

RDL-6000 L1 Ellipse 4G HP

CBRS Band Class 48 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).

CITIZENS BROADBAND RADIO SERVICE

The Citizens Broadband Radio Service (CBRS) is comprised of 150 MHz of spectrum in the 3.5 GHz band and is currently available for commercial use. This regulated spectrum is accessible to Priority Access License (PAL) users (purchased by auction) and General Authorized Access (GAA) users.

Access to CBRS spectrum is controlled by a cloud-based Spectrum Access System (SAS). The SAS dynamically allocates spectrum to users based on license type and real-time spectrum use within the requested geographic area.

The Ellipse 4G employs an embedded SAS client that registers with the SAS cloud service to obtain a 10 MHz or 20 MHz channel, depending on regional regulations and spectrum usage in the location. This GAA access enables economical use of LTE band class 48 (CBRS) UEs. CBRS SAS subscriptions for the Ellipse 4G can be ordered directly from Aviat Networks.

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. Aviat Networks 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

Embedded SAS Client for operation in CBRS spectrum

Support for LTE band class 48 (CBRS) UEs

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

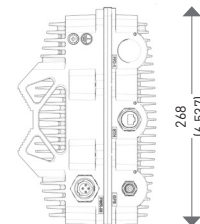
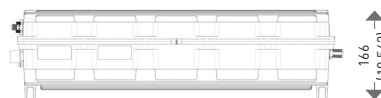
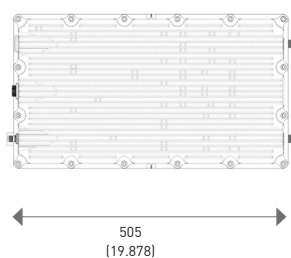
Backhaul options including RDL-3100 Licensed Microwave and Fiber

RDL-6000 L1 ELLIPSE 4G HP SPECIFICATIONS

Platform Classification	All outdoor eNodeB Wide Area BS
Transmit Power Class	20 Watts
3GPP	Compliant
Supported 3GPP Band Classes (Contact Aviat Networks for additional bands)	3500 MHz: B48 (CBRS)
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)	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	-40 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.

DRAWINGS



Dimensions are in millimeters (inches)

Compliance

Safety: IEC/EN/UL 60950-1, CSA-C22.2 No. 60950-1-07, IEC/EN/UL 62368-1, CSA-C22.2 No. 62368-1:14

FCC: FCC Part 96, CBRS (Band 48)

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)