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wireless Data voice *Become one.*

Data Sheet

Key Product Benefits

- 400% increase in WLAN capacity
- Upgradeable to 802.11n
- Simplified deployment - no channel planning required
- Dynamic reservation of bandwidth for VoIP
- Toll-quality Voice over WLAN (VoWLAN) with dynamic reservation of bandwidth

Meru RS4000 Radio Switch Family

Increase WLAN capacity without the complexity

The Meru Networks RS4000 Radio Switch Family is the only way to add capacity to your enterprise wireless LAN (WLAN) without adding complexity. With the RS4000, WLAN capacity can be scaled up with a single access point, eliminating the need to deploy multiple access points. The RS4000 Radio Switch is a plug-and-play upgrade to existing WLANs without the need to re-plan the wireless network. Built on standard, proven wireless networking technology, the RS4000 uses the industry-leading RF intelligence and 802.11 technologies from Meru to re-write the rulebooks for enterprise WLAN deployments. Ideal for use in branch office locations as a standalone device or in high user density areas along with Meru Controllers and AP200 access points, the RS4000 Radio Switch allows corporations to simultaneously deploy and use four 802.11 channels, resulting in a 400% increase of your WLAN network capacity. Meru Networks can deliver the unwired office and All-Wireless Enterprise to organizations like yours today.

Four Radio Omni-directional Coverage

The Meru RS4000 Radio Switch is ideal for indoor applications. Using Meru's patent-pending wideband omni-directional antenna, the RS4000 can simultaneously serve multiple 802.11b/g and 802.11a channels throughout every square foot of the coverage area. The built-in Meru Air Traffic Control™ technology controls contention on the network while Meru standards-based QoS technology dynamically reserves bandwidth over-the-air to provide unprecedented VoIP scale and quality even in the presence of heavy data traffic. With the RS4000, WLANs are no longer bound to the density/performance trade-off constraints governing traditional access points.

Eliminate RF Co-Channel Interference and Handoff Issues

Traditional WLANs require varying levels of RF knowledge in order to properly deploy and manage interference and performance issues on the network. The Meru RS4000 eliminates the concept of channel planning and trivializes RF site surveys by serving all channels simultaneously. The omni-directional antennae on the RS4000 eliminates the need for special directional antennae purchases. When deployed together with other RS4000 radio switches and a Meru Controller, Virtual Cells are created which allow all the WLAN channels to extend anywhere in the building without any interruption to the wireless service. The unique WLAN technology from Meru removes the challenges associated with RF coverage prediction, as well as channel assignments, location and distance considerations. Meru simplifies WLAN deployment so the only question that remains is, "Where do I want service?"

Upgrade Performance Without Changing Your Network

Due to the limitations of other access points, WLAN performance and price were always thought to be tied together. For example, to achieve higher density coverage, more access points must be deployed in order to serve more channels. The Meru RS4000 shatters this model by providing the performance of multiple access points in a single product. This results in a savings of over 70% in enterprise deployment and ongoing management costs. The RS4000 omni-directional antenna enables enterprise IT departments to upgrade network capacity without ever worrying about changing the coverage area. The Virtual Cells made possible by Meru WLAN technology allow every square foot of coverage area to be simultaneously served by all channels, which results in unprecedented voice and data performance at a fraction of the cost of traditional WLAN access points.

RS4000

Technical Specifications

About Meru Networks

Meru Networks is the global leader in wireless infrastructure solutions that enable the All-Wireless Enterprise. Its industry leading innovations deliver pervasive, wireless service fidelity for business-critical applications to major Fortune 500 enterprises, universities, healthcare organizations and local, state and federal government agencies. Meru's award-winning Air Traffic Control technology brings the benefits of the cellular world to the wireless LAN environment, and its WLAN System is the only solution on the market that delivers predictable bandwidth and over-the-air Quality of Service with the reliability, scalability, and security necessary to deliver converged voice and data services over a single WLAN infrastructure.

CONNECTIVITY	
Wireless Configuration	Two 802.11b/g, two 802.11a
Ethernet	Two 10/100 Mbps
WIRELESS SPECIFICATIONS	
Wireless Interfaces	Four radios – two 802.11a, two 802.11b/g
Antenna	Two RP-SMA jacks on housing for antenna; 5dB Omni, Indoor antenna
Wireless Medium Access	Wi-Fi compliant 802.11 MAC standard
Client Support	All Wi-Fi compatible clients
	Power Save clients
	Clients that perform active and passive scanning
MANAGEMENT	
Administrative Access	SSH, Telnet
User access levels	Administrator and Read-Only user-access levels
CLI	CLI for feature configuration
Configuration Files	Text based config file with CLI commands for offline configuration
System Set Up	First-time configuration via utility that communicates over Ethernet port
System Debug	CLI for statistics and remote debug SNMP MIB
SNMP Support	SNMPv2c Agent and Monitoring, Meru MIB, 802.11MIB, MIB II, RFC 2869
Central Management Station	SNMP interoperability with third-party centralized station for Fault, Configuration, Accounting, Performance, Security (FCAPS)
Syslog Support	Syslog v1 and v2 – failure alerts and change notifications
Software Upgrade	The Radio Switch has MIBs to allow a third-party management application to: • Upgrade multiple Radio Switches from a single point. • Roll-back if upgrade fails • Maintain configuration and network settings

PHYSICAL SPECIFICATIONS	
Dimensions	9.5" (W) X 8.5" (L) X 3.875 (H)"
Power Type	2 X Power over Ethernet (IEEE 802.3af) or optional external 5V, 25-30W power adapter
Max. Power Draw	22W
Indicators	4 LEDs for monitoring power, 802.11b/g activity, 802.11a activity, Ethernet activity
LAN/WLAN	
Forwarding	802.11/802.3 Bridging
RS4000 Network Addressing	One IP address per system Can be DHCP or Manual configuration. DHCP pass-through for clients
Load-balancing	Client load-balancing across channels based on traffic
SECURITY	
Layer 2 Security	802.11 Security: WEP-64, WEP-128 802.1X with EAP-TLS/TTLS/PEAP
RADIUS Interoperability	Microsoft IAS; FreeRADIUS; Steel-Belted Radius, Cisco ACS
Layer 3 Security	VPN passthrough
REGULATORY	
RF Certifications	Radio Compliance: FCC Part 15
	Canada RSS210
	EN 300 328 V1.6.1 (11/2004)
	EN 301 893 V1.3.1 (08/2005)
	Japan Technical Regulations
EMC	FCC Part 15
	EN 301 489-17 V1.2.1 (08/2002)
Safety	UL2043 (plenum)
	cUL 60950-1 First Edition
	IEC/EN 60950-1 First Edition with national deviations
	UL 2043 plenum rating
Warranty	Hardware 1 year; Software 90 days
Service	Red Carpet Service options

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