

POWERFUL. VERSATILE. RELIABLE.



SU-0

Datasheet RedMAX™ Subscriber Unit - Outdoor

Redline's RedMAX™ Subscriber Unit - Outdoor (SU-0) delivers reliable, cost-effective, high-bandwidth wireless connectivity for fixed access applications. As a leader in WiMAX Forum Certified™ products, the Redline RedMAX™ SU-0 ensures seamless interoperability with emerging IEEE 802.16-2004 compatible point-to-multipoint (PMP) equipment.

Operating in several radio frequency bands, Redline's third-generation, orthogonal frequency-division multiplexing (OFDM), non-line-of-sight (NLOS) technology overcomes obstacles such as trees and buildings. Its rugged design and sophisticated communications techniques, including advanced Forward Error Correction (FEC), deliver wireline equivalent high availability.

The very low latency of Redline's RedMAX™ SU-0 ensures reliable delivery of delay-sensitive services such as video, packet and circuit voice and other prioritized services. A full range of Quality of Service (QoS) controls lets you deliver toll quality voice and other services while meeting the Service Level Agreements (SLAs) demanded by customers.

Available with a fully integrated flat-panel antenna, or an optional stand-alone antenna, the RedMAX™ SU-0 includes an audible antenna alignment indicator and utilizes Power over Ethernet (PoE) technology for quick and easy installation. The ruggedized and IP67 certified design ensures uninterrupted operation in the toughest environments.

Whether you are providing bandwidth comparable to or greater than xDSL or cable, video surveillance, Smart Grid or Smart Field applications or deploying SCADA or AMI systems, RedMAX's™ WiMAX-based compatibility, high performance and ease of installation make the RedMAX™ SU-0 the best choice for delivering broadband wireless services to business and residential access markets cost effectively.

AT A GLANCE

Optimized for 4G / LTE networks

WiMAX Forum Certified

High performance, weather-resistant design

Simple, quick and economical installation

Extremely low latency

Superior NLOS PMP capability

Advanced OFDM technology for high reliability

Dynamic QoS settings

REDCARE SUPPORT

Redline's products are backed by RedCARE, one of the best support programs in the industry, providing responsive customer and solution support everywhere that Redline's products are available. RedCARE ensures consistent, broadband wireless connectivity for our customers.

ABOUT REDLINE COMMUNICATIONS

Redline Communications (www.rdlcom.com) is a leading provider of specialized broadband wireless systems used to cost-effectively deploy distributed applications and services. Redline systems are used by local and state governments to quickly and easily deploy or extend their public safety networks; by oil and gas companies to connect their digital oil fields; by service providers and enterprises to bring dedicated Internet access to business users; and by the military to rapidly deploy secure networks. For more than 10 years, Redline has been delivering powerful, versatile and reliable wireless solutions through certified partners in the Americas, the Middle East, and Africa.

TECHNICAL SPECIFICATIONS

System Capability	LOS, Optical LOS, and non-LOS Cell-based Point-to-Multipoint
RF Band	3.3–3.5 GHz, 3.4–3.6 GHz, 3.6–3.8 GHz, 3.65–3.7 GHz FCC/IC
Channel Size	3.5 MHz, 7 MHz
Spectral Efficiency	Up to 5 bps/Hz (over-the-air)
Data Rates	18 Mbps (7 MHz channel size); 9 Mbps (3.5 MHz channel size) Ethernet rates
Latency	6–18 msec (depends on channel size, OFDM frame duration)
Maximum Tx Power	Up to +20 dBm (region specific)
Rx Sensitivity	Better than -98 dBm @ BPSK 1/2 (based on BER of 1x10e-6)
PoE Cable	Maximum length up to 91 m (300 ft) using Redline recommended shielded outdoor CAT 5 cable
Network Attributes	Transparent bridge 802.1p, 802.1Q VLAN port tagging 802.1Q, TOS/DSCP and L2/L3 address, traffic classification DHCP client
Modulation/ Coding Rates	Auto select: BPSK, QPSK, 16 QAM, 64 QAM
Coding Rates	1/2, 3/4 and 2/3
Over the Air Encryption	DES, 3DES
MAC	Cell-based PMP deployment 802.16-2004 certified PMP 802.16-2004 packet convergence sub-layer mode TDMA access
Range	Up to 72 km (45 mi)
Duplex Technique	TDD (time-division duplex) HD-FDD (half duplex frequency-division duplex)
Wireless Transmission (PHY)	256 FFT OFDM (orthogonal frequency- division multiplexing)
Management	SNMP, FTP, CLI, TFTP, RedMAX EMS
Power Requirements	PoE-Standard IEEE 802.3af
Compliance	EMC: EN 301 489-1, EN 301 489-4, EN 55022/CISPR 22 RF: EN 301 021, EN 301 753, Industry Canada: RSS-192, FCC: Parts 90 & 15 (for USA 3.65 GHz operation) Safety: IEC 60950-1, EN 60950-1, UL 60950-1
Operating Temperature	-40 °C to 65 °C (-40 °F to 150 °F)
Antenna	Standard: Integrated 14 dBi flat panel Optional: Selection of non integrated high gain antennas
Dimensions	205 mm x 205 mm x 68 mm (8.1 in x 8.1 in x 2.7 in)
Weight	2 kg (4.5 lbs) not including mounting bracket

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