / 7 / 5 / 3.5 / 1.75 MHz
Net spectral efficiency	3.5bps/Hz
BPSK sensitivity	-92 dBm @ 10MHz -99 dBm @ 1.75MHz
64QAM sensitivity	-75 dBm @ 10MHz -82 dBm @ 1.75MHz
Max. transmission power	23 dBm
Antenna	N-type connector for external antenna
Modulation	OFDM
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	From100/0 to 0/100
Access control protocol	Synchronous TDMA with hardware implementation
Duplexing technique	TDD (Time Domain Duplexing)
TDD synchronism	N/A

QUALITY OF SERVICE (QoS)

	Q0/12/11 01 02/11/102 (Q00)
QoS control	Layer 2 QoS. Guaranteed min/max capacity per differentiated service flow
Max. CPEs	Unlimited
Service differentiation	Layer 2: MAC source/destination address, EtherType, VLAN/PPPoE tag Layer 3: DSCPToS, IP source/destination address, subnet, protocol Layer 4: TCP or UDP source/destination port

NETWORKING AND SECURITY

Layer 2 functionality	Bridging (IEEE 802.1), VLAN 802.1q
Layer 3 functionality	Dynamic/static routing, NAT, DHCP server/client
Encryption	AES 256, AES 128 and 3DES
Latency	5ms
X.509 certificates	Yes
Data interface	Ethernet 10/100 Base T
Max. packet size	2048 bytes

MANAGEMENT

Remote	Web, SSH, XML-RPL, SNMP v1, 2 and 3, Radius
Advanced	SMC support, double IP data/management
Local	Port per Handheld Unit, Serie

PHYSICAL FEATURES

Dimensions	330 x 330 x 110 mm (packaged)
Dimensions	216 x 216 x 82 mm
Weight	2,3 kg (mounting kit included)
PoE supply (not included)	100-240 VAC 50/60Hz input 56VDC output (Optional DC input 18-72 VDC)
Power consumption	< 4,5 W
Temperature range	From -30°C to +55°C

STANDARDS

Protocol	aerDOCSIS compatibility with 802.16-2012
Enclosure ODU	Painted aluminium ADC12
Radio	ETSI EN 301 893 V1.5.1 (5GHz), ETSI EN 302 502 V1.2.1 (5.8GHz), ETSI EN 302 326-2
Environment	ODU: IP67 (protection), ETSI EN 60950-1: 2006 (security). IDU: IEC 61000-4-2 (ESD), IEC 61000-4-5 (Surge)



All Albentia Systems products are designed and manufactured in the $\ensuremath{\mathsf{EU}}$

PRODUCT DATASHEET PRO-SU-1150-N



Albentia Systems S.A. C/ Margarita Salas, 22 - 28918 Leganés - Madrid (ESPAÑA) Tel.: +34 91 440 0215 Fax: +34 91 327 4362 E-mail: sales@albentia.com

www.albentia.com