

LBOG-100VAC Series Optical Backhaul Demarcation Devices

APPLICATION NOTE

LINDSAY
BROADBAND

The expansive worldwide deployment of fiber has created the potential to deploy billions of IP devices. Installations in the outdoor space will be the most challenging. Lindsay's LBOG-100VAC series of products are cost-effective, outdoor-hardened, fiber demarcation devices providing data and PoE power up to 95 W. There are specific business segments that currently require Lindsay's LBOG-100VAC optical backhaul demarcation devices.

APPLICABLE TECHNOLOGIES

Technologies which can take advantage of these devices include:

- **Internet of Things (IoT):** 41.6 billion IoT devices will be generating 79.4 zettabytes of data in 2025. The number of devices connected to the Internet, including the machines, sensors, and cameras that make up the IoT, continues to grow at a steady pace.

(Reference: <https://www.helpnetsecurity.com/2019/06/21/connected-iot-devices-forecast/>)

- **LTE/CBRS/Private LTE:** The small cell 5G network market size is expected to grow from USD \$0.5 billion in 2019 to USD \$3.5 billion by 2025, at a Compound Annual Growth Rate (CAGR) of 37.1% during the forecast period. Small cells are low-power base stations that are used to improve network coverage and network capacity, helping end users to bolster their wireless connectivity. These cells are mostly deployed over indoor and outdoor environments to deliver rapid data services to customers. The small cell network would play a pivotal role in 5G networks. Currently, 5G telecom operators are more focused on deploying small cells under low-frequency band for delivering improved bandwidth services to customers.

(Reference: <https://www.marketsandmarkets.com/Market-Reports/small-cell-market-216204568.html>)

- **Wi-Fi® 6:** Wi-Fi 6 is the next generation standard in Wi-Fi technology. It is also known as "AX WiFi" or "802.11ax WiFi." Wi-Fi 6 connects multiple devices with the Internet and provides high Wi-Fi connection speed with the help of two key technologies: (1) Multi-user, multiple input, multiple output (MU-MIMO), and (2) orthogonal frequency division multiple access (OFDMA).

(Reference: <https://www.transparencymarketresearch.com/wifi-6-devices-market.html>)

The outdoor Wi-Fi market was valued at USD \$37.2 billion in 2019, and is projected to reach a value of USD \$82.64 billion by the end of 2025, at a CAGR of 14.24% during the forecast period 2020-2025. The prevalence of home and office Wi-Fi networks, hotspots in public venues, and Wi-Fi at

LBOG-100VAC Series

Outdoor-rated fiber PoE++ devices designed for backhaul and networking applications.

Available in single or dual output PoE++ ports, delivering 55 VDC to remote IP devices with the security of 6 kV surge protection and support 10/100/1000 Mbps data speed. Support IEEE 802.3af/at/bt applications, such as small cells, wireless APs, IP cameras, POS devices, IoT devices, information kiosks, and other high-power Ethernet backhaul devices. Effective distance is 100 meters over Cat5e/Cat6e cables. The IP66 housing does not need to be opened and provides a quick, seamless installation.



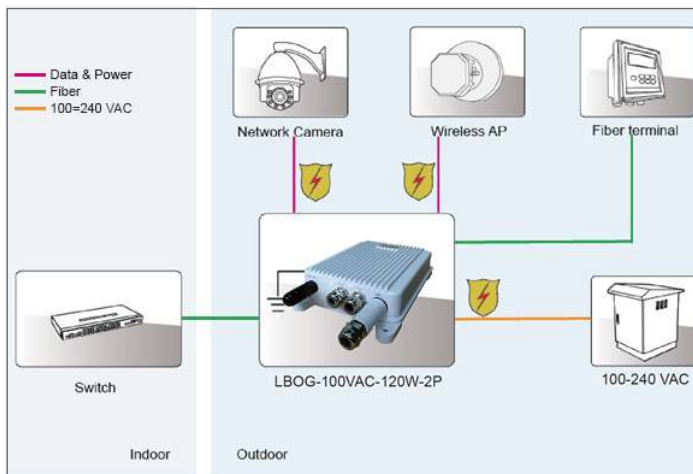
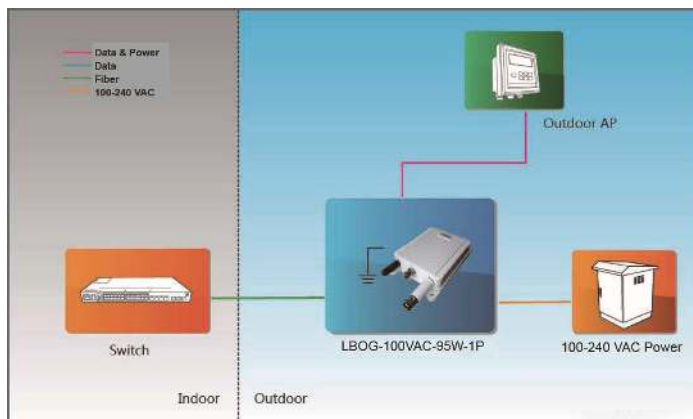
most commercial locations make connectivity easier.

(Reference: <https://www.mordorintelligence.com/industry-reports/outdoor-wi-fi-market>)

- **Security/Surveillance Cameras:** The global video surveillance system market was valued at USD \$52.45 billion in 2019 and is expected to reach USD \$90.37 billion by 2025, registering a CAGR of 9.31%, during the period of 2020-2025. The use of video surveillance in business is growing significantly, owing to the increasing need for physical security, coupled with the use of cloud-based services for centralized data.

(Reference: <https://www.mordorintelligence.com/industry-reports/global-video-surveillance-market-industry>)

APPLICATION DIAGRAMS



TARGET MARKETS

- Utilities
- Municipal
- IoT - Smart Cities
- WISP
- MNO/MSO
- Gated Communities

CONTACT LINDSAY BROADBAND TODAY

Lindsay Broadband's sales engineers develop customized applications to meet customers' needs. Lindsay's solutions enable you to turn up new services quickly and reliably.

Call us today - +1.705.742.1350
or info@lindsaybb.com

ABOUT LINDSAY BROADBAND

For over 65 years, Lindsay Broadband has been a global leader of technologically advanced solutions helping communication service providers deliver new business services from their networks, find new sources of revenue, and meet the exponentially growing data needs of businesses and consumers. Lindsay offers solutions for RF, optical, powering, and business services.

Solutions include LTE AC/DC power supplies, strand-mounted Wi-Fi hotspots, optical and DOCSIS® gateways, LTE small cell backhaul solutions, end-to-end optical equipment, standby/non-standby network power supplies, UPS systems, and RF solutions (including MDU and subscriber amplifiers, line extenders, hardline passives, DCs, multitaps, subscriber passives, cable modems and eMTAs).