

EDGE

Wireless TCP/IP Data Terminal for Extended Ranges and Frequency Bands

The RDL-3000 Edge provides secure reliable wireless transport for challenging fixed point-to-point (PTP) and point-to-multipoint (PMP) deployments requiring higher power, longer range and operation in extended frequency bands. This highly configurable wireless data terminal includes a HazLoc certified option for deployment in hazardous zones.

FEATURES AND BENEFITS

- Highly reliable data terminal with flexible architecture adapts to meet the most challenging PMP and PTP deployment scenarios
- High throughput for concurrent transport of M2M telemetry and telecontrol, data, video and voice services
- Durable all-weather enclosure for reliable operation in extreme temperature ranges 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 Edge is fully compatible with all Redline RDL-3000 family base stations and 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.



SYSTEM AT A GLANCE

Outdoor software-defined
186.6 Mbps wireless terminal
for PMP and PTP applications

Flexible architecture solve tough
deployment challenges

Reliable fast transport of M2M,
data, HD video and voice traffic

Geo-location 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

Very low latency supports
time-sensitive applications

Low power requirement suitable
for solar applications

EDGE SPECIFICATIONS

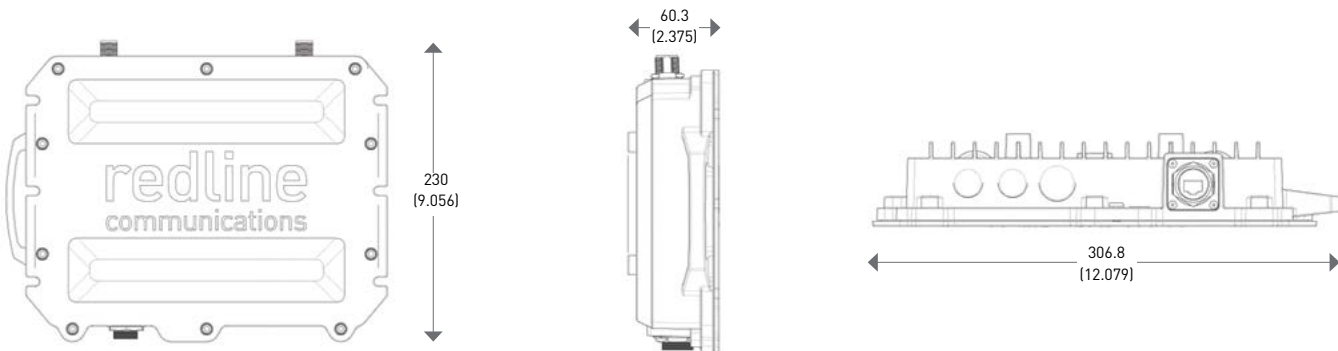
Capability	LOS/OLOS/NLOS PMP Terminal, PTP Terminal ¹
Wireless transmission	OFDM (orthogonal frequency-division, multiplexing), TDD/TDMA, 2 x 2 MIMO A/B with STBC & MRRRC
RF Band (MHz)	470-698 ¹ , 2000-2300 ¹ , 2300-2700 ¹ , 3300-3800 ¹ , 4940-5875 ¹
Channel Size (MHz)	0.875/1.25/1.75/2.5/3.5/5/6/7/10/12/14/20 software selectable ¹
Modulation	BPSK 1/2 to 64 QAM 5/6, 256 QAM ¹
System Capacity	3 Mbps to 186.6 Mbps ¹ UBR
Max Range	100 km (66 mi)
Max Tx Power	+30 dBm ¹ (Max combined tx power, MIMO mode/frequency band specific)
Antenna Info	External MIMO
Wireless QoS	Dynamic Spectrum Access & Management ¹
MAC	Dynamic ARQ
Security	AES 128/256 (OTA, FIPS 197 compliant); HTTPS (SSL), SSH (CLI), SNMP v3; MAC-based, Mutual Authentication; ECDSA Certificates Authentication ¹ ; FIPS-140-2 ¹
Authentication	X.509 Certificates (software keyed)
Connection	10/100 Ethernet (RJ-45), 2xRF N(f)
Layer 2	512 Kbps to 100 Mbps ¹
Latency	<10 ms
Processing (PPS)	>150,000
Attributes	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	Automatic templates using ClearView NMS ¹
Redundancy	1+1 Hot Standby ¹ (PRP or RSTP compatible)
Temperature	-40 to 75 °C [-40 to 167 °F] ⁴
Enclosure	IP67 (IEC 60259)
Humidity	100% humidity, condensing
Surge Protection	Built-in: PoE and RF ports
Power	<17W; Standard; IEEE 802.3at (PoE); CAT-5 cable 100 m (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]

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 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

3.65-3.70 GHz¹: IC RSS-197, FCC Part 90Z

3.5 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

HAZ³: ATEX/IECEx: Zone 2, CSA: Class 1 Div 2

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 antenna