



**ELLIPSE**

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

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

The RDL-3100 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

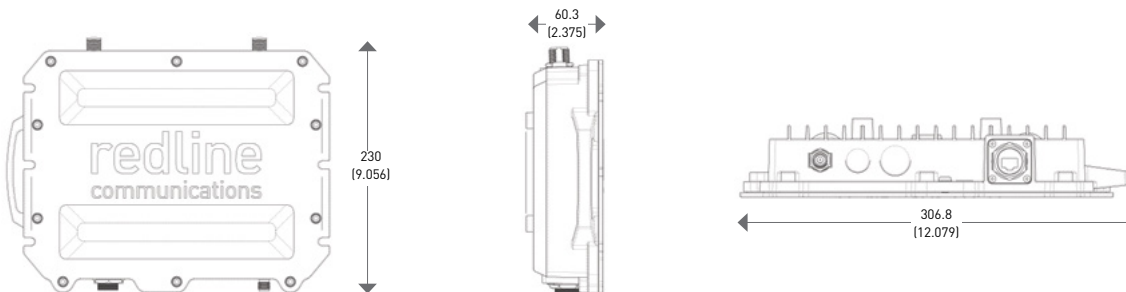
## RDL-3100 XG ELLIPSE SPECIFICATIONS

<b>Capability</b>	LOS/OLoS PTP Controller/Remote; PMP Base Station 1+4
<b>Wireless transmission</b>	OFDM (orthogonal frequency-division, multiplexing), TDD/TDMA 2 x 2 MIMO A/B with STBC & MRRC
<b>RF Band (MHz)</b>	4940-5875 <sup>1</sup>
<b>Channel Size (MHZ)</b>	10/14/20/28/40 software selectable <sup>1</sup>
<b>Modulation &amp; Coding</b>	BPSK 1/2 to 256 QAM 7/8 <sup>1</sup>
<b>System Capacity</b>	Up to 373 Mbps <sup>1</sup> UBR
<b>Max Range</b>	150 km (93.75 mi) <sup>2</sup>
<b>Max Tx Power</b>	+25 dBm <sup>1</sup> (Max combined tx power, MIMO mode/frequency band specific)
<b>Antenna Info</b>	External MIMO sectoral or omni directional
<b>Wireless QoS</b>	Dynamic Spectrum Access & Management <sup>1</sup>
<b>MAC</b>	Dynamic ARQ, dynamic adaptive modulation, fixed frame, fusion fast link adaptation, optimized for throughput
<b>Security</b>	AES-128/256 (OTA, FIPS 197 compliant); HTTPS (SSL), SSH (CLI), SNMP v3; MAC-based Mutual Authentication; ECDSA Certificates Authentication <sup>1</sup>
<b>Connection</b>	10/100/1000 Ethernet (RJ-45), 2xRF N(f), 1xGPS TNC(f)
<b>Layer 2</b>	Up to 335 Mbps <sup>1</sup>
<b>Latency</b>	Frame size 1/2.5/5/10 ms
<b>Attributes</b>	Auto. link distance ranging, transparent bridge, DHCP pass-through, 802.1Q VLAN
<b>Network QoS</b>	CIR, PIR support, multiple services per terminal, 802.3x, 802.1p
<b>Management</b>	Redline ClearView NMS, SNMP v2/v3, HTTP/HTTPS (Web), Telnet/SSH (CLI), RADIUS (User Authentication)
<b>Provisioning</b>	MAC-Based; Template-based <sup>1</sup> ; Automatic using Redline ClearView NMS <sup>1</sup>
<b>Redundancy</b>	HSR or PRP compatible
<b>Temperature</b>	-40 to 75 °C (-40 to 167 °F)
<b>Enclosure</b>	IP67 (IEC 60259)
<b>Humidity</b>	100% humidity, condensing
<b>Location &amp; Timing</b>	Built-in GPS
<b>Surge Protection</b>	Built-in: PoE and RF ports
<b>Power</b>	<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 GHz<sup>1</sup>: IC RSS-210, FCC Part 15,  
ETSI EN 302 502

5.4 GHz<sup>1</sup>: IC RSS-210, FCC Part 15,  
ETSI EN 301 893

5.2 GHz<sup>1</sup>: IC RSS-210, FCC Part 15

4.9 GHz<sup>1</sup>: 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