



# LibraPlus 5860



## 5.x GHz High-Performance Outdoor Wireless

An advanced outdoor wireless Point-to-Point and Point-to-Multipoint platform, LibraPlus 5860 is built on more than a decade of OFDM experience. Packaged in a rugged, all weather enclosure, the full-featured LibraPlus 5860 comes complete with integrated bridging and routing software and extensive network and polling management support. With its high spectral efficiency, large capacity, user friendly GUI and rich feature-set, the LibraPlus 5860 is the ideal broadband wireless solution for rural and metropolitan requirements.

## Performance Optimized

The LibraPlus 5860 combines a powerful +28 dBm radio, advanced OFDM technology and a highly sensitive receiver to create a long-range, high-throughput product. OFDM offers many advantages, including effective use of bandwidth, resistance to interference, ability to take advantage of multi-path characteristics, and advanced error correction and recovery. The high spectral efficiency of the OFDM radio is capable of delivering up to 60 Mbps of bi-directional point-to-point throughput.

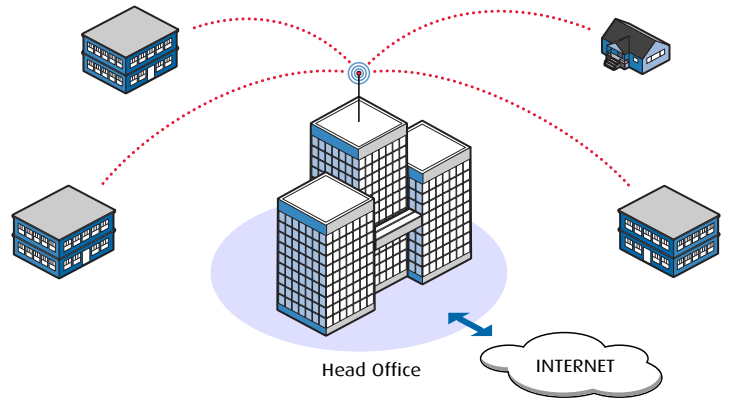
### EXTERNAL ANTENNA (ER, AP, LCPE)

This radio is housed in a rugged die-cast enclosure with an N-type female connector and supports a broad selection of external antennas for long-range applications.



## LibraPlus 5860 Multipoint Family

The LibraPlus 5860 Multipoint Product family has three product components: Access Point (AP), Customer Premises Equipment (CPE) and, Long-range Customer Premises Equipment (LCPE). For easy installation at the end-user location, the CPE comes with an integrated antenna. The AP and LCPE models are housed in a rugged die-cast enclosure with an N-type connector.

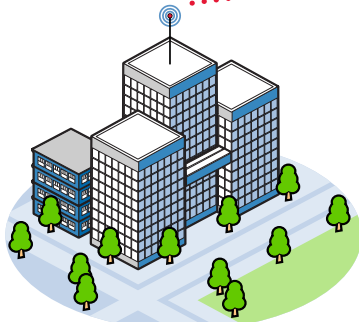


## LibraPlus 5860 Point-to-Point

The LibraPlus 5860 Point-to-Point family includes two product types, Rapid Deployment (RD) and Extended Range (ER). The RD model is packaged with an integrated antenna to save on time and cost during installation. The ER model is equipped with an N-type antenna connector for connection to an external antenna for long-range applications. Delivering a throughput of up to 60 Mbps, the LibraPlus 5860 PP offers a competitive alternative for backhaul applications.

### INTEGRATED ANTENNA (RD, CPE)

For easy installation at the end-user location, EION offers this time and money saving solution with an integrated antenna. No need for RF cables, RF connectors, antennas or extra work.



City Hall

Point-to-Point



Remote Office



## Solid Multi-Layer Security

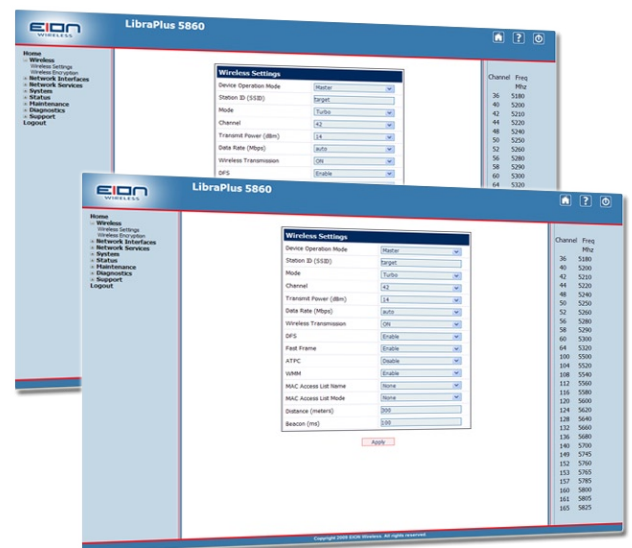
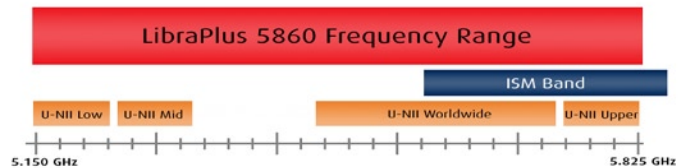
LibraPlus 5860 contains multi-layer security features to prevent eavesdropping and access from undesired intruders. LibraPlus 5860 provides protection of over-the-air transmissions with 128-bit AES encryption at full line speed. For increased security, the LibraPlus 5860 also supports 152-bit WEP and WPA. The rugged all-weather enclosure allows co-location on rooftops and masts limiting physical access.

## Comprehensive Network Management

LibraPlus 5860 takes a carrier-grade approach to network management with a rich Graphical User Interface (GUI) that displays a network level view of device and link status including comprehensive operator maintenance reports and RF diagnostics. The Support for SNMPv2 provides a standard management tool for advanced network requirements. Using these management features, a network administrator can easily control a large LibraPlus 5860 network from a single central location. EION's Enterprise MIB allows the monitoring of RF statistics like power, RSSI, and modulation.

## Extended Frequency & Channel Support

The LibraPlus 5860 provides frequency coverage for more than the standard license-free ISM band. The LibraPlus 5860 covers the complete 5.8 GHz range from 5.150 to 5.825, which includes the limited ISM band. This allows licensed operators to take advantage of unused spectrum in countries that allow it. In addition to the extended frequency support, LibraPlus 5860 contains a 20 MHz normal mode and a bandwidth boosting 40 MHz turbo channel size. The 5 and 10 MHz narrow channel sizes in the LibraPlus 5860 simplify sector planning for large multipoint networks by increasing the number of channels available in the supported band. For point-to-point connections, the narrow channel size provides a robust connection for long link distances due to an improved signal-to-noise ratio and better resilience to delay spread.

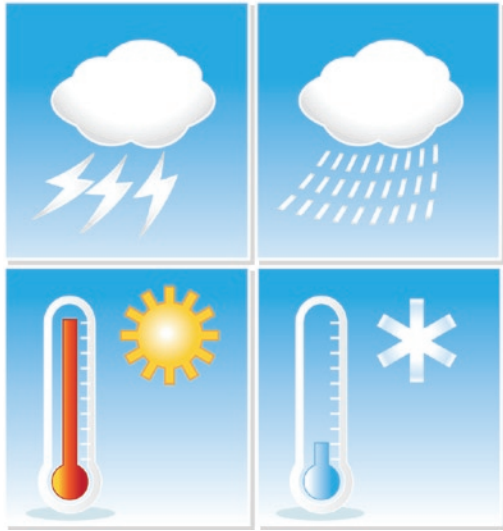


More Subscribers. More Reach. More Performance.



## Wireless Multimedia (WMM)

The LibraPlus 5860 WMM feature provides a basic service level for multimedia traffic. WMM prioritizes traffic over the wireless link according to the type of multimedia traffic; voice, video, best effort, or background. The Wireless Multimedia feature is aimed at enabling applications such as Voice over IP (VoIP), streaming video and IPTV while delivering simultaneous LAN and internet services.



## Rugged Construction

All of the electronics are secured in a rugged metal die cast enclosure designed to the IP66 specification. The enclosure is rated for outdoor operation in temperatures from -35° C to +65° C, and sealed against all environmental conditions to protect against wind, rain, snow, humidity and extreme temperatures. With the included hardware, the outdoor unit can be mounted to a wall, pole or tower.



[www.eionwireless.com](http://www.eionwireless.com)

**Corporate Headquarters**  
 320 March Road, Suite 500  
 Ottawa, ON, K2K 2E3  
 Canada  
 Phone: +1 (613) 271-4400  
 Fax: +1 (613) 271-7040



## VLAN Management

Using the VLAN Management feature in the LibraPlus 5860, network management and access to the Graphical User Interface can be separated to only those computers on a specific VLAN. This adds another layer of security to the LibraPlus 5860 and prevents tampering of the link characteristics from malicious users.

## EPPS & EDP Technology

The LibraPlus 5860 is engineered with EION's proprietary EPPS (EION, Protocol, Protection, Speed) technology for an ultra-secure connection that optimizes the maximum amount of bandwidth available for point-to-point applications. EPPS technology was developed using the latest in encryption and security methods to prevent malicious and non-registered users from eavesdropping or intercepting signals.

EION's proprietary EDP (EION Dynamic Polling) technology uses proprietary polling methods to ensure equitable distribution of traffic to all subscriber stations. The advantage of the EDP system is that the polling is assigned in real time, dynamically adapting to different traffic conditions.

## Fast Frame Packet Aggregation

Each individual packet in an IP stream contains a large amount of overhead data for management functions. When Fast Frame Packet Aggregation is enabled, the LibraPlus 5860 combines several packets together into a single jumbo packet. The end result is less management overhead as the packet passes over the wireless link, and of course higher overall throughput.

## Fully Certified

The LibraPlus 5860 is tested and covered under the European CE certifications. The LibraPlus is also certified by the Federal Communications Commission (FCC) Part 15 in the United States and Industry Canada (IC) RSS-210 in Canada. LibraPlus 5860 can also be registered in many other worldwide markets. For details please contact your local EION Wireless sales representative.



EION Wireless, a division of EION Inc., is a global provider of Broadband Wireless Access products that enable effective, economic and secure wireless high-speed communications solutions. EION is a Principal Member of the WiMAX Forum and was named one of the fastest fifty growing wireless companies in North America by Deloitte and Touche. With over ten thousand broadband wireless installations worldwide, the company's licensed and unlicensed frequency products are used by wireless ISPs, private network operators, and remote rural networks and in voice and data backhaul applications to solve last mile challenges. EION Wireless works with more than 165 worldwide channel partners to support its diverse global customer base.