

OfficeServ™ Wireless

Dual-Band AP/MGI-General Description

Every effort has been made to eliminate errors and ambiguities in the information contained in this booklet. Any questions concerning information presented here should be directed to SAMSUNG TELECOMMUNICATIONS AMERICA. SAMSUNG TELECOMMUNICATIONS AMERICA disclaims all liabilities for damages arising from erroneous interpretation or use of information presented in this manual.



Publication Information

SAMSUNG TELECOMMUNICATIONS AMERICA reserves the right without prior notice to revise information in this publication for any reason.

SAMSUNG TELECOMMUNICATIONS AMERICA also reserves the right without prior notice to make changes in design or components of equipment as engineering and manufacturing may warrant.

Copyright 2006
Samsung Telecommunications America

All rights reserved. No part of this manual may be reproduced in any form or by any means—graphic, electronic or mechanical, including recording, taping, photocopying or information retrieval systems—without express written permission of the publisher of this material.

TABLE OF CONTENTS

PART	DESCRIPTION	PAGE
<u>1</u>	<u>MGI/DUAL-BAND SYSTEM OVERVIEW</u>	
1.1	<u>GENERAL DESCRIPTION</u>	<u>1.1</u>
1.2	<u>PRODUCT ADVANTAGES</u>	<u>1.1</u>
1.3	<u>SYSTEM COMPONENTS</u>	<u>1.2</u>
1.4	<u>SOFTWARE VERSIONS</u>	<u>1.2</u>
1.5	<u>SYSTEM CAPACITY TABLE</u>	<u>1.3</u>
1.6	<u>PROGRAMMING</u>	<u>1.3</u>
<u>2</u>	<u>HARDWARE DESCRIPTIONS</u>	
2.1	<u>WIRELESS DUAL-BAND ACCESS POINT (SMT-R2000).....</u>	<u>2.1</u>
2.2	<u>WIRELESS INTERNET PHONE (WIP-5000M)</u>	<u>2.2</u>
<u>3</u>	<u>SPECIFICATIONS</u>	
3.1	<u>DUAL-BAND AP</u>	<u>3.1</u>
3.2	<u>WIP-5000M</u>	<u>3.2</u>

PART 1. MGI/DUAL-BAND AP SYSTEM OVERVIEW

1.1 GENERAL DESCRIPTION

Samsung, the leader in wireless voice solution, offers the industrial most advanced wireless IP telephony solution for enterprise network. Samsung OfficeServ Wireless system operates on a converged wired and wireless infrastructure to improve employee mobility and productivity. Samsung OfficeServ Wireless provides rich functionalities with tight integration with Samsung IP enabled PBX systems.

Samsung OfficeServ Wireless offers superior voice quality across wireless LAN access points. Voice IP packets are handled at higher priority than data packets in the access points. No matter how heavy the data traffic in the WLAN, the voice traffic is always guaranty to serve.

The same handset and access points can be used for all Samsung IP enabled systems. If customers out grow the current system, the same wireless handset and access points can be used in the next bigger system.

This advanced in-building OfficeServe wireless product can be adjunct to the Samsung OfficeServ 100, OfficeServ 500, and OfficeServ 7000 Series systems. Depending on the system platform, Samsung OfficeServ Wireless system can support up to 240 wireless handsets.

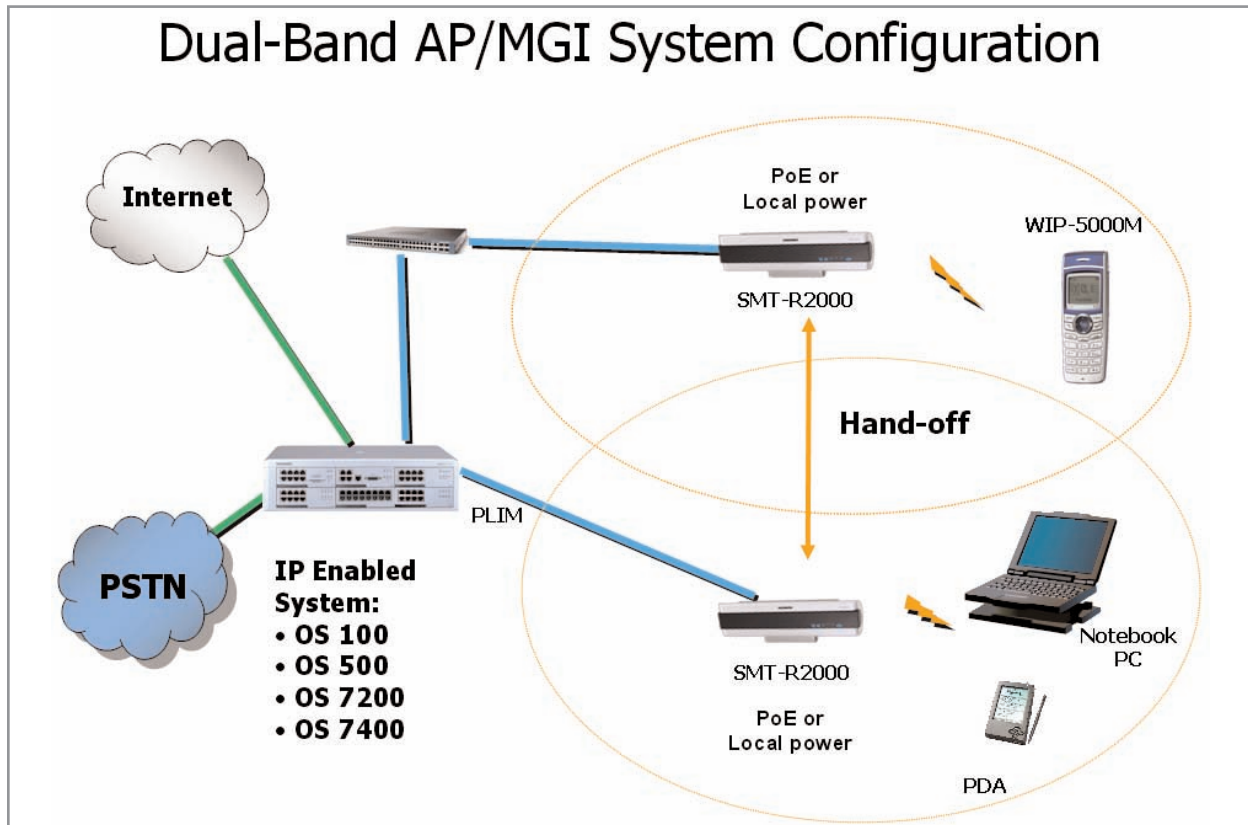
1.2 PRODUCT ADVANTAGES

- Dual-Band AP using IEEE 802.11a/b/g WLAN technology
- No monthly air time charge by using unlicensed 2.4 GHz/5 GHz frequency band
- Wireless VoIP using SIP protocol with proprietary extension
- Products support both wireless voice and wireless data services
- Excellent voice quality with guaranty priority on voice IP packets
- Rich feature integration with Samsung IP enabled PBX systems
- Easy installation and operation without lengthy training
- Innovative and lightweight wireless handset with easy access to system features
- Flexible configuration allows separate voice and data network management
- Seamless hand-off among different access points
- Programming through the existing KMMC and PCMMC

1.3 SYSTEM COMPONENTS

1. Media Gateway Interface (MGI) Card
2. Wireless Dual-Band Access Point (SMT-R2000)
3. Wireless Internet Phone 5000 Mobile Handset (WIP-5000M)

System Configuration



1.4 SOFTWARE VERSIONS

The Samsung OfficeServ Wireless LAN products require the latest system software versions that are released after May, 2006 launch.

1.5 SYSTEM CAPACITY TABLE

	OfficeServ 100	OfficeServ 500	OfficeServ 7200	OfficeServ 7400
Maximum SMT-R2000 APs	No Limitation	No Limitation	No Limitation	No Limitation
Maximum WIP-5000M Registration	56	120 (M) 240 (L)	120	192
Maximum Simultaneous Handset Voice Calls	Limit by MGI Channel*	Limit by MGI Channel*	Limit by MGI Channel*	Limit by MGI Channel*

* MGI channel is required for WIP to TDM call.

1.6 PROGRAMMING

The wireless system can be programmed via KMMC from any LCD display keyset without interrupting system operation.

The system can also be programmed via PCMMC. This permits a technician to program the system using a personal computer.

Four MMCs

Four MMCs (845 to 849) are used for the OfficeServ MGI/Dual-Band AP Wireless products.

Related Function	MMC No.	Description
Registration and Setting of WLAN	845	WLAN parameter setting
	846	Sets WIP-5000M information
	848	Sets WIP-5000M IP address
	849	Select dual-band AP, enable/de-register handset.

PART 2. HARDWARE DESCRIPTIONS

2.1 WIRELESS DUAL-BAND ACCESS POINT (SMT-R2000)

The wireless access point (SMT-R2000) provides wireless coverage to the building. It supports IEEE 802.11a/b/g WLAN standard for both voice and data. It gives priority to voice packets. The quality of the service for voice is always guaranty.



SMT-R2000

Highlights of SMT-R2000 Features

- Two radios WLAN access point
 - Radio 1: 5GHz IEEE 802.11a (54 Mbps)
 - Radio 2: 2.4 GHz IEEE 802.11b/g (54 Mbps)
- 8 voice calls per AP
- Maximum Wireless data stations or handsets association per AP
 - 802.11a: 255
 - 802.11b/g: 255
- Wireless access or repeater mode
- RP-SMA type connector for external antenna
- Support router mode
- Enhanced security mode (WEP, WPA, WPA2, etc.)
- Support PoE (Power over Ethernet)
- Easy Web Management
- Wi-Fi certified
- No MGI channel required for conversation between handset to handset or handset to ITP desktop phone

2.2 WIRELESS INTERNET PHONE (WIP-5000M HANDSETS)

Wireless Internet Phone (WIP-5000M) is a compact handheld unit that works within the Samsung OfficeServ Wireless system. The three ounce handset comes with a rich set of features. Its graphical display and menu-driven function make it very simple to use. The handset package comes with a two-hour fast charging unit, a leather carrying case and a headset with hook switch.

Highlights of WIP-5000M Features

- Caller name and number display
- Call Waiting
- Voice mail indication
- Hot key for voice mail access
- System hold
- Call transfer
- Call forward
- Call mute
- Call pick up
- Do not disturb
- Dynamic soft keys
- Hard keys for TRANSFER, HOLD, and CONFERENCE
- Redial
- Pre-dial
- Local phone book with 200 entries.
 - Each entry can store 3 phone numbers
 - There is a total of 600 phone numbers
 - 100 Speed Dial (Entry 0 to 99) can be assigned from the Phone Book
- Hot key for vibrator function (*)
- 32 incoming call log and 32 outgoing call log
- Adjustable volume
- 10 different ringer tones and adjustable ringer volume
- Hot key for keypad lock/un-lock (#)
- Microphone mute key
- Talk/standby time 2.5/25 hours
- 2 hours fast charger
- Spare battery slot in charger
- Weight 3.2 oz including battery
- Support two system registration
- Built-in Web server for status monitor and software upgrading
- Software upgrade through wireless connection



WIP-5000M Handset

PART 3. SPECIFICATIONS

3.1 DUAL-BAND AP

Category	Specification
Standard	WLAN: 802.11a/b/g VoIP: SIP (proprietary extension)
RF Frequency	2.4~2.483 GHz; 5.15-5.825 GHz
RF Output Power	From 1mW to 100 mW
RF Channels	Three non-overlapping channels for 802.11 b/g Twelve non-overlapping channels for 802.11a
Voice CODEC	G.711, G729A
Size	328 (width) x 80 (length) x 41 (height) mm
Weight	About 1 Kg
Power	PoE or AC Power Adapter
Antenna	2 Internal Antenna Diversity, 2dBi Dipole
LED	Power, 5 Ghz, 2.4 GHz, LAN, WAN
External Connector	External antenna connector (RP-SMA), RJ-45 WAN, RJ-45 LAN, RJ45 SIO, PWR
Operating Temperature	+32°F (0°C) to +113°F (+45°C)
Storage Temperature	-40°F (-20°C) to +158°F (+70°C)
Humidity	0 – 90% non-condensing

3.2 WIP-5000M

Category	Specification
Standard	WLAN: 802.11b VoIP: SIP (proprietary extension)
RF Frequency	2.4~2.483 GHz
RF Output Power	Up to 100 mW
Transmission Protocols	Direct Sequence Spread Spectrum (DSSS)
Voice CODEC	G.711, G729A
Size	43 mm (width) x 126 mm (length) x 20 mm (height)
Weight	95 g
Battery	3.8V Li-Ion/1000mA
Talk Time	2.5 Hours
Standby Time	25 Hours
Configuration	LCD: eight icons with 4 lines display
	Key Pad
	External Battery Charger
	Antenna: Super Sensitive Antenna
Operating Temperature	+32°F (0°C) to +113°F (+45°C)
Storage Temperature	-40°F (-20°C) to +158°F (+70°C)
Humidity	0 - 90% Non-Condensing