2.4GHz, 4.9GHz and 5.8GHz Red Leaf Systems

RedOS™ is a powerful wireless operating system with capabilities far beyond most other products on the market, while keeping a reasonably small flash and memory footprint. The RedOS™ is a wireless networkin-box solution designed to enable the immediate deployment of profitable public and/or cost-effective private WLAN networks by service providers and enterprises.

Specifications:

Red Leaf Point to MultiPoint

RedLeaf IEEE 802.11a/b/g Indoor/Outdoor AP/Router/Hotspot Controller	
Description	RedLeaf™ IEEE 802.11a/b/g Indoor/Outdoor AP/Router/Hotspot Controller
Ethernet Connection	IEEE 802.3 10/100Base-T (RJ-45)
Standard	IEEE 802.11a (Wireless LAN) IEEE 802.11b (Wireless LAN) IEEE 802.11g (Wireless LAN) IEEE 802.3 (Ethernet)
Network Interface	1 or 2 x 10/100Mb Ethernet (National Semiconductor) option
CPU	233 or 266 MHz National Geode SC1100 (5x86, 16KB)
Memory	64Mb or 128Mb SDRAM option
Flash	16Mb, 32Mb or 64Mb option
Radio	Single or Dual Radio option
Antenna	Single, Dual or Quad Antenna option
Console	1 x serial port (DB9 male)
Operation Modes	Access Point / Client Bridge / Adhoc / Wireless Router / WDS**
Management	SSH Client
External Power Jack (via POE)	+7 to +18 VDC @1A (Center pin = positive, sleeve = ground) (POE and PS included)
Mounting	Pole mount via 2 pc U-bolt clamps (included)
Enclosure	Industrial Die-Cast Aluminum Enclosure (IP-67 rating) Provides complete protection against ingress of dust (6) Provides protection against immersion in water (7)
AP Weight	1 kg
Shipping Weight	2 kg
Dimension	180mm x 125mm x 46mm
Temperature Range	-20°C ~ +50°C
Relative Humidity	10% to 90% non condensing
Warranty	1 Year Parts & Labor returned to factory
Software Credits	A list of Linux GPL software credits and contributors to core firmware version 2.x, is provided.
Manual	User-Guide is provided
Firmware NOS	Firmware is provided

Radio Characteristics			
Modulation	802.11b DSSS / 802.11 a/g OFDM		
Frequency Range	2.4 – 2.4965 GHz / 4.940 – 4.990 GHz / 5.180 – 5.825 GHz		
Special Radio Features	802.11 a/g: TX power control and ACK adjustment for long distance links 802.11 a/g: Packet Bursting 802.11 a/g: Fast Frames 802.11 a/g: Hardware Compression and Encryption 802.11 a/g: Multi-Channel Bonding 802.11 a/g: Super-G (802.11 108Mbps)		
Data Rate	11Mbps : CCK 5.5Mbps : CCK 2Mbps : DQPSK 1Mbps : DBSK	802.11a 6-54Mbps OFDM 802.11g 6-54Mbps OFDM	
Channels	802.11 b/g 11 – US (FCC) 14 – Japan (MKK) 13 – Other countries (ETSI)	802.11a 13 – US (FCC)	
Range	PTMP up to 15 Miles / 25 Miles PTP with high gain antennas (a/g only)		
Antenna Connector	N Female Bulkhead		
Transmit Power (Minimum)	802.11b 1Mb:1-200mW(20-23dBm) 2Mb:1-200mW(20-23dBm) 5.5Mb:1-200mW(20-23dBm) 11Mb:1-200mW(20-23dBm)	802.11g 6Mb:100mW(20dBm) 9Mb:100mW(20dBm) 12Mb:100mW(20dBm) 18Mb:100mW(20dBm) 24Mb:100mW(20dBm) 36Mb:79.4mW(19dBm) 48Mb:50.1mW(17dBm) 54Mb:39.8mW(16dBm)	802.11a 6Mb:63.1mW(18dBm) 9Mb:63.1mW(18dBm) 12Mb:63.1mW(18dBm) 18Mb:63.1mW(18dBm) 24Mb:63.1mW(18dBm) 36Mb:50.1mW(17dBm) 48Mb:31.6mW(15dBm) 54Mb:31.6mW(15dBm)
Transmit Power (Minimum)	802.11b 11Mb <-89dBm 5.5Mb < -85dBm 2Mb < -90dBm 1Mb < -91dBm	802.11g 6Mb: -104dBm 9Mb: -96dBm 12Mb: -95dBm 18Mb: -93dBm 24Mb: -87dBm 36Mb: -84dBm 48Mb: -79dBm 54Mb: -77dBm	802.11a 6Mb: -99dBm 9Mb: -99dBm 12Mb: -97dBm 18Mb: -91dBm 24Mb: -86dBm 36Mb: -83dBm 48Mb: -78dBm 54Mb: -76dBm
Approvals	FCC Part15, Section 15,247		
FCC Grant	FCC Certification Grant		