

PRO-BS-1150-N

5 GHz BAND BASE STATION

Strong protection against interferences

Net throughput of 35Mbps

QoS per CPE and service

Synchronism GPS integrated

High coverage range LOS

Full-outdoor IP67

Ultra-compact and energy-efficient



PRODUCT OVERVIEW

The PRO-BS-1150-N base station has been designed for professionals applications in the 5GHz band. This equipment provides 35 Mbps net throuput that can be distributed among the uplink and downlink, allowing assign up to 85% for surveillance applications. The base station implements advanced quality of service mechanisms in order to guarantee capacities for competing differentiated services such as video or VoIP.

It is a very robustness and reliability full-outdoor equipment with high security levels. This equipment 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 market and assure an adequate transmission in scenarios presenting highly saturated spectrums.

Additionally, it is completely interoperable with equipment from other IEEE802.16-2012 standard manufacturers.

APPLICATIONS

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

Specifications

RADIO PARAMETERS

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	-74 dBm @ 10MHz -82 dBm @ 1.75MHz
Max. transmission power	23 dBm
Antenna	N - type 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
Analizador de espectros	Yes, intelligence
Downlink/Uplink	From 100/0 to 0/100
Access control protocol	Synchronous TDMA with hardware implementation
Duplexing technique	TDD (Time Domain Duplexing)
Synchronism	Yes

QUALITY OF SERVICE (QoS)

QoS control	5 QoS levels (BE, nRTPS, eRTPS, RTPS, UGS). Separate queues per service and user
Max. CPEs	50
Service differentiation	Layer 2: MAC source/destination address, EtherType, VLAN/PPPoE tag Layer 3: DSCP ToS, 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 ACC-HU, 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 (working environment temperature)

STANDARDS

Enclosure ODU	Painted aluminium ADC12
Radio	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)