

# LTE Single-Band Micro Cell eNodeB

Ellipse 4G HP is an all-outdoor, compact, ruggedized, single band Micro cell eNodeB, built to deliver LTE access for Private and Public LTE networks. The Ellipse 4G HP is designed to 3GPP specifications supporting mobility, and fixed User Equipment.

### **FEATURES AND BENEFITS**

- Macro area coverage in micro form factor
- All-outdoor hardened design eliminates the need for additional rack or cabinet space
- Leverages reliable, proven and deployed Texas Instruments<sup>®</sup> base technology.
- LTE standards-based allowing a wide selection of remote devices supporting data, video, PTT, VoLTE and full mobility.
- Best in class power efficiency
- Easy to deploy with built-in GPS receiver, standard GigE and 48VDC

### **PRODUCT COMPLEMENTS**

The Ellipse 4G HP eNodeB interoperates with a variety of EPC's and UE's. Redline also offers a complete selection of antennas and peripherals including professional services and core applications for all your deployment needs.

## **UNIFIED GLOBAL SOLUTIONS**

Redline's iLTE™ 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**

3GPP Wide Area BS eNodeB

2x2 MIMO

Digital Pre-distortion Transmitters

FDD or TDD Band Classes

Ruggedized for outdoor harsh environments

Compact form factor and light weight

Low power consumption

Wide selection of MIMO antennas

Software Defined Radio — Support remote field upgrades of new features and standards

Backhaul options including RDL-3100 Licensed Microwave and Fiber

Tested with many UE's and EPC's



# **RDL-6000 L1 ELLIPSE 4G HP SPECIFICATIONS**

Platform Classification	All outdoor eNodeB Wide Area BS
Transmit Power Class	20 Watts
3GPP Release	9+ (Features rolled in as required))
Supported 3GPP Band Classes (Contact Redline for additional bands)	700 MHz FDD B12, B13, B14, B17, B28 800 MHz FDD B5, B20, B26 2000 MHz: B4, B66 2500 MHz: B41 3500 MHz: B42, B43
Number of Active UE's	128
Access Scheme	DL: OFDMA UL: SC-FDMA
Modulation	DL: QPSK, 16QAM, 64QAM UL: QPSK, 16QAM
Antenna Technology	DL: 2x2 MIMO UL: 1x2 SIMO
Channel Size	5, 10, 20 MHz
Transmit Power	B14 FCC 22W; 700 MHz: 2x +39 dBm; 800 MHz: 2x +38 dBm; 2000 MHz: 2x +38 dBm; 2500 MHz <sup>2*</sup> +38 dBm; 3500 MHz: <sup>2*</sup> +38 dBm
Receiver Sensitivity	-118 dBm based on PRB in 10 MHz for Wide Area BS defined by 3GPP
Transmission Rate (max)	DL: 150 Mb/s UL: 50 Mbps
Data/Control/Management Interfaces	Single 1000Base-T (including S1 & X2)
Mobile Environment	Up to 120 km/h (75 mph)
Range	Up to 37 km (23 miles)
Environmental	-50 to +60 °C (-58 to 140 °F); IP67, Nickel plated, powder coat
Surge Protection	Built-in
Management	FlexCore-EPC; Telnet/SSH, SNMP, NetConf; Deployment Profiles
Power	48VDC; <80W
Timing	Integrated GPS receiver & IEEE 1588
Terminations	RF: 2x N(f); Data: 1x RJ45; GPS: 1x TNC(f); DC: 1x 4-pin

# Compliance

3GGP: Release 9+ Safety: IEC, EN, and UL/CSA 60950 EMC: EN 301 489-1. EN 3-1 489-17 FCC B4<sup>2</sup>, B66<sup>2</sup>, B14, B12, B17 ISED: B42, B662, B12, B17 ETSI<sup>2</sup> Other Bands Pending



## **Physical Attributes**

## **Dimensions**

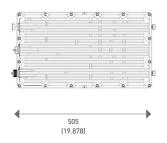
505 x 268 x 166 mm (19.878 x 10.563 x 6.537 in)

## Weight

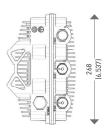
10.2 Kg (22.5 lb)

All specifications are subject to change without notice. 1. Initial band, others to be determined; 2. Pending

## **DRAWINGS**







Dimensions are in millimeters (inches)

302 Town Centre Blvd. Markham, ON L3R 0E8 Canada w rdlcom.com

t +1.905.479.8344

e info@rdlcom.com tf +1.866.633.6669

