

# LIBRAPLUS 5860

## HIGH-PERFORMANCE OUTDOOR WIRELESS



### OVERVIEW

An advanced outdoor wireless Point-to-Point and Point-to-Multipoint platform, LibraPlus 5860 is built on more than a decade of OFDM experience.

With its high spectral efficiency, large capacity, user friendly GUI and rich feature-set, the LibraPlus 5860 is the ideal unlicensed wireless solution for rural and metropolitan broadband requirements.

### TRUSTLINK ADVANTAGE

TrustLink™ technology ensures equitable distribution of traffic to all subscriber stations and uses intelligence to determine the number of polling cycles every user gets depending on the level of its activity. This way the network resources are not wasted during the polling of inactive users due to no user data transmission. TrustLink can be employed in both point-to-point and point-to-multipoint networks and dramatically reduces the effects of unwanted interference on the wireless link.

### PRODUCT FEATURES

- Point-to-Point and Point-to-Multipoint Topologies
- 5.x GHz Extended frequency range
- 40 MHz Turbo-Mode Channel Size
- 20 MHz Normal Channel Size
- 5 & 10 MHz Narrow Band Channel Sizes
- OFDM technology provides NLOS coverage in urban environments
- EION TrustLink™ Technology
- Up to 60 Mbps throughput in Point-to-Point Applications
- User Friendly Web-Based GUI
- SNMPv2 and enterprise MIB for advanced network management
- Integrated Antenna Model for Rapid Deployment and External Antenna Model for Extended Range
- High spectral efficiency and robust RF network design
- Rugged construction for all weather conditions (-35° C to +70° C)

Product Name	Product Description	Product Code
LibraPlus 5860-28 RD	RD (Rapid Deployment) Point-to-Point with integrated 23 dBi antenna	9140-2820-(M*/S*)
LibraPlus 5860-28 ER	ER (Extended Range) Point-to-Point with N-type antenna connector	9140-2821-(M*/S*)
LibraPlus 5860-28 CPE	CPE (Customer Premise Equipment) Point-to-Multipoint with integrated 23 dBi antenna	9140-2802
LibraPlus 5860-28 AP	AP (Access Point) Point-to-Multipoint with N-type antenna connector	9140-2803
LibraPlus 5860-28 LCPE	LCPE (Long Range CPE) Point-to-Multipoint with N-type antenna connector	9140-2804

\* Master (M) and Slave (S) Point-to-Point Radios with TrustLink™ Technology MUST be ordered as a pair.

DATASHEET  
**LibraPlus 5860**

<b>Radio</b>		<b>LibraPlus 5860 AP, CPE, LCPE, RD, ER</b>
Topology	RD, ER: Point-to-Point; AP, CPE, LCPE: Point-to-Multipoint with Dynamic Polling	
Frequency*	5.005 to 5.995 GHz	
Channel Size*	Quarter: 5 MHz; Half: 10 MHz; Normal: 20 MHz; Turbo: 40 MHz	
Channel Spacing	5 MHz × channel number for CF	
Modulation	OFDM: BPSK, QPSK, 16QAM, 64QAM	
Antenna	RD, CPE: 23 dBi flat panel antenna; ER, AP, LCPE: N-Type female RF connector	
Physical Line Rate	100 Mbps	
Effective Throughput	up to 60 Mbps	
Output Power†	up to +28 dBm, Adjustable in 1 dB steps up to license key power limit	
Duplexing Format	TDD, Half-Duplex	
<b>Network Support</b>		
Medium Access Control	Proprietary MAC, EPPS (RD, ER), TrustLink (AP, CPE, LCPE and –M and –S radios)	
Network Connection	10/100 Base T Auto-Negotiate	
Operational Mode	Transparent Bridging, Multicast	
QoS	Uplink and Downlink Traffic Shaping per CPE (AP, CPE, LCPE); WMM: Voice and Video priority (RD, ER)	
Fast Frame Aggregation	Yes (RD, ER)	
MAC Filtering	Yes, configurable black or white Access Control Lists	
VLAN	Data Tagging/Untagging, 802.1q transparency, VLAN Management	
Intra-sector Bridging	Yes	
<b>Wireless Networking</b>		
Output Power Mgmt.	Yes, Manual or Automatic	
Data Rate Selection	Manual or Dynamic	
<b>Security</b>		
Radio Access	Username and Password	
Data Scrambling	WPA1, WPA2 (CCMP, TKIP), WEP (64,128,154)	
<b>Management</b>		
Remote Management	Web-GUI, SNMPv2 (Set, Get and Traps with proprietary MIB)	
Management Access	Over the Air & Wired over prioritized ports	
Installation Management	RSSI Indicator, Wireless Link Monitoring, Audible Antenna Alignment Beeper, Built-in Spectrum Analyzer	
Backup Configuration	Save Radio Configuration to local PC	
Software Upgrade	Over the Air, local, Web-based upgrade, Dual bank to allow rollback	
<b>Physical, Electrical &amp; Environmental</b>		
Mounting Bracket	Yes, 2-Axis pole/wall	
Power Consumption	Max 10 W	
Input Voltage	100-240V, 50/60 Hz AC	
Operating Temperature	-35° C to +70° C	
Environmental	RoHS and WEEE	
Enclosure	Die Cast NEMA 4x; Designed to IP66	
Relative Humidity	0 to 100%, condensing	
Certifications	FCC Part B 15.109, ICES-003; FCC ID: XEC-LP5860-001; FCC Part 15.247, subpart C, 15.203, 15.207 (2007), 15.109, 15.407 ETSI EN 301 489-1, EN 301 893, EN 301 489-17 (EMC Wideband data and HIPERLAN) EN 50385-2002, EN 55022, EN 61000; Safety: UL 60950 equivalent EN60950 (EU); Modular approvals (electrical); RoHS	
Lightning Protection	Integrated, Telcordia GR-1089 compliant (Meets IEC 61000-4-2/ 4-4)	
Dimensions	AP, ER, LCPE: 230 × 230 × 65 mm; RD, CPE: 300 × 300 × 90 mm	
Weight	AP, ER, LCPE: 2.0 kg; RD, CPE: 2.3 kg	

† Maximum power output is set by country specific licensing key. The operator of this product must ensure compliance when selecting external antennas with the limits specified by local regulation prior to deployment  
 \* Frequency bands that are available to the operator are determined by country specific licensing key.

