RFS7000

High performance, high bandwidth RF switch for large scale deployments

FEATURES

Centralized multicore/ multithreaded architecture
Security and high performance for bandwidth-heavy applications; a single point of management lowering the overall cost of network deployment and administration

Unified RF management platform
Improve business process flow and enable data sharing by managing multiple RF networks, such as wi-fi, RFID, 802.11n and Wi-MAX, on a single switch

L2 and L3 roaming
Seamless roaming of mobile clients across even complex distributed networks

Robust, scalable features for demanding enterprise networks

Designed for large scale, high bandwidth deployments, the RFS7000 Wireless Switch from Motorola provides robust, highly scalable support for seamless enterprise mobility. Motorola's Wi-NG architecture, optimized for enterprise mobility and multimedia applications, simplifies network deployment and management, provides superior performance, security and scalability, and supports emerging RF technologies. Built on this platform, the RFS7000 enables campus-wide roaming across subnets, and offers powerful failover capabilities, exceptional quality of service (QoS) and increased voice capacity. Integrated security features include intrusion detection and protection, secure guest access and protection against denial of service attacks.

Raising the bar on enterprise-class performance

Taking advantage of multicore/multithreaded architecture, the RFS7000 is intended for large scale, high bandwidth enterprise deployments. It is designed to handle from 8,000 to 50,000 mobile devices, up to 256 802.11 dual-radio a/b/g access ports, up to 2500 dual radio a/b/g APs in a cluster and it will support upcoming 802.11n access ports. Failover capabilities and cluster management provide high availability, ensuring an "always-on" network. Whether your business requires wireless deployment across

multiple buildings, high-capacity systems or deployment in large public access areas, the RFS7000 delivers it – efficiently and securely.

Converged RF management for cutting-edge enterprise mobility

In addition to providing enterprise-class performance, the RFS7000 is designed to support seamless mobile access to multiple RF networks, with the exceptional security and manageability that you've come to expect from Motorola.

Interfaces to locationing systems simplify asset tracking throughout your network, while Layer 3 roaming and external fixed/mobile convergence (FMC) solutions allow personnel to seamlessly roam from subnet to subnet, and from cellular to Wi-Fi networks. When used in concert with enterprise-class application-intensive Wi-Fi handheld devices, the RFS7000 enhances fast roaming capabilities.

The RFS7000 provides comprehensive network security features that maintain constant compliance of HIPAA and PCI standards, including integrated MAC-based authentication, intrusion detection, AAA/Radius server (for WPA/WPA2 termination on the box) and hotspot provisioning capabilities for secure guest access. The stateful packet inspection firewall offers protection against denial of service attacks while optimizing network traffic.

Comprehensive layered security

Exceptional level of data and network protection without sacrificing fast roaming

Clustering and load balancing

Ensures an "always-on" highly available network for superior performance; supports multiple levels of redundancy and failover capabilities

Motorola Enterprise Mobility Services offers comprehensive support and technical expertise to design, deploy and maintain successful mobility solutions.

For more information, contact Motorola at 1.800.722.6234 or 1.631.738.2400, or visit motorola.com/rfs7000

RFS7000 Specifications

Packet Forwarding

802.1D-1999 Ethernet bridging; 802.11-.802.3 bridging; 802.1Q VLAN tagging & trunking; proxy ARP; IP packet steering-redirection

Wireless Networking

Wireless LAN:	Supports 250 WLANs; multi-ESS/BSSID traffic segmentation; VLAN to ESSID mapping; Auto Assignment of VLANs (on RADIUS authentication); Power Save Protocol Polling; pre-emptive roaming; congestion control
Access ports:	Supports 1-256 "thin" access ports; automatic access port adoption with ACLs; access port load balancing; direct sequence access point-to-access port conversion
Layer 2 or Layer 3 deployment of Access Ports	
Layer 3 Mobility (Inter-Subnet Roaming)	
Supported access ports and access points:	AP300 (802.11a/b/g ready) (L2 or L3 Deployments) WLAN – GRE Tunnel Mapping
Radio frequency automatic channel select (ACS); transmit power control management: (TPC); country code-based RF configuration; 802.11b – 3 non-overlapping channels; 802.11a—11 non-overlapping channels; 802.11g—3 non-overlapping channels (ready)	

Network Security

Packet filtering/Access Control Lists (ACLs):	L2/3/4 stateful packet analysis; network address translation (NAT)
Authentication:	Access Control Lists (ACLS); pre-shared keys (PSK);: 802.1x/EAP—transport layer security (TLS), tunneled transport layer security (TTLS), protected EAP (PEAP); Kerberos Integrated AAA/RADIUS Server with native support for EAP-TTLS and EAP-PEAP (includes a built in user name/password database; supports LDAP)
Transport encryption:	WEP 40/128 (RC4), KeyGuard, WPA—TKIP, WPA2-CCMP (AES), WPA2-TKIP
Secure Guest Access (HotSpot Provisioning):	Local Web Based Authentication; URL Redirection for User Login; Customizable Login/Welcome Pages; Support for external Authentication/Billing Systems
RADIUS Support (Standard and Symbol Vendor Specific Attributes):	• User Based VLANs (Standard) • MAC Based Authentication (Standard) • User Based QoS (Symbol VSA) • Location Based Authentication (Symbol VSA) • Allowed ESSIDs (Symbol VSA)

Optimized Wireless QoS

RF priority:	802.11 traffic prioritization and precedence
Wi-Fi multimedia extensions:	WMM-power save with Admission Control
Classification & marking:	Layer 1-4 packet classification; 802.1p VLAN priority; DiffServ/TOS

System Resiliency & Redundancy

Active:Standby; Active:Active and 1:Many redundancy with access port and MU load balancing; self healing (on detection of RF interference or loss of RF coverage)

Management

Command line interface (serial, telnet, SSH); secure Web-based GUI (SSL); SNMP v1/v2/v3; SNMP traps—40+ user configurable options; Syslog; TFTP Client; secure network time protocol (SNTP); text-based switch configuration files; DHCP (client/server/relay), switch auto-configuration and firmware updates with DHCP options; multiple user roles (for switch access); Syslog, MIBs (MIB-II, Etherstats, wireless switch specific monitoring and configuration)

Physical Characteristics

Form factor:	1U Rack Mount
Dimensions:	HxWxD = 44.45mm x 440mm x 390.8mm
Weight:	13.5lbs / 6.12kg
Physical interfaces:	– 4 10/100/1000 Cu/SFP Ethernet interfaces, 1 10/100 OOB port, 1 CF card slot, 2 USB slots, 1 serial port (RJ45 style)
MTBF:	>65,000 Hours

Power Requirements

AC input voltage:	90 – 264 VAC 50/60Hz
Max AC input current:	6A@115 VAC, 3A@230 VAC
Input frequency:	47 Hz to 63 Hz

User Environment

Operating temperature:	0C to 40C
Storage temperature:	-40C to 70C
Operating humidity:	5% to 85% (w/o condensation)
Storage humidity:	5% to 85% (w/o condensation)

Regulatory

Product Safety:	UL / cUL 60950-1, IEC / EN60950-1
EMC Compliance:	FCC (USA), Industry Canada, CE (Europe), VCCI (Japan), C-Tick (Australia/New Zealand)

Part Numbers

RFS-7010-100R0-WR:	Zero Port Wireless Switch
RFS-7010-10010-WR:	128 Port Wireless Switch
RFS-7010-10020-WR:	256 Port Wireless Switch

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