

Lemko EZ LTE Solution - CBRS Band

Lemko Corporation's EZ LTE Solution is an advanced 3GPP compliant non-line of sight mobile wireless infrastructure platform designed specifically for enterprises and wireless broadband providers operating in the **CBRS band (Band 48** in the U.S.) and **Band 42 and 43** internationally.

This solution highlights Lemko's unique architecture for integrating various communications and collaboration applications into streamlined, ruggedized nodes for scalable mobile wireless networks. These self-enclosed nodes are ideally suited for outdoor and indoor installations where meeting clients' mobile wireless network technology goals and business objectives are of the utmost importance.

Cloud-based interfaces and applications support subscriber management, policy/charging control, reporting and monitoring. Each EZ LTE is rated up to 2W RF power and supports voice, SMS, high speed data, video calls and data handoff.



Key Facts

- Transmitter RF Power up to 2W (or \approx 1.8 miles, non-line of site)
- 20 MHz bandwidth capable
- Supports networking over microwave PTP and Satellite link
- Light pole mountable
- Supports 3GPP compliant CPE/UEs
- Compact footprint (includes EPC-PGW, SGW, MME, HSS, CDR/PCRF)
- Temperature operating range (-45°C to +55°C)
- Waterproof/Dustproof rated for harsh environment deployment
- Data off-load at each node

Product Specs

PERFORMANCE INDICES

Working Frequency

Band 48 (CBRS band), Band 42 and 43

Working Bandwidth

5MHz/10MHz/15MHz/20MHz

TDD DL \approx 90Mbps - UL \approx 30Mbps @ 20MHz

96 active users (3-Sectors: 288 active users)

Up to \approx 1.8 miles radius coverage

Ethernet Connection

Mobility

\leq 75 m/h

Receiver Sensitivity

-105dBm

PHYSICAL INDICES

Weight (DC)

< 5.5kg

ENVIRONMENT INDICES

Ground

\leq 5 Ω Earth resistance can be less than 10 Ω in lightning-less area with less than 20 lightning storms a year

Temperature

Outdoor: -45°C to +55°C

Heat Dissipation

Natural Cooling

RELIABILITY INDICES

MTTR

1hour

EMC INDICES

MTBF

\geq 350000 hours

Output Power (TOC)

2W (1W x 1W MIMO)

Synchronization Mode

GPS, IEEE1588

POWER INDICES

Power Supply

48V DC

Storage

Temperature: -45°C to +70°C
Relative Humidity: 5% to 95%

Relative Humidity

5% to 95%

Availability

99.9997%



Layer 7 backbone

Ethernet/Microwave Link (low cost)

Dimension (HxWxD)

12 x 9 x 5 (in)
300 x 228 x 120 (mm)

POWER CONSUMPTION

Power Dissipation

55W@100% RF load LTE

National/International Standard

ETSI EN 301 489-01,
ETSI EN 301 489-23
ETSI EN 300 386-V1.3.2
(CISPR22) Class B 1999/5/EC (R&TTE)

Waterproof/Dustproof

IP65

Downtime Duration

<1.481min/year