The RDL-3000 Ellipse manages all security, traffic scheduling and Quality of Service (QoS) functions for Redline’s extensive family of outdoor wireless TCP/IP remote data terminals. This highly configurable wireless base station features powerful processing capabilities to reliably transport any mix of wireless traffic between the base station and multiple remote sites.

**FEATURES AND BENEFITS**

- Highly reliable transport hub supports all RDL-3000 remote wireless data terminals including auto-acquire systems
- 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**

The Ellipse base station is fully compatible with all Redline RDL-3000 wireless remote terminals. 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.
ELLIPSE SPECIFICATIONS

Capability
- LOS/OLOS/NLOS PMP Base Station¹ or PTP Terminal¹

Wireless transmission
- OFDM (orthogonal frequency-division, multiplexing), TDD/TDMA
- 2 x 2 MIMO A/V with STBC & MRRRC

RF Band (MHz)
- 470-698¹, 2000-2300¹, 2300-2700¹, 3300-3800¹, 4940-5875¹

Channel Size [MHz]
- 0.875/1.25/1.75/2.5/3.5/4/5/6/7/10/12/14/20 software selectable¹

Modulation & Coding
- BPSK 1/2 to 64 QAM 5/6, 256 QAM¹

System Capacity
- 3 Mbps to 186.6 Mbps¹ UBR

Max Range
- 100 km (66 mi)

Max Tx Power
- +30 dBm¹ (Max combined tx power, MIMO mode/frequency band specific)

Antenna Info
- External MIMO sectoral or omni directional

Wireless QoS
- Dynamic Spectrum Access & Management¹

MAC
- Per link: dynamic ARQ, dynamic adaptive modulation, dynamic and fixed frame

Security
- AES-128/256 (OTA, FIPS 197 compliant); HTTPS (SSL), SSH (CLI), SNMP v3; MAC-based Mutual Authentication; ECDSA Certificates Authentication¹, FIPS 140-2¹

Connection
- 10/100 Ethernet (RJ-45), 2xRF N(f), GPS TNC(f)

Layer 2
- 512 Kbps to 100 Mbps (data rate limited by remote unit’s option key)¹

Latency
- <10 ms

Processing (PPS)
- >150,000

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, HTTP (Web), Telnet (CLI), RADIUS (User Authentication)

Provisioning
- MAC-Based; Template-based¹; Automatic using Redline ClearView NMS¹

Redundancy
- 1+1 Warm Standby¹

Temperature
- -40 to 75 °C (-40 to 167 °F)¹

Enclosure
- IP67 [IEC 60259]

Humidity
- 100% humidity, condensing

Location & Timing
- Built-in GPS¹

Surge Protection
- Built-in: PoE and RF ports

Power
- <17W; Standard IEEE 802.3at [PoE]; CAT5 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. Pending; 3. In Process; 4. UHF systems only: 60 °C (140 °F)

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
- 4.35-3.70 GHz¹: IC RSS-197, FCC Part 90Z
- 3.6 GHz¹: IC RSS-192
- 3.3-3.8 GHz¹: ETSI EN 302 326-2
- 2.6 GHz¹: EN 302-544
- 2.4 GHz¹: IC RSS-210, ETSI 300-328, FCC Part 15C²
- 2.3 GHz¹: IC RSS-195
- 2.1 GHz¹: [2.025-2.110 GHz¹, 2.200-2.290 GHz¹]
- ITU-R F.1098
- 600 MHz¹: IC RSS-196, FCC Part 15H

Security: FIPS 140-2³, 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 antennal

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