RDL-6000

ELLIPSE 4G HP

LTE Single-Band Mini-Macro eNodeB

Ellipse 4G HP is an all-outdoor, compact, ruggedized, single-band Mini-Macro cell eNodeB, built to deliver LTE access for Private and Public LTE networks. The Ellipse 4G HP is designed to 3GPP and CBRS Alliance specifications with support for mobility and fixed User Equipment (UE).

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® 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, 1588, standard GigE and 48VDC.

PRODUCT COMPLEMENTS

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

SYSTEM AT A GLANCE

3GPP Wide Area BS eNodeB

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

redline communications

POWERFUL. VERSATILE. RELIABLE.

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 B05, B08, B20[2], B26 2000 MHz: B01, B04, B66 2500 MHz: B07, B41 3500 MHz: B42, B43[1], B48
Number of Active UEs	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 (Tx Power Output per Port)	700 MHz: 2x +39 dBm; 800 MHz: 2x +38 dBm; 2000 MHz: 2x +38 dBm; 2500 MHz: 2x +39 dBm; 3500 MHz: 2x +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 2-pin

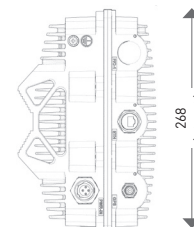All specifications are subject to change without notice.
1. Partial Band; 2. Pending

Compliance

3GGP: Release 9+

Safety: IEC, EN, and UL/CSA 60950

EMC: EN 301 489-1. EN 3-1 489-17

FCC: B04, B05[2], B07[2], B12, B13[2], B14, B17, B26[2], B48[2], B66[2]

ISED: B04, B05[2], B07[2], B12, B13[2], B14, B17, B66[2]

ETSI: B01[2], B20[2],B28[2], B41[2], B42[2], B43[2]

Other Bands Pending

RoHS Compliant

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)

DRAWINGS

505
(19.878)
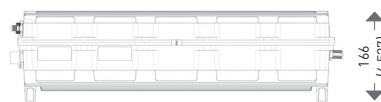
166
(6.537)

268
(10.563)

Dimensions are in millimeters (inches)

redline communications