



Broadband Wireless Access Solution for  
Voice / Video / Data / M2M Communications



## Datasheet

# Base Station for Access Solutions

## RDL-3000 SC

RDL-3000 Series Solutions  
More flexible than fiber

### AT A GLANCE

Software-defined carrier-grade wireless base station system

2.5 / 3.5 / 4.9 - 5.8 GHz bands

Selection of external antennas

Integrated GPS for geo-location and synchronization for collocation with other TDD systems

Up to 120 Mbps over the air (OTA)

Flexible Quality of Service profiles

Effective multipath and interference mitigation for non line-of-sight operation

Scalable using software keyed speeds and applications

All outdoor, low power installation

Powerful packet processing capacity delivers very low end-to-end latency

Superior reliability with the best MTBF in the wireless industry

Remote management and KPI monitoring solution using Redline ClearView NMS

Use the RDL-3000 SC Virtual Fiber™ solution to manage PMP wireless IP traffic scheduling, Quality of Service (QoS), and security for Redline's versatile line of premium access subscribers. This powerful base station reliably manages multiple data streams to extend coverage, fill service gaps, connecting M2M devices, and support high capacity applications including business access and 4G/LTE off-loading.

Available in a range of frequency bands, the RDL-3000 SC delivers high-speed, low latency, and five-9's availability in the most challenging deployment conditions. You can rely on the RDL-3000 SC to provide robust high speed connectivity to wireless access points throughout cluttered urban cities, in business parks, and across open rural terrain. Use the flexible QoS profiles to actively manage fine SLA controls on every end-to-end connection.

Join the growing list of enterprises, service providers, and local & state governments globally using Redline's Universal Wireless Transport (UWT) to reliably connect people and machines everywhere. Redline Virtual Fiber™ solutions — where nothing else works.

### FEATURES AND BENEFITS

- ❑ RDL-3000 SC controls any mix of Redline access series subscribers
- ❑ Durable IP67 rated enclosure ensures many years of reliable low maintenance service
- ❑ Virtual Fiber™ solution overcomes the time/cost of obstacles such as roads, waterways, and rights-of-way
- ❑ Complete over-the-air monitoring, configuration, and software upgrades without physical access to the system
- ❑ Purchase only initial performance levels and features and upgrade later over-the-air without replacing hardware
- ❑ Fully software-defined design provides enhanced flexibility and extends system life far beyond fixed hardware solutions

### PRODUCT COMPLEMENTS

The RDL-3000 SC base station wirelessly controls the Enterprise, RDL-3000 SU and AN-80i. RDL-3000 series access solutions are supplemented by a full line of carrier grade peripherals including antennas, cables, mounting hardware, and power sources.

POWERFUL. VERSATILE. RELIABLE.

**redline**<sup>®</sup>  
communications

## REDLINE VIRTUAL FIBER

Redline Virtual Fiber™ is your smart alternative to deliver IP connectivity whenever fiber-like performance is required and you need to deploy rapidly, where fiber is not available, or fiber is impractical. With simple setup and connection, scalable performance options, superior physical security and reliability, Redline Virtual Fiber™ provides flexibility not available with fiber.

## REDLINE PROFESSIONAL SERVICES

Redline Professional Services cover the entire spectrum of complex tasks to design, build, optimize, and manage private wireless broadband networks. From product training and cell planning to complete turnkey solutions, let Redline and their global partners help you realize and manage a world class wireless network.

Redline is widely recognized as having one of best customer support programs in the wireless industry for delivering responsive customer and solution support everywhere Redline's products are deployed.

## SOFTWARE OPTIONS

- MetroLINK
- SecureLINK
- RapidLINK
- VideoLINK



## COMPLIANCE



## ABOUT REDLINE COMMUNICATIONS

Redline Communications ([www.rdlcom.com](http://www.rdlcom.com)) is the innovator of Virtual Fiber™, a rugged wireless broadband solution used to cost-effectively deploy and extend secure networks, enable machine-to-machine (M2M) applications, connect digital oilfields and smart grids, facilitate and enhance public safety networks, and bring Internet access wherever and whenever it's needed – regardless of terrain or remote location. For more than a decade Redline has delivered powerful, versatile and reliable wireless systems to governments, militaries, oil and gas companies and telecom service providers through its global network of certified partners.

## RDL-3000 SC SPECIFICATIONS

<b>System Capability</b>	LOS, OLOS, and NLOS PMP Base Station / PTP
<b>Wireless Transmission</b>	OFDM (orthogonal frequency-division, multiplexing), 2 x 2 A/B MIMO, TDD
<b>RF Band</b>	2300-2700 MHz <sup>1</sup> , 3300-3800 MHz <sup>1</sup> , 4940-5875 MHz <sup>1</sup>
<b>Channel Size</b>	3.5/5/7/10/14/20 MHz <sup>1</sup> (software selectable)
<b>Data Rate</b>	Up to 120 Mbps UBR / 100 Mbps Ethernet
<b>Latency</b>	<10 ms
<b>Processing Speed</b>	>150,000 PPS
<b>Max Range</b>	100 km (66 mi)
<b>Max Tx Power</b>	+26 dBm <sup>1</sup> (MIMO, frequency band specific)
<b>PoE Cable</b>	Up to 91 m (300 ft)
<b>Network Attributes</b>	Transparent bridge, automatic link distance ranging, DHCP pass-through, 802.1Q VLAN
<b>Modulation</b>	BPSK to 64 QAM, TDMA
<b>MAC</b>	Dynamic ARQ (per-link), Dynamic adaptive modulation (per-link), Dynamic and fixed TDD (per link)
<b>QoS</b>	802.1 p/Q, CIR, PIR support, Multiple service flows per subscriber, Dynamic Spectrum Access & Management <sup>1</sup>
<b>OTA Encryption</b>	AES-128 <sup>1</sup> (software keyed)
<b>Net Connection</b>	10/100 Ethernet (RJ-45)
<b>GPS</b>	Integrated (software keyed)
<b>Management</b>	ClearView, HTTP (Web), SNMP v2 / v3, Telnet, HTTPS (SSL), SSH
<b>Operating Temp</b>	-40 °C to +60 °C (-40 °F to +140 °F)
<b>Humidity</b>	100% humidity, condensing
<b>Power Consumption</b>	Standard IEEE 802.3at
<b>Compliance</b>	Safety: IEC, EN, and UL/CSA 60950, EMC: EN 301 489-1, EN 301 489-17, 5.8 GHz <sup>1</sup> : IC RSS-210, FCC Part 15, ETSI EN 302 502, 5.4 GHz <sup>1</sup> : IC RSS-210, FCC Part 15, ETSI EN 301 893, 4.9 GHz <sup>1</sup> : IC RSS-111, FCC Part 90, 3.65 GHz <sup>1</sup> : IC RSS-197, 3.5 GHz <sup>1</sup> : IC RSS-192, 3.3-3.8 GHz <sup>1</sup> : ETSI 302 326-2, 2.4 GHz <sup>1</sup> : IC RSS-210 <sup>2</sup> , ETSI 300-328 <sup>2</sup> , 2.3 GHz <sup>1</sup> : IC RSS-195
<b>Enclosure</b>	IP67 (IEC 60259)
<b>Dimensions</b>	290.7 mm x 230.0 mm x 60.3 mm (11.45 in x 9.06 in x 2.375 in)
<b>Weight</b>	2.7 Kg (6 lbs) without bracket or antenna

<sup>1</sup> Availability restricted by regional regulations or product options; <sup>2</sup> Pending

CANADA 302 Town Centre Blvd., Toronto, Ontario  
UAE Bldg. 9, Office G19, Dubai Internet City, Dubai  
USA 185 SW 7th St., Office 1817, Miami, Florida  
+1.905.479.8344 | email [info@rdlcom.com](mailto:info@rdlcom.com) | toll free +1.866.633.6669

20130514 RDL-3000-SC-COM © 2013 Redline Communications Inc. All rights reserved.  
The symbols ® and ™ designate trademarks of Redline Communications or identified third parties.  
All other logos and product names are the trademarks of their respective owners, errors and omissions excepted.

**redline**<sup>®</sup>  
communications