



ELLIPSE

Wireless TCP/IP Base Station or Remote for Dedicated High Capacity Data Transport/Backhaul

The RDL-3100 XG provides high-capacity reliable wireless transport for small sector trunking and backhaul services.

The RDL-3100 XG low latency system is used for transporting multiple TCP/IP based services including transparent LAN, MPLS, IoT, M2M, small cell backhaul, VoIP and high-resolution video.

This system is simple to setup and operate for small sectors of up to 4 remotes and provide hitless throughput up to 373 Mbps over the air.

FEATURES AND BENEFITS

- Highly reliable transport hub intended for high throughput, low latency PTP/PMP applications
- High throughput for concurrent transport of M2M telemetry and telecontrol, data, video and voice services
- Durable all-weather enclosure for reliable operation in extreme temperatures and environmental conditions
- Over-the-air monitoring, configuration and software keyed features enable upgrades without physical access
- Software-defined architecture enhances reliability and service lifetime

PRODUCT COMPLEMENTS

A full line of carrier grade antennas are available to address all your deployment challenges. Use Redline's ClearView NMS for complete element management and over-the-air software upgrades. Redline provides a complete selection of peripherals and professional services for all your deployment needs.

UNIFIED GLOBAL SOLUTIONS

Redline's patented UWT™ technology provides a truly unified wireless networking solution—across the spectrum, across your company and across the globe—enabling secure, reliable, high-speed connectivity to people and smart devices everywhere.



SYSTEM AT A GLANCE

Outdoor software-defined wireless base station for PTP and PMP applications

Operation between 4.9 - 5.8 GHz

Reliable fast transport of M2M, data, HD video and voice

Geo-location & timing using built-in GPS

Wide selection of MIMO antennas

-40 to 75 °C operating range using dynamic and thermal dissipation (no moving parts)

High-grade cyber security features

Low latency supports time-sensitive applications

Low power consumption suitable for alternative power

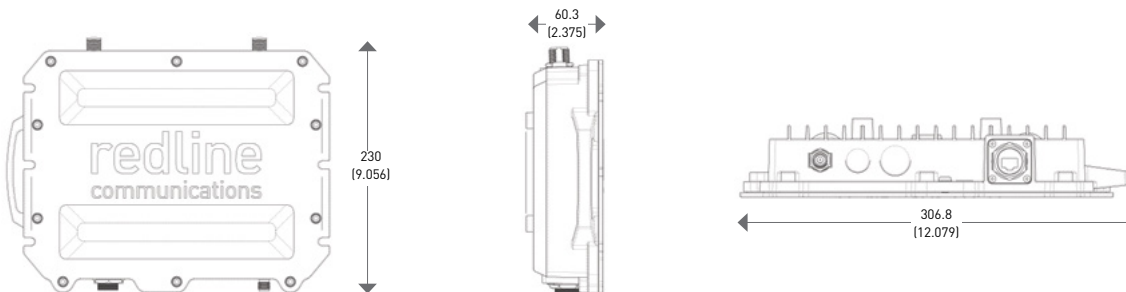
RDL-3100 XG ELLIPSE SPECIFICATIONS

Capability	LOS/OLoS PTP Controller/Remote; PMP Base Station 1+4
Wireless transmission	OFDM (orthogonal frequency-division, multiplexing), TDD/TDMA 2 x 2 MIMO A/B with STBC & MRRC
RF Band (MHz)	4940-5875 ¹
Channel Size (MHz)	10/14/20/28/40 software selectable ¹
Modulation & Coding	BPSK 1/2 to 256 QAM 7/8 ¹
System Capacity	Up to 373 Mbps ¹ UBR
Max Range	150 km (93.75 mi) ²
Max Tx Power	+25 dBm ¹ (Max combined tx power, MIMO mode/frequency band specific)
Antenna Info	External MIMO sectoral or omni directional
Wireless QoS	Dynamic Spectrum Access & Management ¹
MAC	Dynamic ARQ, dynamic adaptive modulation, fixed frame, fusion fast link adaptation, optimized for throughput
Security	AES-128/256 (OTA, FIPS 197 compliant); HTTPS (SSL), SSH (CLI), SNMP v3; MAC-based Mutual Authentication; ECDSA Certificates Authentication ¹
Connection	10/100/1000 Ethernet (RJ-45), 2xRF N(f), 1xGPS TNC(f)
Layer 2	Up to 335 Mbps ¹
Latency	Frame size 1/2.5/5/10 ms
Attributes	Auto. link distance ranging, transparent bridge, DHCP pass-through, 802.1Q VLAN
Network QoS	CIR, PIR support, multiple services per terminal, 802.3x, 802.1p
Management	Redline ClearView NMS, SNMP v2/v3, HTTP/HTTPS (Web), Telnet/SSH (CLI), RADIUS (User Authentication)
Provisioning	MAC-Based; Template-based ¹ ; Automatic using Redline ClearView NMS ¹
Redundancy	HSR or PRP compatible
Temperature	-40 to 75 °C (-40 to 167 °F)
Enclosure	IP67 (IEC 60259)
Humidity	100% humidity, condensing
Location & Timing	Built-in GPS
Surge Protection	Built-in: PoE and RF ports
Power	<15W; Standard IEEE 802.3af (PoE); CAT5e cable 100m (330 ft) max.

All specifications are subject to change without notice.

1. Availability restricted by regional regulations, model type, software version and purchased product options;
2. Channel Size Dependent

DRAWINGS



Dimensions are in millimeters (inches)

Compliance

Safety: IEC, EN, and UL/CSA 60950

EMC: EN 301 489-1, EN 301 489-17

5.8 GHz¹: IC RSS-210, FCC Part 15,
ETSI EN 302 502

5.4 GHz¹: IC RSS-210, FCC Part 15,
ETSI EN 301 893

5.2 GHz¹: IC RSS-210, FCC Part 15

4.9 GHz¹: IC RSS-111, FCC Part 90

Security: FIPS 197 Compliant



Physical Attributes

Dimensions

306.8 x 230 x 60.3 mm (12.079 x 9.06 x 2.375 in)

Weight

2.7 kg (6.0 lbs) without bracket or antenna

Patent No.

US 9,468,028 B2