

# LNK-LU150-23

35 Mbps RADIOLINK 4.9 - 5.8 GHz BAND

35Mbps net throughput

Selectable channel bandwidth

Accurate latency control

QoS and service differentiation

OFDM with adaptive modulation

True-TDMA technology

Full-outdoor IP67 and energy-efficient

Integrated 23dBi antenna



## PRODUCT OVERVIEW

LNK-LU150-23 is Albentia System's professional PtP radiolink in the 5GHz band. This equipment covers the 4.9-5.875GHz licensed band and offers a **net capacity of 35Mbps** in a selectable channel bandwidth of up to 10MHz, allowing for a more efficient use of the spectrum and frequency reuse.

Designed in compliance with **aerDOCSIS technology**, this equipment features strong mechanisms for **QoS management**, **service differentiation** and **latency control**, focusing on QoS and accuracy, unlike other wireless systems which are solely orientated towards capacity. The quality offered by this radiolink can only be compared to PDH/SDH technologies, with all the advantages of IP/Ethernet solutions, which makes LNK-LU150-23 the ideal solution for **professional applications in licensed band**.

## APPLICATIONS

- Wireless bridges
- Backhaul systems for cellular networks or access networks
- Radiolinks for corporate access
- Radiolinks for professional video transmission
- Professional applications



## Specifications

### RADIO PARAMETERS

|                            |  |
|----------------------------|--|
| Frequency band             | 4900-5875 MHz                          |
| Modulation                 | OFDM 256 subcarriers                   |
| Channel bandwidth          | 10 / 7 / 5 / 3.5 / 1.75 MHz            |
| Adaptive modulation        | BPSK, QPSK, 16QAM and 64QAM            |
| FEC                        | Reed-Solomon and convolutional         |
| Maximum RF power           | +20 dBm                                |
| Transmission power control | >30 dB                                 |
| Duplexing technique        | TDD (Time Domain Duplexing)            |
| Uplink/downlink allocation | Programmable between 85-15% and 90-10% |
| Antenna                    | 23dBi                                  |
| BPSK sensitivity           | -92dBm @ 10MHz<br>-99dBm @ 1.75MHz     |
| 64QAM sensitivity          | -75dBm @ 10MHz<br>-81.5dBm @ 1.75MHz   |

### TRAFFIC AND THROUGHPUT

|                           |                             |
|---------------------------|-----------------------------|
| Maximum over-the-air rate | 52 Mbps                     |
| Net Ethernet traffic      | 35 Mbps                     |
| Maximum PPS               | 10.000                      |
| ARQ support               | Yes. Selectable per service |
| Encryption                | AES256/128                  |

### MANAGEMENT

|          |  |
|----------|--|
| Local    | Web, CLI                                       |
| Remote   | SNMP, XML-RPC                                  |
| Advanced | SMC channel support, double IP data/management |

### QUALITY OF SERVICE (QoS)

|                         |   |
|-------------------------|---|
| QoS                     | Layer 2 QoS. Guaranteed min/max capacity per service  |
| VLANs                   | 802.1q, 802.1p, q-in-q support, unlimited VLANs   |
| Service differentiation | L2: MAC source/destination address, EtherType, VLAN tag<br>L3: DSCP ToS, IP source/destination address and subnet, protocol<br>L4: TCP, UDP source/destination port |
| Service flows           | 16  |

### NETWORKING

|                       |   |
|-----------------------|---|
| Layer 2 functionality | Bridging (IEEE 802.1), VLAN (IEEE 802.1q)       |
| Layer 3 functionality | Dynamic/static routing, NAT, DHCP server/client |
| Data interface        | 10/100 Base-T Ethernet RJ45                     |
| Max. packet size      | 2048 bytes                                      |

### PHYSICAL FEATURES

|                           |  |
|---------------------------|--|
| Dimensions                | 306 x 306 x 82mm (packed)  |
| Weight                    | 3 kg (mounting kit included)   |
| PoE supply (not included) | 100-240 ACV 50/60 Hz input<br>56 DCV output<br>(Optional DC input 18-72 DCV) |
| Power consumption         | < 4 W (100% traffic)   |

### STANDARDS

|             |  |
|-------------|--|
| Protocol    | aerDOCSIS compatibility with 802.16-2012                         |
| Radio       | ETSI EN 301 893, ETSI EN 302 502                                 |
| Environment | ETSI EN 300 019-1-4C4.1E (ODU)<br>ETSI EN 300 019-1-3-C3.2 (IDU) |
| EMC         | ETSI EN 301489-1 V1.8.1<br>ETSI EN 301489-17V1.2.1               |

