

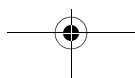
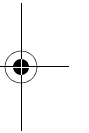
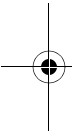


RFS4011 Series Integrated Services Controller Installation Guide



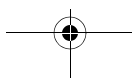
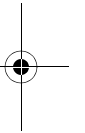
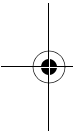


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1 Introduction

The Motorola RFS4011 Series Integrated Services Controller is a member of Motorola's RFS Series Integrated Services Controller family. The RFS4011 provides centralized Wireless LAN (WLAN) configuration and management by coalescing a network "intelligence" previously spread across physically distributed access points. The RFS4011 simplifies deployment of a Wired/Wireless 802.11 a/b/g/n network, for a SME/SMB. With the integrated Layer 2/Layer 3 Networking Services such as integrated Layer 2 Switching with PoE+ ports, Onboard DHCP Server, Security Services like Wired/Wireless Firewall, Wireless IDS/IPS, Onboard AAA Server and IPSEC VPN Gateway, and QoS mechanisms to support Voice & Video, the RFS4011 transforms the enterprise by delivering a SMART Branch. The RFS4011 is the WLAN's point of management reducing wireless networking complexity by moving management out of the ceiling and into the wiring closet. The RFS4011 can adopt up to 36 Adaptive APs or 6 Thin Access Points. The RFS4011 has integrated dual 802.11n radios, that are band unlocked, to provide access in both 2.4GHz and 5GHz simultaneously, or provide access in either band with the second radio capable of doing 24 by 7 security monitoring in both bands.

This document is written for the network device installer.

1.1 Package Contents

Inspect the package contents and report any missing or damaged items to your sales representative. The package should contain the following:

- RFS4011 Series Integrated Services Controller
- Console Cable
- *Installation Guide* (this document)
- Rubber Feet
- Power Supply Unit

1.2 Document Conventions

The following graphical alerts are used in this document to indicate notable situations:



NOTE Tips, hints, or special requirements that you should take note of.

2 RFS4011 Series Integrated Services Controller: **Installation Guide**



CAUTION Care is required. Disregarding a caution can result in data loss or equipment malfunction.



WARNING! Indicates a condition or procedure that could result in personal injury or equipment damage.

1.3 Warnings

- Read all installation instructions and site survey reports, and verify correct equipment installation before connecting the system to its power source.
- Remove jewelry and watches before installing this equipment.
- Install the equipment in a rack or on a desktop with adequate dimensions and weight allowances.
- Verify the unit is grounded before connecting it to the power source.
- Verify any device connected to this unit is properly wired and grounded.
- Connect all power cords to a properly wired and grounded electrical circuit.
- Verify the electrical circuits have appropriate overload protection.
- Motorola strongly recommends the use of an Uninterruptible Power Supply (UPS) that supports the RFS4011 Series Integrated Services Controller power rating. Not using a UPS can result in data loss or equipment damage due to a power surge or power failure.
- Verify that the power connector and socket are accessible at all times during the operation of the equipment.
- Do not work with power circuits in dimly lit spaces.
- Do not install this equipment or work with its power circuits during thunderstorms or other weather conditions that could cause a power surge.
- Verify there is adequate ventilation around the device, and ambient temperatures meet equipment operation specifications.
- This product is designed for in building installation only and is not intended to be connected to exposed (outside plant) networks.

1.4 Site Preparation

- Consult your site survey and network analysis reports to determine specific equipment placement, port capacity, power drops, and so on.
- Assign installation responsibility to the appropriate personnel.
- Identify where all installed components are located.
- Verify appropriate rack mounting requirements, as required.
- Provide a sufficient number of power drops for your equipment.
- Ensure adequate, dust-free ventilation to all installed equipment.
- Identify and prepare Ethernet and console port connections.
- Verify that cable lengths are within the maximum allowable distances for optimal signal transmission.
- Verify that the RFS4011 Series Integrated Services Controller is powered through an Uninterruptible Power Supply (UPS).

2 Specifications

2.1 Physical Specifications

Width	304.8mm (12.0in)
Height	44.45mm (1.75 in) 1 RU
Depth	254mm (10.0 in)
Weight	2.15 Kg (4.73 lbs)
Operating Temperature	0°C - 40°C (32°F - 104°F)
Operating Humidity	5% - 85% RH, non-condensing
Operating Altitude	10,000 ft @ 28deg C < 15% Relative Humidity

2.2 Power Cord Specifications

A power supply is included, however a power cord is not supplied with the controller. Use only a correctly rated power cord certified (as appropriate) for the country of operation.

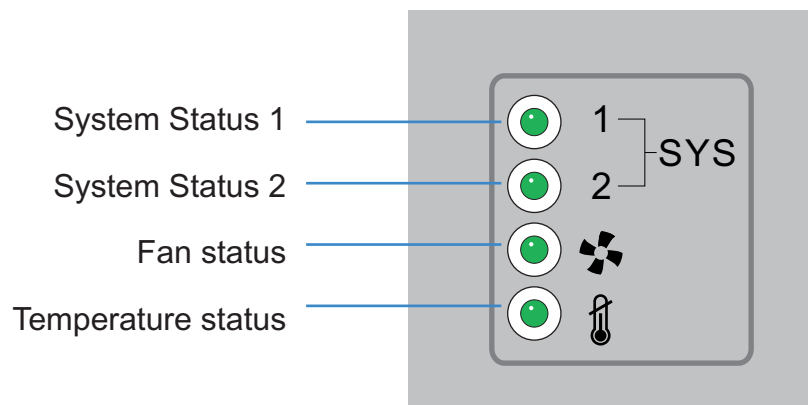
2.2.1 Power Protection

- **If possible, use a circuit dedicated to data processing equipment.** Commercial electrical contractors are familiar with wiring for data processing equipment and can help with the load balancing of these circuits.
- **Install surge protection.** Be sure to use a surge protection device between the electricity source and the RFS4011 Series Integrated Services Controller.
- **Install an Uninterruptible Power Supply (UPS).** A UPS provides continuous power during a power outage. Some UPS devices have integral surge protection. UPS equipment requires periodic maintenance to ensure reliability. A UPS of the proper capacity for the data processing equipment must be purchased.

3 LED Codes

The RFS4011 Series Integrated Services Controller has eight status LEDs on its front panel. Four LEDs for the system, fan, and temperature status, and 2 each per radio to show access (per band) or sensor operation. Each of the six Gigabit Ethernet Ports have two status LEDs. These LEDs display two colors (green & amber), and three lit states (solid, blinking, and off). Five of the Gigabit Ethernet Ports also support Power over Ethernet (PoE) and have corresponding PoE LEDs. The following tables decode the combinations of LED colors and states for the System Status, Radio and the Gigabit Ethernet and PoE LEDs.

3.1 System Status LEDs



3.1.1 Start Up / POST (Primary System or Redundant System)

System Status 1 LED	System Status 2 LED	Event
Off	Off	Power off
Green Blinking	Green Blinking	Power On Self Test (POST) running
Green Solid	Green Blinking	POST succeeded (Operating System Loading)
Green Solid	Off	POST succeeded (Normal Operation)
Amber Blinking	Off	POST Failure
Alternating Green Blinking & Amber Blinking	Alternating Green Blinking & Amber Blinking	System Boot Up Error



NOTE During controller start up, the Temperature status LED will be lit Solid Amber. This is normal behavior and does not indicate an error. At the completion of start up the Temperature Status LED will switch to Solid Green.

6 RFS4011 Series Integrated Services Controller: **Installation Guide****3.1.2 Switch Status (Primary System)**

System Status 1 LED	System Status 2 LED	Event
Off	Off	Power off
Green Solid	Off	Redundancy Feature Enabled Primary System Normal Operation No Access Ports Adopted
Green Solid	Green Solid	Redundancy Feature Enabled Primary System Normal Operation Actively Adopting Access Ports
Green Solid	Amber Blinking	No Country Code configured on the controller or Access Port or Adaptive AP License and Country Code configured, but no APs adopted

3.1.3 Switch Status (Redundant System)

System Status 1 LED	System Status 2 LED	Event
Off	Off	Power off
Green Solid	Off	Redundant System Normal Operation
Green Blinking	Green Solid	Redundant System failed over and adopting ports
Green Blinking	Alternating Green Blinking & Amber Blinking	Redundant System not failed over.

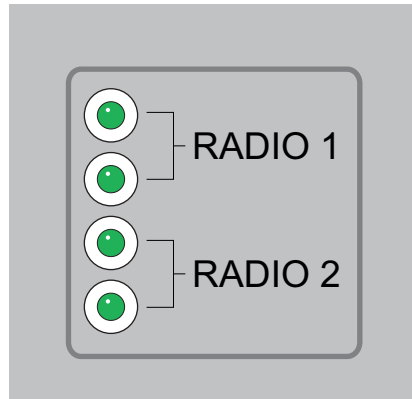
3.1.4 Fan LED

Fan LED	Event
Off	System Off / POST Start
Green Blinking	POST in Process
Green Solid	All System Fans Normal Operation
Amber Solid	Redundant Cooling Failure System Operational
Amber Blinking	System Cooling Failure <i>System will be held in reset until the issue is resolved</i>

3.1.5 Temperature Status LED

Temperature LED	Event
Off	System Off
Green Solid	Ambient Inlet Temperature is within specified operating limit
Amber Solid	Ambient Inlet Temperature is near the maximum operating temperature During controller start up, this LED will be lit Solid Amber. This is normal behavior and does not indicate an error.
Amber Blinking	Ambient Inlet Temperature is above the maximum specified operating temperature <i>System will be held in reset until the issue is resolved</i>

3.2 Radio Status LEDs



3.2.1 Radio 1 LEDs

Radio 1 LED 1	Event
Off	WLAN Radio Disabled or Not Installed
Green Solid	Radio Present but not configured (2.4GHz Band)
Green Blinking	Activity - Transmit / Recieve (2.4GHz Band)

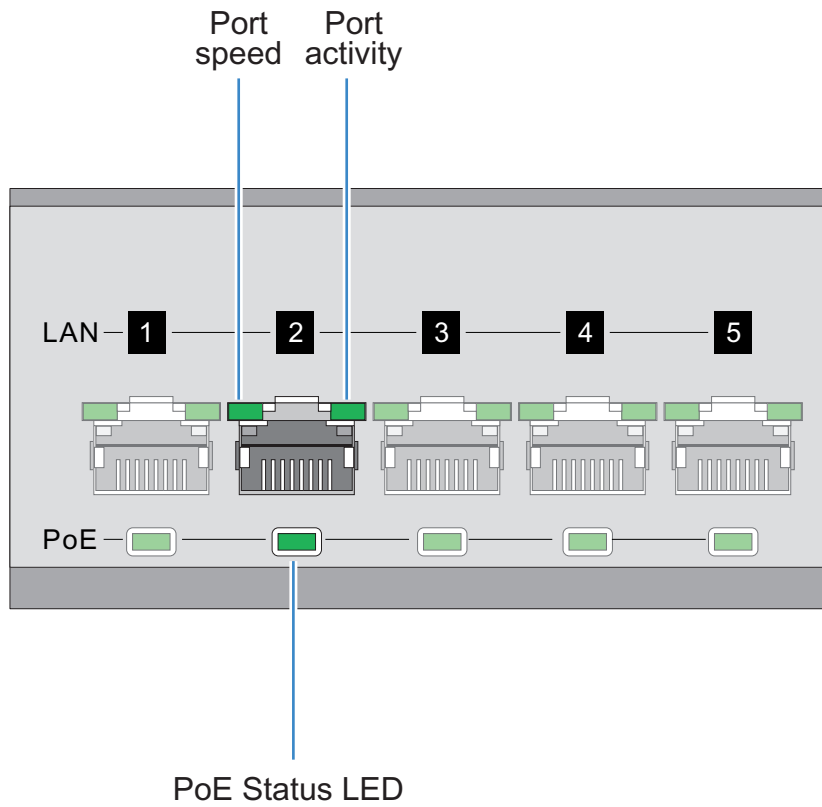
Radio 1 LED 2	Event
Off	WLAN Radio Disabled or Not Installed
Green Solid	Sensor Mode without Sensor Server connected
Green Blinking	Sensor Mode with Sensor Server connected

3.2.2 Radio 2 LEDs

Radio 2 LED 1	Event
Off	WLAN Radio Disabled or Not Installed
Amber Solid	Radio Present but not configured (5.2GHz Band)
Amber Blinking	Activity - Transmit / Recieve (5.2GHz Band)

Radio 2 LED 2	Event
Off	WLAN Radio Disabled or Not Installed
Green Solid	Sensor Mode without Sensor Server connected
Green Blinking	Sensor Mode with Sensor Server connected

3.3 RJ-45 Gigabit Ethernet LEDs



3.3.1 RJ-45 Port Speed LED

Port Speed LED	Event
Off	10 Mbps
Green Solid	100 Mbps
Green Blinking	1000 Mbps
Amber Blinking	Port Fault

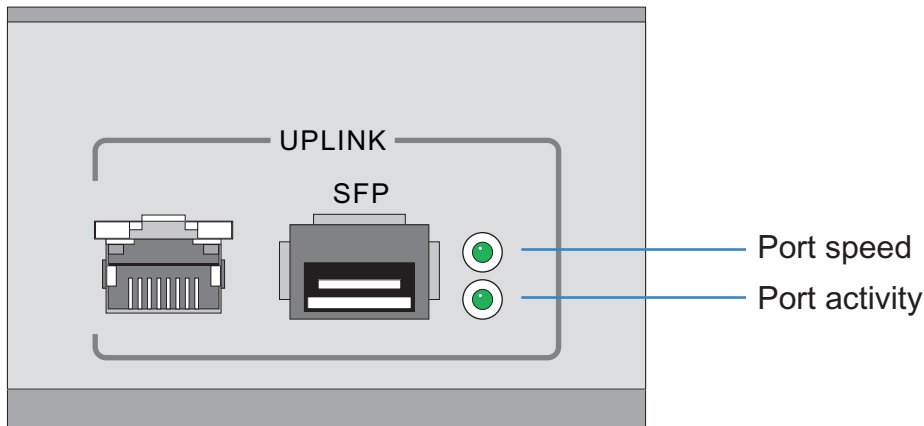
3.3.2 RJ-45 Port Activity LED

Port Status LED	Event
Off	No Link or Administratively shut down
Green Solid	Link present
Green Blinking	Activity: Transmit and Receive
Amber Blinking	Link Fault

3.3.3 PoE Status LED

PoE Status LED	Event
Off	PoE Disabled or Not in Use
Green Solid	PoE Enabled and Powering Port
Amber Solid	PoE Over-Limit
Amber Blinking	PoE Port Fault

3.4 SFP Gigabit Ethernet LEDs



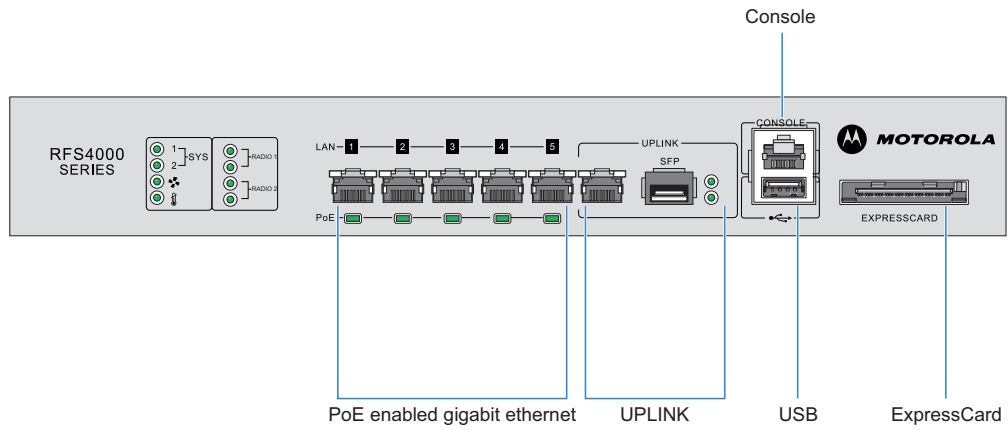
3.4.1 SFP Port Speed LED

Port Speed LED	Event
Green Blinking	1000 Mbps
Amber Blinking	Module or Tx/Rx Fault Loss

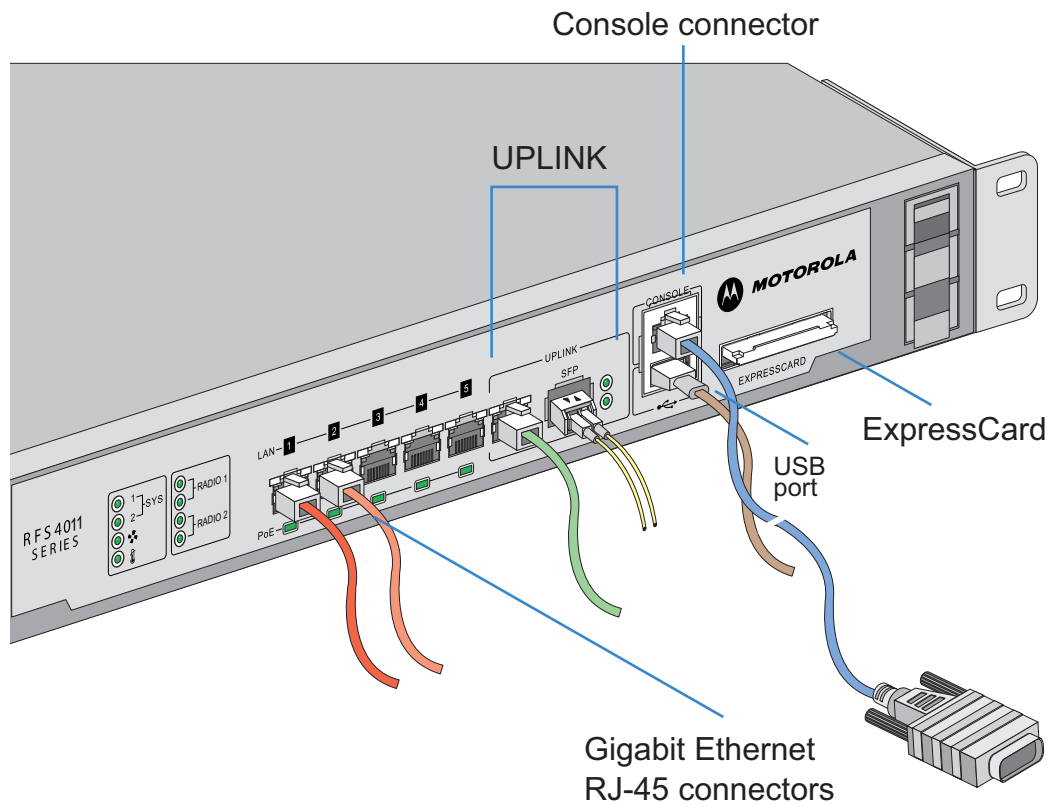
3.4.2 SFP Port Activity LED

Port Status LED	Event
Off	No Link or Administratively shut down
Green Solid	Link present / Operational
Amber Blinking	Module or Tx/Rx Fault Loss

4 Hardware Setup



4.1 Cabling Information



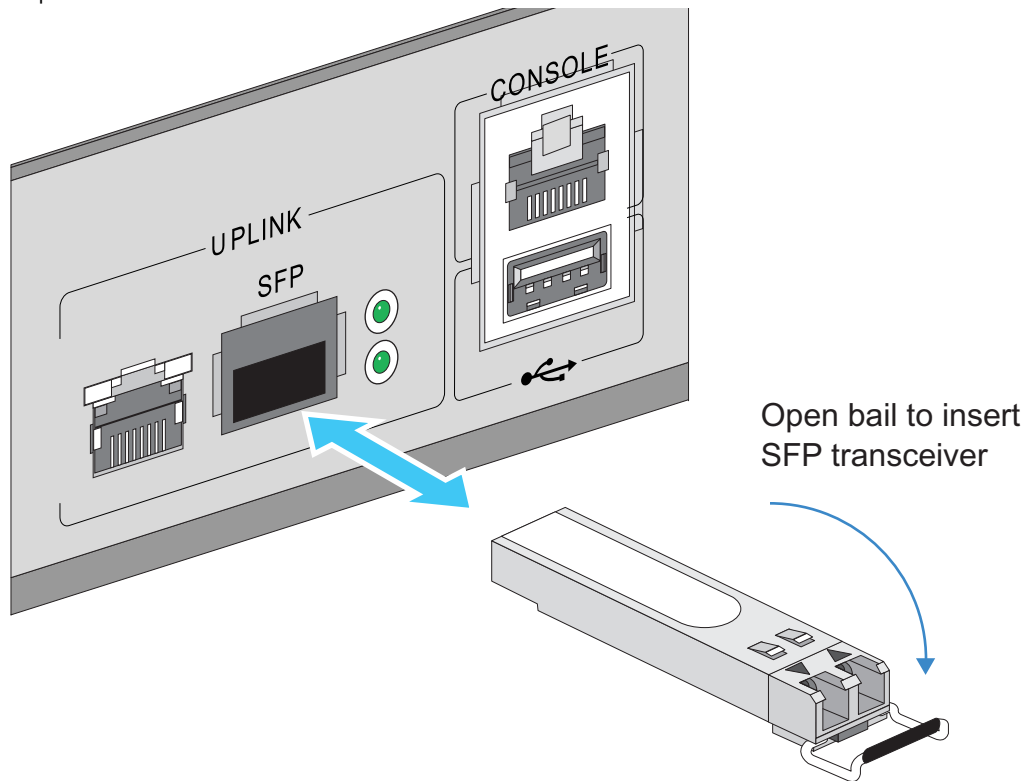
The RFS4011 Series Integrated Services Controller has five RJ-45 Gigabit Ethernet LAN ports, 1 combo Gigabit (RJ45 + SFP) uplink port, one USB port, one Console connector and one ExpressCard slot. The above diagram shows each of those ports and the cables or devices attached to them. The sections that follow describe connection and cabling information for each port. For software configuration, please see the *RFS Series Integrated Services Controller Wi-NG System Reference Guide* available from the Motorola website.

4.2 Gigabit Ethernet on the RFS4011

The RFS4011 has five RJ-45 Gigabit Ethernet LAN ports and one 1 combo Gigabit (RJ45 + SFP) uplink port. Using the RJ-45 ports requires connecting a Category-6 Ethernet cable to the port. To use the Gigabit SFP port, first install the SFP Module (Motorola Part Number: *Fiber-3000-1S-WWR*).

4.2.1 Installing Gigabit Ethernet SFPs

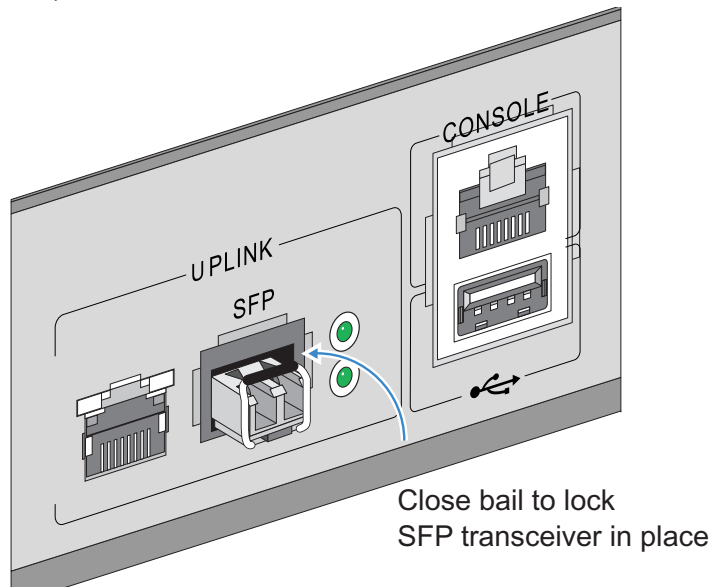
1. Open the bail on the transceiver.



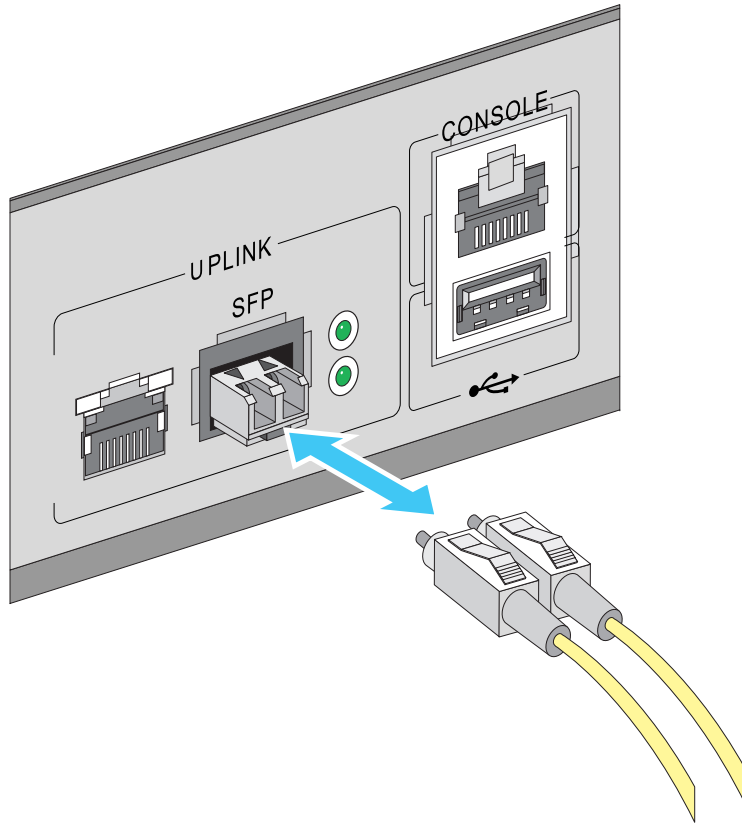
2. Insert the SFP transceiver into the corresponding port on the controller.

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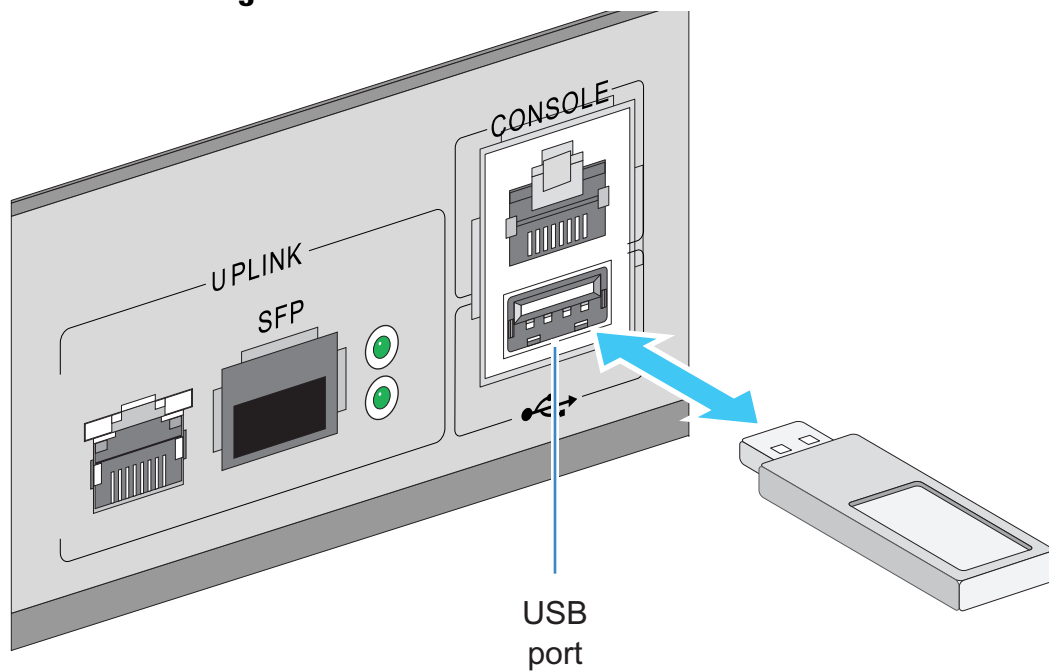
3. Once the SFP transceivers are properly seated in their ports, close the bails to lock the transceivers in place.



4. Insert the fiber optic cables into the installed transceivers.



4.3 Connecting USB Devices



The RFS4011 contains one USB port for connecting USB flash storage devices to the controller. The controller can use the USB flash storage device for file transfers and firmware updates. Follow the setup instructions below to connect the devices to the controller and access devices through the Web UI or Command Line Interface.

1. Connect the USB flash drive to the USB .
2. Wait a few seconds for the drive to be recognized by the controller.
3. Follow the instructions in the *RFS Series Integrated Services Controller Wi-NG System Reference Guide* or *RFS Series Integrated Services Controller Wi-NG CLI Reference Guide* for more information on accessing USB storage devices from the controller for file transfers or firmware updates.



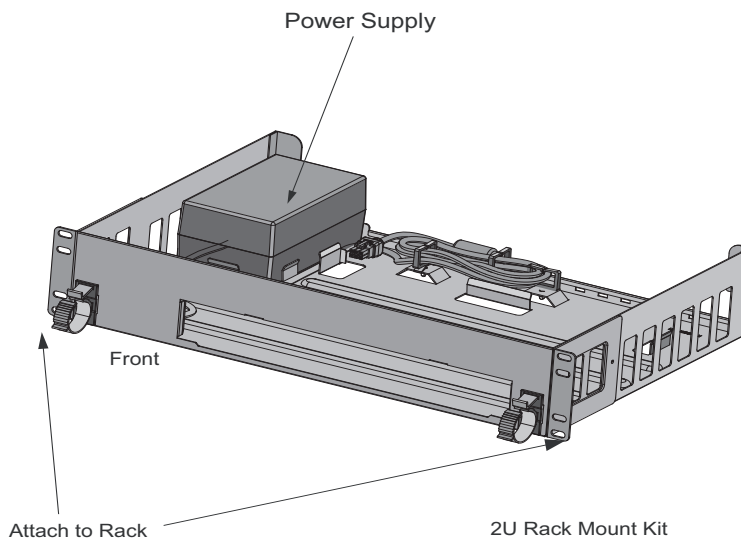
NOTE The controller supports USB flash devices formatted with FAT or VFAT (FAT32) filesystems only. If your flash storage device is formatted with another filesystem, format your device with a FAT32 filesystem.

4.4 Rack Mount Installation Instructions (Optional)

For rack mounted installations, the RFS4011 Series Integrated Services Controller is compatible with an optional 2U rack mount bracket (Motorola Part Number: RFS-4011-MTKT2U-WR).

To install the RFS4011 in a rack:

1. Attach the controller to the 2U rack mount kit using the guides provided.



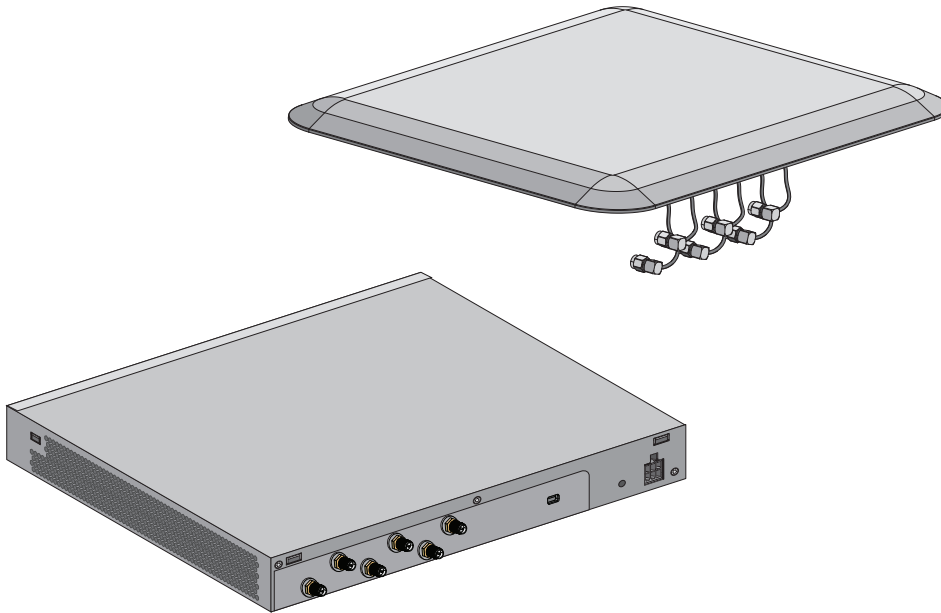
2. Place the power supply unit in the rack mount tray in the space provided.
3. Attach the mounting tray to the rack using screws appropriate for your rack's mounting holes.

4.5 RFS4011 Antenna Facade Installation (Optional)

The RFS4011 Series Integrated Services Controller is compatible with an optional antenna facade (Motorola Part Number: ML-2452-PTA4M3X3-1)

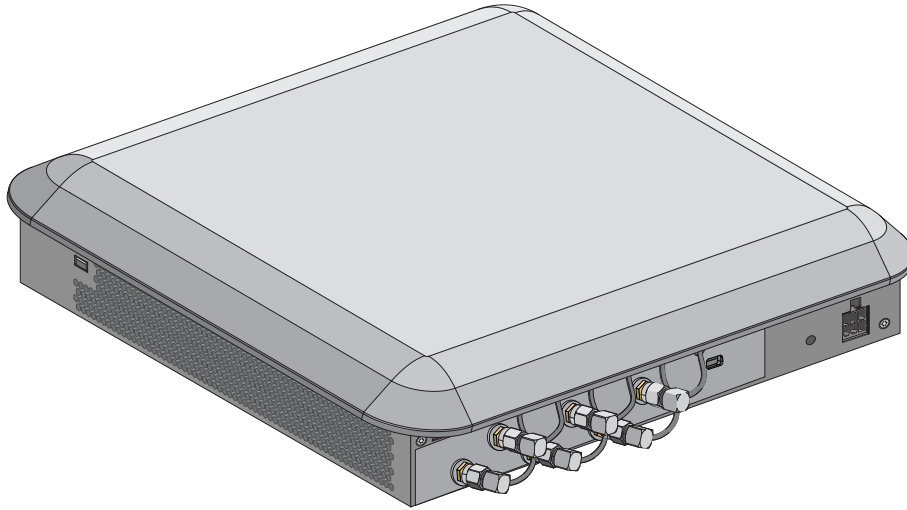
To install the RFS4011 antenna facade:

1. Align the antenna connectors on the antenna facade with the antenna connectors on the back of the RFS4011.



2. Connect the numbered antenna connectors on the antenna facade to the corresponding connectors on the back of the RFS4011.

3. Once all six antenna connectors have been securely connected, align the two side and two rear clips on the antenna facade with the corresponding holes on the RFS4011.

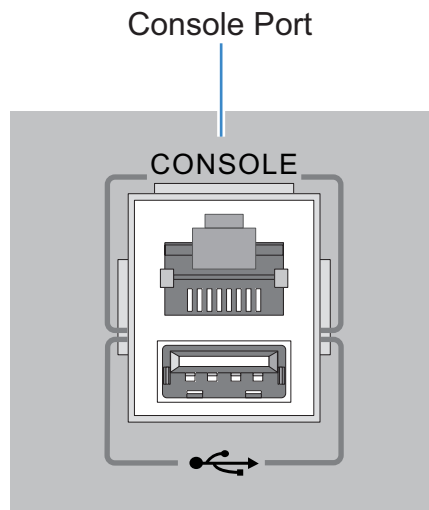


4. Gently press down on the antenna facade until the clips click into place.

4.6 RFS4011 Console Port Setup

To add the RFS4011 Series Integrated Services Controller to the network and prepare it for initial configuration:

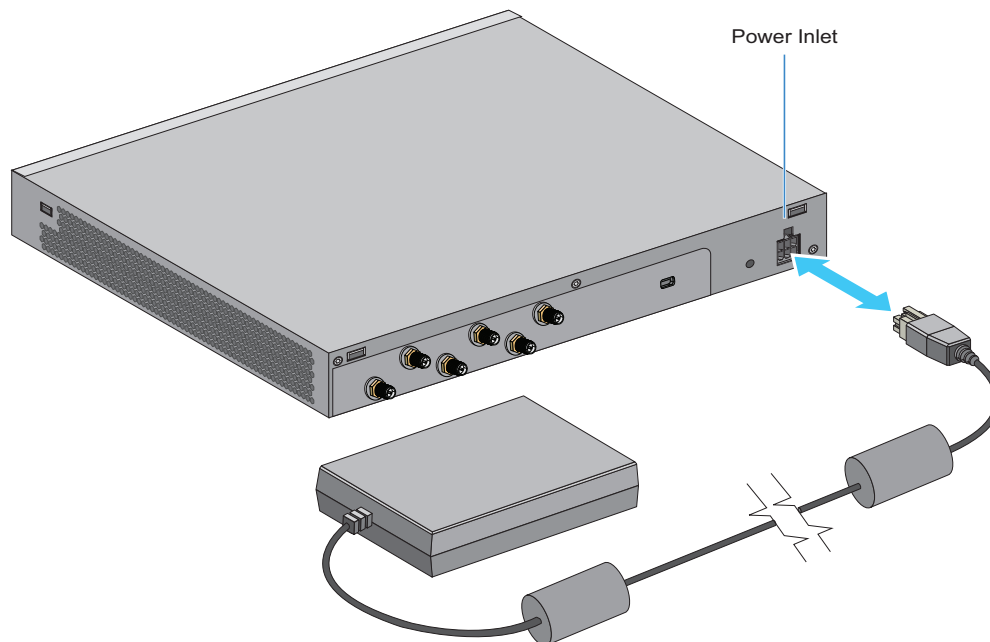
1. Using the supplied console cable, connect the RFS4011 serial port to an RS-232 (DB-9) serial port on a separate computer (the "configuration computer").



2. On the configuration computer, configure a terminal emulation application (such as **HyperTerminal**) as follows:

Terminal Type	VT-100
Port	COM port
Terminal Settings	19200bps transfer rate 8 data bits no parity 1 stop bit no flow control no hardware compression

4.7 Supplying Power to the RFS4011



1. Plug the power supply (Motorola Part Number: 86-120786-01) into the power inlet at the back of the RFS4011.
2. Plug the cord into a standard AC outlet with a voltage range of 100 to 240 VAC.



WARNING! An improper shutdown can render the RFS4011 Series Integrated Services Controller inoperable such that it could require service by Motorola Support. Do not remove AC power without first following the shutdown procedure. An abrupt loss of power can corrupt the information stored on the device.

4.8 Resetting the RFS4011's Password

The RFS4011 has a means of restoring its password to its default value. Doing so also reverts the access point's security, radio and power management configuration to their default settings. Only an installation professional should reset the access point's password and promptly define a new restrictive password.

To contact Motorola Support in the event of a password reset requirement, go to <http://www.symbol.com/contactsupport>.



CAUTION Only a qualified installation professional should set or restore the access point's radio and power management configuration in the event of a password reset.

4.9 Verifying the Installation

View the LEDs on the front panel of the RFS4011 Series Integrated Services Controller to ensure the device is functioning properly. The normal LED pattern follows this path:

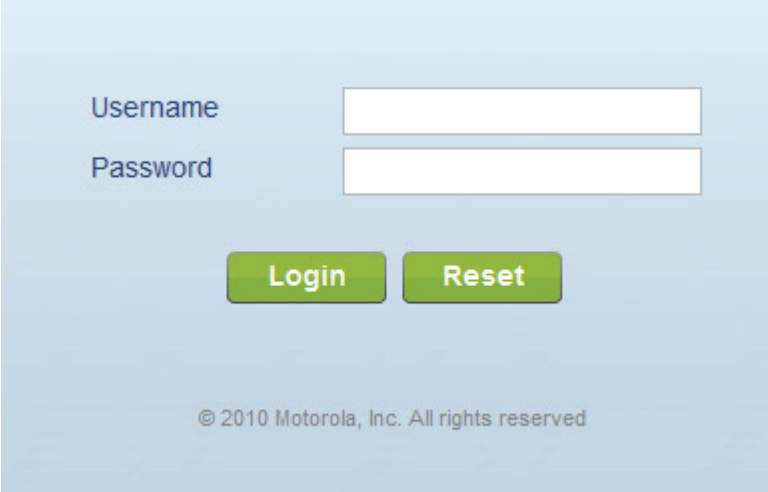
- During the Power On Self Test (POST), the System 1 and System 2 LEDs both blink green.
- If the POST test fails, the System 1 LED will blink amber. If the POST test succeeds, the System 1 LED will be lit solid green.
- As the software is initialized, the System 2 LED will blink green.
- After the software has finished initializing, the System 1 LED will be lit solid green and the bottom System 2 LED will be off. The RFS4011 Series Integrated Services Controller is ready to be configured, as described in the *RFS Series Integrated Services Controller WiNG System Reference Guide*.

Other LED codes indicate the presence (or absence) of different standby states, or errors. A guide to the RFS4011 Series Integrated Services Controller LEDs codes is provided in [Chapter 3, LED Codes](#).

5 Quick Start Information

Once the RFS4011 Series Integrated Services Controller hardware is installed and powered on, complete the following steps to get the device up and running on and access the management functions on the controller:

1. Connect one end of an Ethernet cable to any of the five LAN ports on the front of the RFS4011 and connect the other end to a computer with a working web browser.
2. Set the computer to use an IP address between 192.168.0.10 and 192.168.0.250 on the connected port. Set a subnet / network mask of 255.255.255.0.
3. Once the computer has an IP address, point the web browser to: <http://192.168.0.1/> and the following login screen will display.



Username

Password

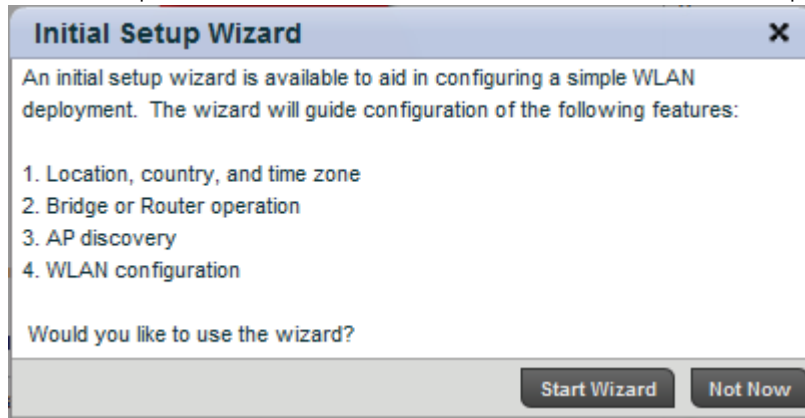
Login Reset

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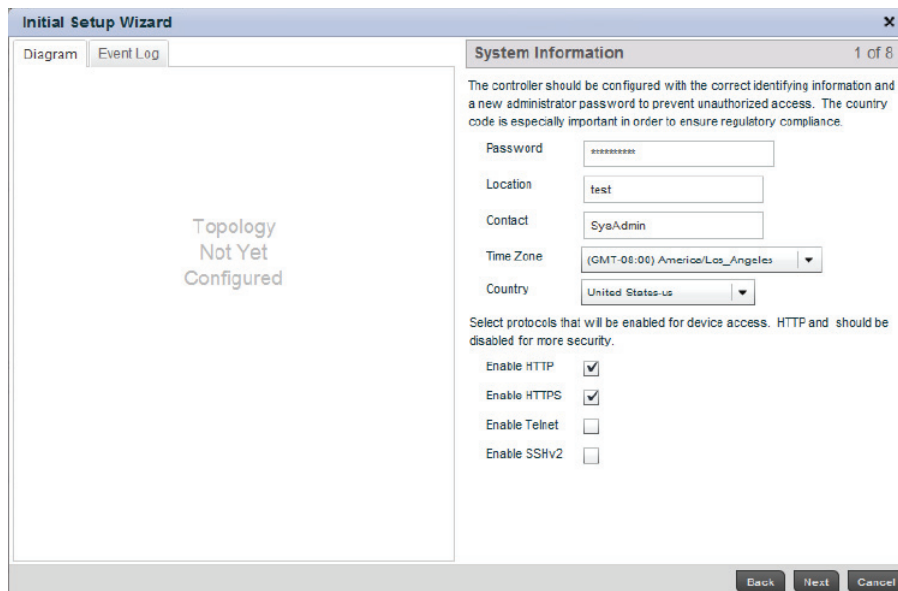
4. Enter the default username *admin* in the **Username** field.
5. Enter the default password *motorola* in the **Password** field.
6. Click the **Login** button to load the management interface.

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7. If this is the first time the management interface has been accessed, a dialogue displays to start the initial setup wizard. Click the **Start Wizard** button to run the initial setup wizard.



8. On the first screen of the wizard, change the default **Password** and enter a **Location**, and **Contact** name.



9. Select a **Time Zone** and **Country** for the RFS4011.
10. Select each of the access methods allowed to access the device.
11. Click the **Next** button to continue to the next step and follow the onscreen instructions to complete the initial setup wizard.

6 Regulatory Information

This guide applies to the following Model Number: RFS-4011

All Motorola devices are designed to be compliant with rules and regulations in locations they are sold and will be labeled as required. Any changes or modifications to Motorola equipment, not expressly approved by Motorola, could void the user's authority to operate the equipment.

Local language translations are available at the following website:

<http://www.motorola.com/enterprisemobility/support/>.

Motorola's devices are professionally installed, the Radio Frequency Output Power will not exceed the maximum allowable limit for the country of operation.

Antennas: Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could cause damage and may violate regulations.

Country Approvals

Regulatory markings are applied to the device signifying the radio (s) are approved for use in the following countries: United States, Canada, Japan, China, S. Korea, Australia, and Europe.

Please refer to the *Declaration of Conformity* (DoC) for details of other country markings. This is available at

<http://www.motorola.com/doc>.

Note 1: For 2.4GHz Products: Europe includes, Austria, Belgium, Bulgaria, Czech Republic, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Operation of the device without regulatory approval is illegal.

Health and Safety Recommendations

Warnings for the use of Wireless Devices

Please observe all warning notices with regard to the usage of wireless devices.

Potentially Hazardous Atmospheres

You are reminded of the need to observe restrictions on the use of radio devices in fuel depots, chemical plants etc. and areas where the air contains chemicals or particles (such as grain, dust, or metal powders).

Safety in Hospitals

Wireless devices transmit radio frequency energy and may affect medical electrical equipment. When installed adjacent to other equipment, it is advised to verify that the adjacent equipment is not adversely affected.

Pacemakers

Pacemaker manufacturers recommended that a minimum of 15cm (6 inches) be maintained between a handheld wireless device and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with independent research and recommendations by Wireless Technology Research.

Other Medical Devices

Please consult your physician or the manufacturer of the medical device, to determine if the operation of your wireless product may interfere with the medical device.

RF Exposure Guidelines

Safety Information

Reducing RF Exposure - Use Properly

Only operate the device in accordance with the instructions supplied.

International

The device complies with internationally recognized standards covering human exposure to electromagnetic fields from radio devices. For information on "International" human exposure to electromagnetic fields refer to the Motorola/Symbol Declaration of Conformity (DoC) at: <http://www.motorola.com/doc>

EU

Remote and Standalone Antenna Configurations

To comply with EU RF exposure requirements, antennas that are mounted externally at remote locations or operating near users at stand-alone desktop of similar configurations must operate with a minimum separation distance of 20 cm from all persons.

US and Canada

Co-located statement

To comply with FCC RF exposure compliance requirement, the antennas used for this transmitter must not be co-located or operating in conjunction with any other transmitter/antenna except those already approved in this filling.

Remote and Standalone Antenna Configurations

To comply with FCC RF exposure requirements, antennas that are mounted externally at remote locations or operating near users at stand-alone desktop of similar configurations must operate with a minimum separation distance of 20 cm from all persons.

Power Supply

Use ONLY a LISTED Motorola, Type no. 86-120786 (54Vdc, 2.7A), direct plug-in power supply, marked Class 2 (IEC60950-1, SELV).

Use of alternative Power Supply will invalidate any approvals given to this unit and may be dangerous.

Laser Devices - Gigabit Ethernet SFP Option

Complies with 21CFR1040.10 and 1040.11 except for deviations pursuant to Laser Notice

No. 50, dated June 24, 2007.

EN60825-1: 2007

IEC60825-1 (Ed. 2.0)

The laser classification is marked on the device.

Class 1 Laser devices are not considered to be hazardous when used for their intended purpose. The following statement is required to comply with US and international regulations:



CAUTION Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous laser light exposure..

Wireless Devices - Countries

Country Selection

Select only the country in which you are using the device. Any other selection will make the operation of this device illegal.



NOTE The US only model (RFS-4011-11110-US) has the country code permanently set to the US. The (RFS-4011-11110-WR) model cannot be configured for use in the US.

Operation in the US and Canada

The use on UNII (Unlicensed National Information Infrastructure) Band 1 5150-5250 MHz is restricted to indoor use only, any other use will make the operation of this device illegal.

The available channels for 802.11 b/g operation in the US are Channels 1 to 11. The range of channels is limited by firmware.

Radio Frequency Interference Requirements—FCC



This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help.

Radio Transmitters (Part 15)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Radio Frequency Interference Requirements – Canada

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Radio Transmitters

This device complies with RSS 210 of Industry & Science Canada. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (EIRP) is not more than that permitted for successful communication.

This device has been designed to operate with the antennas listed below, and having a maximum gain of 7.5 dBi (2.4GHz) and 10.0 dBi (5GHz).

- ML-2452-PTA4M3X3-1
- ML-2452-PTA3M3-036
- ML-2452-HPA5-036
- ML-2452-PNA7-01R

Antennas not included in this list or having a gain greater than those shown above are strictly prohibited for use with this device. The required antenna impedance is 50 ohms.

Label Marking: The Term "IC:" before the radio certification signifies that Industry Canada technical specifications were met.

CE Marking and European Economic Area (EEA)

The use of 2.4GHz RLAN's, for use through the EEA, have the following restrictions:

- Maximum radiated transmit power of 100 mW EIRP in the frequency range 2.400 -2.4835 GHz.
- France outside usage, the equipment is restricted to 2.400-2.45 GHz frequency range.
- Italy requires a user license for outside usage.

Statement of Compliance

Motorola hereby, declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. A Declaration of Conformity may be obtained from <http://www.motorola.com/doc>.

Korea Warning Statement for Class B

기종별	사용자안내문
B급 기기 (가정용 방송통신기기)	이 기기는 가정용 (B급) 으로 전자파적합등록을 한 기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.
Class B (Broadcasting Communication Device for Home Use)	This device obtained EMC registration mainly for home use (Class B) and may be used in all areas.

Other Countries

Australia

Use of 5GHz RLAN's in Australia is restricted in the following band 5.50 – 5.65GHz.

Brazil

Declarações Regulamentares para RFS-4011 - Brasil

Nota: A marca de certificação se aplica ao Transceptor, modelo RFS-4011. Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário. Para maiores informações sobre ANATEL consulte o site:

www.anatel.gov.br

Chile

Este equipo cumple con la Resolución No 403 de 2008, de la Subsecretaria de telecomunicaciones, relativa a radiaciones electromagnéticas.

Mexico

Restrict Frequency Range to: 2.450 – 2.4835 GHz.

Taiwan
臺灣

低功率電波輻射性電機管理辦法

第十二條

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

在 5.25-5.35 兆赫頻帶內操作之無線資訊傳輸設備，限於室內使用

Korea

당해 무선설비는 운용 중 전파혼신 가능성이 있음

당해 무선설비는 전파혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할 수 없습니다 .

Turkish WEEE Statement of Compliance

EEE Yönetmeliğine Uygundur



Waste Electrical and Electronic Equipment (WEEE)

English: For EU Customers: All products at the end of their life must be returned to Symbol for recycling. For information on how to return product, please go to:
http://www.symbol.com/environmental_compliance.

Čeština: Pro zákazníky z EU: Všechny produkty je nutné po skončení jejich životnosti vrátit společnosti Symbol k recyklaci. Informace o způsobu vrácení produktu najdete na webové stránce: http://www.symbol.com/environmental_compliance.

Dansk: Til kunder i EU: Alle produkter skal returneres til Symbol til recirkulering, når de er udtjent. Læs oplysningerne om returnering af produkter på: http://www.symbol.com/environmental_compliance.

Deutsch: Für Kunden innerhalb der EU: Alle Produkte müssen am Ende ihrer Lebensdauer zum Recycling an Symbol zurückgesandt werden. Informationen zur Rücksendung von Produkten finden Sie unter http://www.symbol.com/environmental_compliance.

Eesti: EL klientidele: kõik tooted tuleb nende eluea lõppedes tagastada taaskasutamise eesmärgil Symbol'ile. Lisainformatsiooni saamiseks toote tagastamise kohta külastage palun aadressi: http://www.symbol.com/environmental_compliance.

Español: Para clientes en la Unión Europea: todos los productos deberán entregarse a Symbol al final de su ciclo de vida para que sean reciclados. Si desea más información sobre cómo devolver un producto, visite: http://www.symbol.com/environmental_compliance.

Ελληνικά: Για πελάτες στην Ε.Ε.: Όλα τα προϊόντα, στο τέλος της διάρκειας ζωής τους, πρέπει να επιστρέφονται στην Symbol για ανακύκλωση. Για περισσότερες πληροφορίες σχετικά με την επιστροφή ενός προϊόντος, επισκεφθείτε τη διεύθυνση http://www.symbol.com/environmental_compliance στο Διαδίκτυο.

Français : Clients de l'Union Européenne : Tous les produits en fin de cycle de vie doivent être retournés à Symbol pour recyclage. Pour de plus amples informations sur le retour de produits, consultez : http://www.symbol.com/environmental_compliance.

34 RFS4011 Series Integrated Services Controller: **Installation Guide**

Italiano: per i clienti dell'UE: tutti i prodotti che sono giunti al termine del rispettivo ciclo di vita devono essere restituiti a Symbol al fine di consentirne il riciclaggio. Per informazioni sulle modalità di restituzione, visitare il seguente sito Web: http://www.symbol.com/environmental_compliance.

Latviešu: ES klientiem: visi produkti pēc to kalpošanas mūža beigām ir jānogādā atpakaļ Symbol otrreizējai pārstrādei. Lai iegūtu informāciju par produktu nogādāšanu Symbol, lūdzu, skatiet: http://www.symbol.com/environmental_compliance.

Lietuvių: ES vartotojams: visi gaminiai, pasibaigus jų eksploatacijos laikui, turi būti gražinti utilizuoti į kompaniją „Symbol“. Daugiau informacijos, kaip gražinti gaminį, rasite: http://www.symbol.com/environmental_compliance.

Magyar: Az EU-ban vásárlóknak: Minden tönkrement termékét a Symbol vállalathoz kell eljuttatni újrahasznosítás céljából. A termék visszajuttatásának módjával kapcsolatos tudnivalóért látogasson el a http://www.symbol.com/environmental_compliance weboldalra.

Malti: Għal klijenti fl-UE: il-prodotti kollha li jkunu waslu fl-aħħar tal-hajja ta' l-użu tagħhom, iridu jiġu rritornati għand Symbol għar-riċiklaġġ. Għal aktar taġġir dwar kif għandek tirritorna l-prodott, jekk jogħġbok żur: http://www.symbol.com/environmental_compliance.

Nederlands: Voor klanten in de EU: alle producten dienen aan het einde van hun levensduur naar Symbol te worden teruggezonden voor recycling. Raadpleeg http://www.symbol.com/environmental_compliance voor meer informatie over het terugzenden van producten.

Polski: Klienci z obszaru Unii Europejskiej: Produkty wycofane z eksploatacji należy zwrócić do firmy Symbol w celu ich utylizacji. Informacje na temat zwrotu produktów znajdują się na stronie internetowej http://www.symbol.com/environmental_compliance.

Português: Para clientes da UE: todos os produtos no fim de vida devem ser devolvidos à Symbol para reciclagem. Para obter informações sobre como devolver o produto, visite: http://www.symbol.com/environmental_compliance.

Slovenski: Za kupce v EU: vsi izdelki se morajo po poteku življenjske dobe vrniti podjetju Symbol za reciklažo. Za informacije o vračilu izdelka obiščite: http://www.symbol.com/environmental_compliance.

Slovenščina: Pre zakaznikov z krajín EU: Všetky výrobky musia byť po uplynutí doby ich životnosti vrátené spoločnosti Symbol na recykláciu. Bližšie informácie o vrátení výrobkov nájdete na: http://www.symbol.com/environmental_compliance.

Suomi: Asiakkaat Euroopan unionin alueella: Kaikki tuotteet on palautettava kierrätettäväksi Symbol-yhtiöön, kun tuotetta ei enää käytetä. Lisätietoja tuotteen palauttamisesta on osoitteessa http://www.symbol.com/environmental_compliance.

7 Part Numbers, Support, and Sales

Part Numbers

Description	Part Number
RFS4011 Series Integrated Services Controller with Internal PoE and Power Supply (US Only)	RFS-4011-11110-US
RFS4011 Series Integrated Services Controller with Internal PoE and Power Supply	RFS-4011-11110-WR
Rack Mount Kit	RFS-4011-MTKT2U-WR
Antenna Facade (ANT:802.11 ABGN 3X3 MIMO RFS4011)	ML-2452-PTA4M3x3-1
Power Supply Unit	86-120786-01

Motorola's Enterprise Mobility Support Center

If you have a problem with your equipment, contact Enterprise Mobility support for your region. Support and issue resolution is provided for products under warranty or that are covered by an Enterprise Mobility Services agreement. Contact information and web self-service is available by visiting <http://supportcentral.motorola.com/>.

When contacting Enterprise Mobility support, please provide the following information:

- *Serial number of the unit*
- *Model number or product name*
- *Software type and version number*

Motorola responds to calls by email or telephone within the time limits set forth in support agreements. If you purchased your Enterprise Mobility business product from a Motorola business partner, contact that business partner for support.

Customer Support Web Sites

Motorola's Support Central Web site, located at <http://supportcentral.motorola.com/> provides information and online assistance including developer tools, software downloads, product manuals and online repair requests.

Manuals

<http://support.symbol.com/support/product/manuals.do>

8 Motorola, Inc. End-User License Agreement

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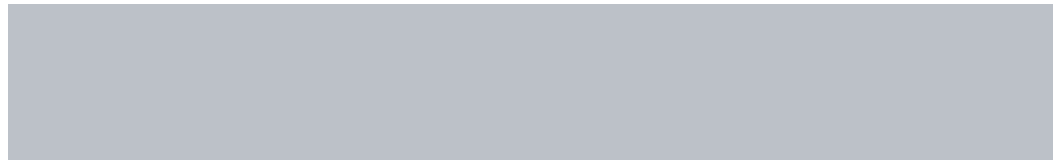
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38 RFS4011 Series Integrated Services Controller: **Installation Guide**

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9 RFS4011 China ROHS Compliance



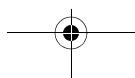
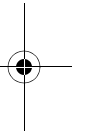
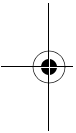
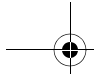
部件名称 (Parts)	有毒有害物质或元素 					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr ⁶⁺)	多溴联 苯 (PBB)	多溴二苯 醚 (PBDE)
金属部件 (Metal Parts)	○	○	○	○	○	○
电路模块 (Circuit Modules)	X	○	○	○	○	○
电缆及电缆组件 (Cables and Cable Assemblies)	○	○	○	○	○	○
塑料和聚合物部件 (Plastic and Polymeric Parts)	○	○	○	○	○	○
光学和光学组件 (Optics and Optical Components)	○	○	○	○	○	○
电池 (Batteries)	○	○	○	○	○	○

○：表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下。

X：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 标准规定的限量要求。

对销售之日的所售产品，本表表示，公司供应链的电子信息产品可能包含这些物质。注意：在所售产品中可能会也可能不会含有所有所列的部件。

This table was created to comply with China RoHS requirements for Motorola's RFS4011.





MOTOROLA INC.
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SCHAUMBURG, IL 60196
<http://www.motorola.com>



72-139899-01 Revision B
September 2010

