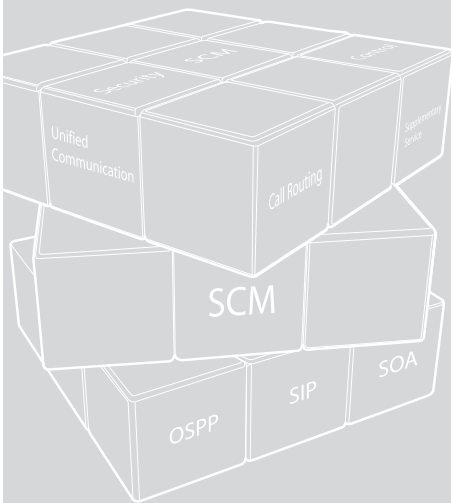


Samsung Enterprise IP Solutions

UNLIMITED CONNECTIVITY



Experience smart enterprise communications that enables
your business to grow seamlessly and cost-effectively



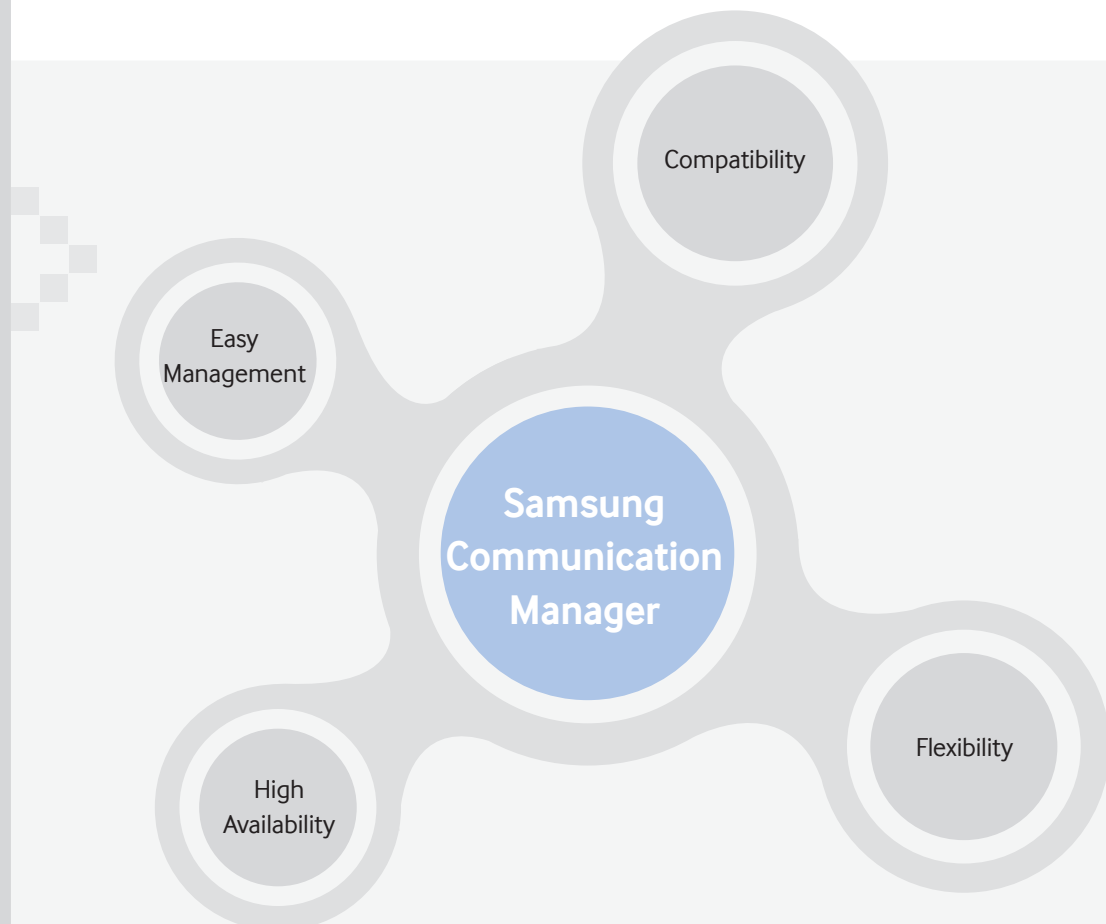
Samsung Communication Manager is a SIP-based PBX that offers flexibility and stability. It is an all-in-one communication solution that enables mobility and enhanced productivity.

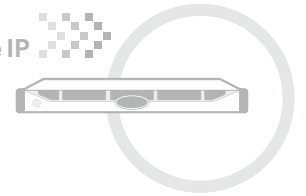
Pure IP-PBX

Samsung Communication Manager

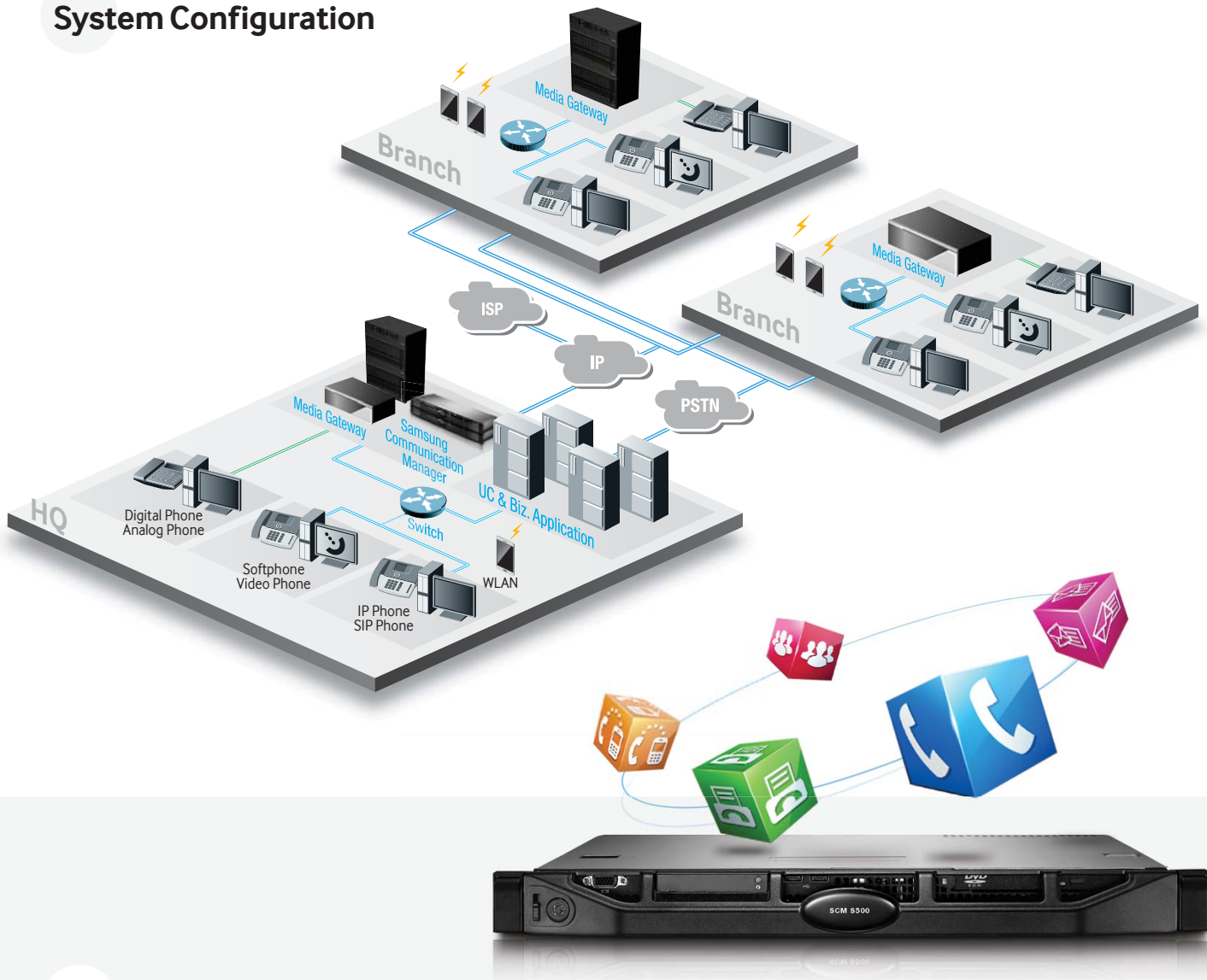
An “All-in-One” Solution in the Rapidly Changing Communications Market

Communications is a critical element for competitive advantage and business success. As such, businesses are focusing on optimizing the way employees collaborate and communicate for a more productive and agile work environment. **Samsung Communication Manager** offers an enterprise-class, full-featured phone system specially designed to create optimized collaborative work environments, operational efficiency and enhanced productivity.





System Configuration



Major Functions and Benefits

Straightforward Architecture

- Single server architecture
- Accommodates up to 3,000 users (expandable to 6,000* users)
- Bundled software licenses
- Entire voice ecosystem consolidated into one interface

Resiliency and High Availability

- High availability modes: active-standby, active-active
- Switchover cases : LAN cable down, SCM down or process down
- Data Synchronization : real-time, total sync or by command

(*) System capacity up to 6,000 users in Active-Active redundancy mode.

Features that Satisfy All Customer Demand Levels

- Simplified MAC (move, add and change) process
- Integrated voice mail, auto attendant, email, and access manager
- Excellent integration for mobile phones into your voice network

Embedded Applications

- Unified messaging
- Conferencing
- Mobile Extension (MOBEX)
- Call MOVE
- System monitoring
- Call trace
- WE VoIP (Mobile Application)
- Compatibility provides SIP features (300+) and CSTA Link for 3rd party connectivity



Samsung Communication Manager

Scalability and Easy Management

As your business grows, you can simply add user licenses without costly software or hardware changes. The SCM can be quickly installed and its easy management tools reduce time and money spent on system administration. This all-in-one solution allows you to efficiently and effectively manage your entire voice ecosystem in one interface, integrating all administrative functionality for your system's database, applications, and troubleshooting.

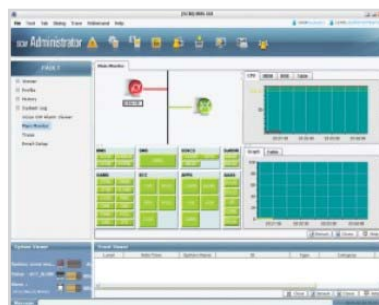
Low Total Cost of Ownership

The SCM provides bundled software licenses that lower software costs, and its single-server architecture reduces hardware and management costs. The SCM requires less space with its all-in-one features and functionality on a single server, so your business saves money on electricity and cooling, supporting green initiatives.

Compatibility and Flexibility

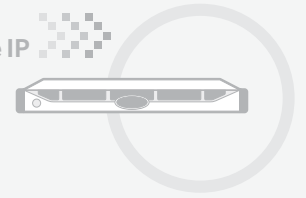
The SCM is a SIP-based VoIP soft switch, which allows easy integration of 3rd party applications to meet your business needs. You can also improve productivity and customer experience with its simplified MAC (move, add and change) process and hot desking which enables 'work-as-you-go' environments.

Easy Management



Easy to set up. Easy to manage. Easy to use.

The SCM administrator GUI is configured and specially designed to help system administrators to efficiently control all functions. The SCM's embedded call tracing, system monitoring and database management applications are convenient, powerful and intuitive.



Embedded Applications

- Eliminates additional cost of multiple application servers
- Eliminates complications from multiple servers running different operating systems
- Consolidates management of your business's applications

Embedded UMS (Unified Message Service)

- Powerful auto attendant
- Robust voice mail feature package
- Real-time status monitoring per port
- E-mail server interface and Outlook integration

Embedded ACD Lite

- Queuing and routing control
- Agent status and real-time monitoring
- Call statistics on groups

Embedded Audio Conference

- Built-in audio conference bridge
- Flexible configuration
- Predefine, Progressive, Ad-hoc, Meet-me Voice Conference
- Up to 40 concurrent conferences serviced

Embedded Personal Assistant

- Web-based user interface to manage settings
- Record greetings
- Set schedules
- Meet-me conference reservation and status monitoring

Embedded MOH and TFTP Server

- Provides music or tone for on-hold calls
- Custom music or announcements loaded as .wav files
- Primary and secondary announcements for ACD Lite application
- Automatic phone software updates

External Applications

Samsung Communicator

- Softphone mode
- Desk phone mode
- UC phone

Embedded CSTA Server

- Interface function using standard CSTA Phase-I and II protocols to communicate with external application
- Enable organizations with larger channel/services requirements

Specifications

	Category	SCM-S500 Server
System Capacity	Users	Max. 3,000
	Gateways	Max. 512
	BHCA	60,000
	CPS	50
	Concurrent Calls	1,000
	MOH Channels	256
	UMS Channels	64
	Maximum SIP Phones (Samsung + 3 rd Party)	3,000
	Maximum AOM Devices	100
	SIP Trunks	512 SIP trunk routes, Max. 1,000 concurrent calls
	PRI Circuits	Depends on gateways selected
	T1 Circuits	Depends on gateways selected
	FXS	Depends on gateways selected
	FXO	Depends on gateways selected
Conferencing	Paging Channels (Through IP Phone)	128
	Total Conference Channels	128
	Meet-me Conference Channels	Max. 64 (Requires license)
	Predefined / Progressive / Ad-hoc	128 minus meet-me conference channels (No license required)
H/W Specifications	Rack Unit	1 RU
	CPU	3.1 GHz quad core, Single CPU
	RAM	4 GB
	HDD	500 GB
Redundancy	System	Active-Standby, Active-Active



Media Gateway

Ubigate iBG Series

With full routing capabilities, enterprise-class switching capacity, VoIP and best-in-class integrated security, the Samsung Ubigate iBG Series Convergence Platform replaces a multitude of special-purpose network devices and delivers an agile and efficient network infrastructure. The Ubigate iBG Series offers analog and digital voice interface such as T1, E1, FXS and FXO.

iBG

Gateway

- Voice Gateway
- T1/E1, FXS, FXO
- SIP
- Survivable Gateway



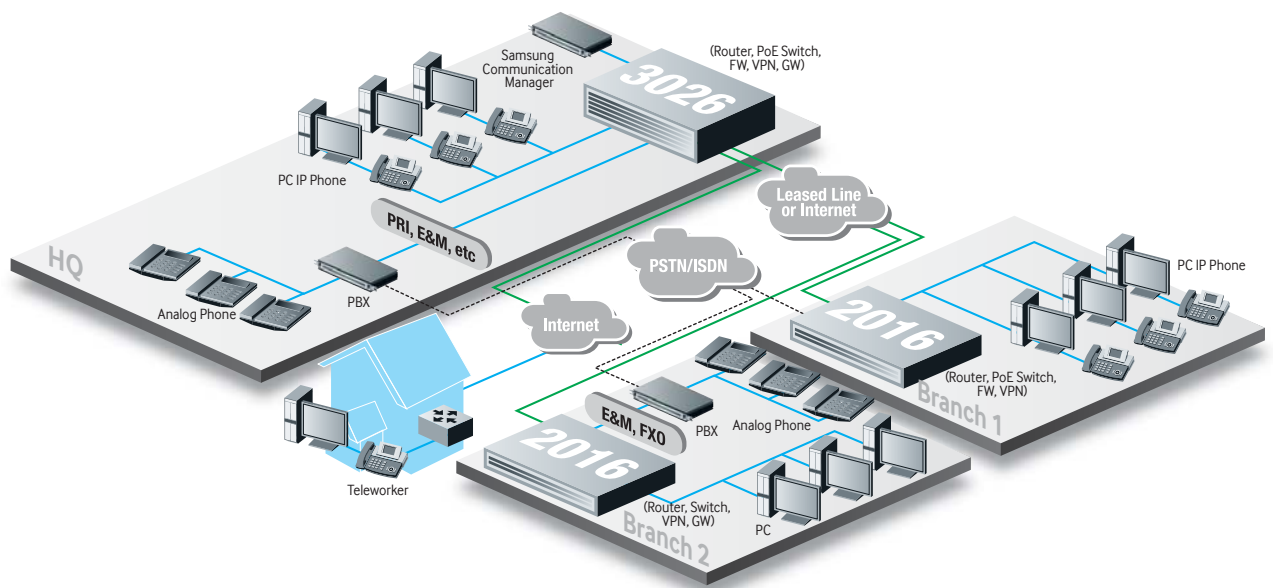
Data

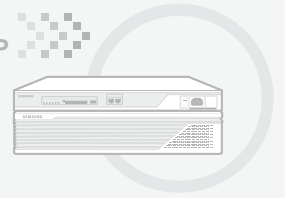
- Routing, L2 / L3 switching
- IPv6 support

Security

- Firewall, VPN
- sRTP, TLS (for Voice)

System Configuration





Major Functions and Benefits

Offers Various Interfaces and Functions for IPT

- Offers voice interfaces such as T1, E1, FXO, FXS, etc.
- Offers QoS and security functions such as sRTP and TLS.
- Acquired compatibility certification with broad works products.

Powerful Performance and Data Functions

- Offers voice gateway, data and security functions without lowering performance quality.
- Provides 40% higher packet forwarding performance compared with competitors.
- Offers next generation technologies such as hardware based IPv6. (iBG 2006 is software based)
- Offers L2 and L3 switching functions. (Only L2 for iBG 2006)

One Box Solution for the Enterprise




- Simultaneously provides voice, and basic router and switch functionalities.
- Reduces purchasing and maintenance costs.

High Availability and Convenient Management

- Supports Hot Swap functions for power dualization, power supply, fan, and modules.
- Convenient system management using web-based management tools.



Specifications

Feature		Ubigate iBG 1003	Ubigate iBG2016	Ubigate iBG3026
				
Platform	Interface Slot	1 mini module, 1 internal	1 network module, 4 mini module, 2 internal	2 network module, 3 mini module, 1 option module, 2 internal
	Fixed Ethernet Ports	2 FE (2 UTP)	5 FE (4 UTP + 1 SFP)	4 GbE (2 UTP + 2 SFP)
	Number of power supply	1 ea	1 ea	2 ea
Max. Port Density	Voice	T1E1	2 port	4 port, 8 port
		FXS	16 port	40 port
		FXO	2 port	24 port
LAN	Ethernet	4 fast ethernet	24 fast ethernet	54 gigabit ethernet
Voice Feature	Interface / Signaling	Analog FXS, E&M, FXO, Analog DID (Direct Inward Dial)		
		T1 (FXO, FXS), E1 (CAS R2 MFC / DTMF)		
		T1 / E1 ISDN PRI Q.931, T1 / E1, Q.SIG, T1 R1, CAMA Trunk		
	Protocols	SIP, RTP / RTCP, TLS, sRTP		
	DSP	Codec: G.711, G.723.1, G.726, G.729 A/B Echo cancellation (G.168-2002), Comfort Noise Generation (CNG), Voice Activity Detection (VAD), Tone - MF / DTMF		



Samsung IP Phones

Samsung IP Phones can make your business more efficient, collaborative and agile. Their advanced features and functionality enhance productivity and communications among employees and off-site colleagues while helping your business to reduce costs.



SMT-i5343

- Top of the line full UC featured IP phone for executives
- Full duplex speakerphone
- 4.3" TFT color LCD (480 x 272)
- 2 10/100/1000 Mbps ethernet
- Support Wi-Fi (802.11 a/b/g/n)
- NFC / Bluetooth
- Support PoE (IEEE 802.3af)
- USB camera (Option)
- Support XML browser
- sRTP, TLS, IPSec, 802.1x



SMT-i5243

- Full UC featured IP phone for executives
- 4.3" color LCD display (480 x 272)
- Intuitive UC dial
- 5 soft keys
- 14 programmable buttons
- 2 position base wedge
- XML support
- Full duplex speakerphone
- USB port
- Optional wall mount



SMT-i5230

- SIP phone specially designed for sales staff
- 3.2" mono backlit LCD display
- 30 button desi-less with 3.2" sub LCD
- 5 buttons per page (6 pages)
- Intuitive UC dial
- 2 position base wedge
- XML support
- Full duplex speakerphone
- Optional wall mount



SMT-i5220

- IP phone for office administrators
- 3.2" mono backlit LCD display
- Intuitive UC dial
- 24 programmable buttons
- 2 position base wedge
- Speakerphone
- XML support
- Optional wall mount



SMT-i5210

- Ideal for office workers
- 3.2" mono backlit LCD display
- Intuitive UC dial
- 14 programmable buttons
- 2 position base wedge
- Speakerphone
- XML support
- Optional wall mount



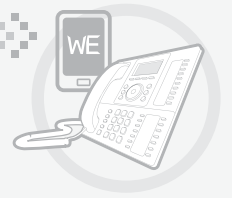
SMT-i3105

- Entry level IP phone
- 4 line mono 2.8" LCD display
- 5 programmable buttons with LEDs
- SIP capabilities
- Speakerphone



SMT-i5264

- Add on module
- 2ea 10/100 Mbps ethernet
- Support PoE (IEEE 802.3af)
- 64/64 DSS/BLF buttons
- Web remote setting support
- Speed dial / Call pick up / Public / Extension
- IPv6 support



Wireless Enterprise Applications



WE VoIP (Mobile Application)

- The Samsung WE VoIP is an application for smartphones used in enterprise WLAN environments.
- The Samsung's exclusive HD Voice technology and Samsung smart devices ensure crystal clear call quality-better than 3G network.
- The Samsung WE VoIP provides frequently-used functions of an extension phone in the office, such as conference, transfer, hold, as well as work specific functions, such as Later and Wait, through interconnection with Samsung Communication Manager. The Business CID function, which displays work contact lists of WE Work and employees information, provides additional convenience to the user.

Integrated Dialer



Integrates conventional dialer with VoIP dialer without using an additional application.

Work-specialized Receiving Function : Later / Wait



You can answer a call during a meeting by selecting the Wait function and then connect to the caller and speak after getting out of the meeting room. When you select Later, the call is rejected and the caller's number is added in the call back list.

HD Voice



Application of Samsung Voice Engine optimized for smartphones Wideband Codec (G.722), Super Wideband Codec (SILK) Seamless handover support during calls while moving between AP cells.



WE Work (Mobile UC Application)

- The Samsung WE Work is a Mobile UC Application used in both wireless intranet and internet.
- Used with a work contact list linked to a groupware of the WE Work Solution, you are able to search or view employee information and the organization chart without the need to save it to the smart device. The employee information saved in the work contact list cannot be searched from a personal application, hence the employee information is protected.
- Business Messenger application powered with work request and management functions enhances productivity.
- The presence service helps find employee's location and status, providing you options to select an appropriate way to communicate.

Integrated Contact List



Integrated Contact List=Work + Personal Work contact's information are managed in a separate database from personal contacts.

View Organization Chart



With interconnection with groupware, the user can view the organization chart and send a work request message.

Confirmation Receipt of Assigned Task



Anyone who joins a group chat late can see all of the previous dialogue among colleagues and check the message receipts.

Task List



Assign tasks to your employees and manage them efficiently.



Ethernet L2 Switches

Ubigate iES4000 Series

The Samsung Ubigate iES4000 Series is a workgroup Ethernet switch that reduces total cost of ownership (TCO) in the IPT environment and offers user convenience and the highest security standards.

iES4028FP



iES4028 is a Layer 2 PoE switch that offers wire speed 10/100 Fast Ethernet switching. It provides four Gigabit ports and offers excellent performance when compared to the price. Up to 32 switches can be administered as one logic group using just one IP address. In addition, it offers high-end QoS functions that can configure traffic prioritization and minimize latency for voice or high quality video services. In the case of the PoE model, up to 15.4 W per 802.3af based port can be supported.

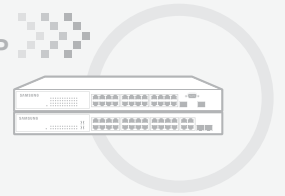
iES4024GP

iES4024GP is a Layer 2 PoE switch that offers wire speed 10/100/1000 gigabit Ethernet switching. It provides two gigabit combo ports and offers excellent performance for its price. Up to 36 switches can be administered as one logic group using just one IP address. In addition, it offers high-end QoS functions that can configure traffic prioritization and minimize latency for voice or high quality video services. The PoE port supports up to 15.4 W per 802.3af based port.

Specifications

Physical Features

Feature	Ubigate iES4028FP	Ubigate iES4024GP
		
Ports	24 10/100 base-T ports with PoE 2 10/100/1000 base-T ports 2 gigabit combo ports, 1 Console port	22 10/100/1 000 base-T ports with PoE 2 gigabit combo ports with PoE 1 console ports
Switching Capacities	12.8 Gbps	48 Gbps
Forwarding Rate	9.5 Mpps	35.7 Mpps
Weight	4.13 kg	4.33 kg
Dimensions	440(W) x 43(H) x 330(D) mm	440(W) x 43(H) x 320(D) mm
AC Input	100 to 240 V, 50-60 Hz	100 to 240 V, 50-60 Hz
Power Consumption	225 W (System 45 W, PoE 180 W)	225 W (System 45 W, PoE 180 W)
Power over Ethernet	Maximum output power per port : 15.4 W Maximum output power per port : 7.5 W simultaneously	Maximum output power per port : 15.4 W Maximum output power per port : 7.5 W simultaneously
Network Interface	10/100 BASE-T ports 10/100/1000 BASE-T ports SFP transceiver slots supporting SX, LX and ZX SFP Multimode fiber cable : 62.5/125 or 50/125 microns Single mode fiber cable : 9/125 micron	



Major Functions and Benefits

Best Gigabit Port Density

- Supports up to four 10/100/1000 gigabit uplink Ethernet ports at the 1RU chassis

IP Clustering Support

- IP clustering support that can manage up to 32 switches with just one IP address

IGMP Snooping Support

- Allows IP multicast traffic only to registered members in the multicast environment to lower bandwidth and to enhance LAN performance

Improved Security Functions

- Supports L2 - L4 based ACL, Radius, TACACS+, SSH, SSL, 802.1X based Port Security, and DHCP Snooping

IEEE802.3af Standards for All Access Ports Support

- Supports IEEE Power over Ethernet for all access ports (iES4028FP, iES4026GP)

GVRP and Voice VLAN Support

- Supports tag or port-based VLAN, automatic GVRP LAN registration, and Voice VLAN for optimal IPT environments

LACP Supported MultiLink Trunking

- Able to connect to high bandwidth bases by trunking 10/100 or gigabit ports



Software Features

Feature	Description
Flow Control	<ul style="list-style-type: none"> • IEEE802.3x for full duplex mode • Back pressure flow control half duplex mode
Spanning Tree	<ul style="list-style-type: none"> • IEEE802.1D STP / IEEE 802.1w RSTP • IEEE802.1s MSTP / Spanning tree fast forwarding • Auto edge / Loop protection
MAC Addresses	<ul style="list-style-type: none"> • 8K MAC address entries
VLAN	<ul style="list-style-type: none"> • 802.1Q tag-based VLAN • 802.1Q port-based VLAN • 802.1v protocol-based VLAN • 256 VLANs entries out of 4K VLAN IDs • GVRP / Voice VLAN
IGMP Snooping	<ul style="list-style-type: none"> • V1, V2, V3 / Querier • Immediate leave / Filtering and throttling
Link Aggregation	<ul style="list-style-type: none"> • IEEE802.3ad with LACP - 8 aggregation groups up to 8 ports
MVR	<ul style="list-style-type: none"> • Yes
Jumbo Frame	<ul style="list-style-type: none"> • 10K in gigabit ports
QnQ	<ul style="list-style-type: none"> • Yes
Quality of Service	<ul style="list-style-type: none"> • Priority queue - Scheduling : Strict priority, WRR - 4 queues per port • DiffServ • COS - IEEE802.1p - DSCP based COS • Rate limiting (Per port based) - Ingress - Egress

Feature	Description
Security	<ul style="list-style-type: none"> • Storm control - Broadcast storm - Multicast storm - DLF (Destination Lookup Failure) • MAC address filtering • Username • Password authentication • Access control list (L2 / L3 / L4) • AAA - RADIUS, TACACS+ • MAC based Authentication • HTTPS / SSL • SSH v1 / v2 • 802.1x - Port-based, Supplicant support, VLAN assignment, Guest VLAN, Co-works with radius, TACACS+ server • Management interface access filtering - SNMP, WEB, Telnet • DHCP snooping • IP source guard
Management	<ul style="list-style-type: none"> • Management method - Web based - Telnet (4 sessions) • Software download - TFTP, Xmodem • Dual firmware images • Configuration file download - TFTP • SNMP v1 / v2c / v3 • RMON (Group 1, 2, 3, 9) • BOOTP - Client • DHCP - Client, Relay (Option 82) • Port mirroring (One-to-many) • Event/Error log - Local, Syslog, SMTP • Remote Ping • SNTP • NTP • IEEE802.1ab (LLDP) • UPnP, Banner, Web authentication • IP clustering (36 members)



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Samsung **Enterprise IP** Solutions



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