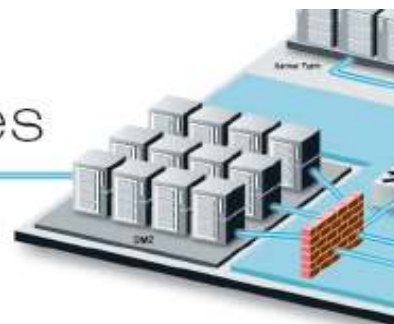


The right choice for unified networking -
Ubigate™ iBG Series



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 enables true enterprise voice and data convergence through a wide range of QoS features and supports both analog and IP phones. With a wide range of features and network interfaces supported in the Ubigate™ iBG Series, enterprise customers can meet today's business needs and be confident that they can meet tomorrow's without 'forklift' replacement of current equipment. The platform's integrated security provides industry's best perimeter and end-point protection for all types of traffic – including voice - by inspecting all incoming and outbound traffic and blocking intruders. Whether your organization requires support for VoIP, new mission-critical applications, or just additional bandwidth, Ubigate™ iBG Series can meet the challenge and give you a competitive advantage with higher productivity and more rapid growth.



- **Integration of L2/L3 switching, advanced routing, including IPv6, voice and security in one platform**
- **Modular design and highest performance in its class**
- **Complete security functions for protection from both internal and external threats**
 - Stateful Firewall, IPSec VPN certified by ICSA
 - SSL VPN, IPS
- **Full support for voice**
 - Switching Modules with Optional PoE for IP Phones
 - Voice Interfaces (FXS, FXO, E&M) for Analog Voice
 - SIP ALG
 - Survivable Telephony
 - SIP Trunking
 - Interoperability with Soft switches (Broadsoft, Teleware)
- **High-availability features**
 - Hot-swappable Modules, Fan, and Power Supply
 - Internal Redundant Power Supply
 - VRRP
 - Integrated Security Module Bypass
 - Dial-on-demand Routing



Simplified and Cost-Effective Installation, Operation and Maintenance

Integration of switching, routing, VoIP, and security into one platform simplifies network maintenance and management by minimizing the number of hardware units from different vendors in the network. What brings it all together is Samsung's intuitive Web-based Device Manager for the Ubigate™ iBG Series. By providing central management for all Ubigate™ iBG Series services - including routing, switching, VoIP, and security - it lowers administrative burden and effectively reduces total network cost of ownership. And it does all this while increasing your ROI.

Best-in-class, Comprehensive Security

The Ubigate™ iBG Series' Integrated Security Module (ISM) delivers maximum security for enterprises. When ISM's security function - High-performance IPS - is coupled with the onboard Firewall and VPN, Ubigate™ iBG Series offers best-in-class, the most comprehensive security protection.

IP Telephony Made Easy



With interfaces for analog phones, and Ethernet modules with PoE for IP phones, the Ubigate™ iBG Series delivers flexible, business-class voice services. In addition, the Ubigate™ iBG Series ensures the priority of voice traffic with a wide range of QoS functionality.

High Availability

Best-in-class high availability hardware and software features mean that the Ubigate™ iBG Series accelerates business productivity. The Ubigate™ iBG Series secures network availability and reduces downtime with hot-swappable modules, power supplies and fans - the only product in its class to do so.

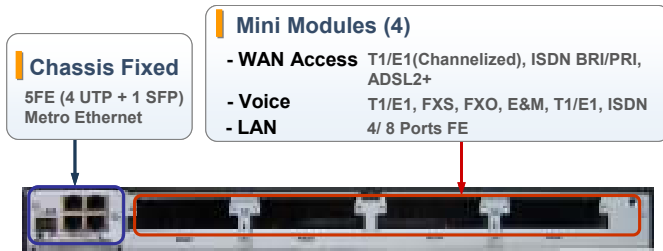
Price and Performance

The Ubigate™ iBG Series sets industry-leading price/performance benchmarks for enterprise networking. The platform's switching, routing, VoIP and security functions deliver a significant price/performance advantage over competitive products.

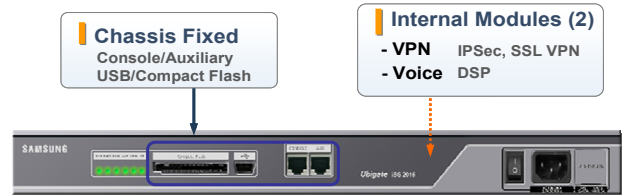
Hardware Specifications		 iBG2006	 iBG2016	 iBG3026
Platform	DRAM (Default / Max)	512M / 1G	512M / 1G	512M / 1G
	Flash (Default / Max)	256M / 512M	256M / 512M	256M / 512M
	Number of Console Ports	1	1	1
	Number of Aux Ports	1	1	1
	Number of USB (v1.1) Ports	1	1	1
	Number of Ethernet Management Ports	-	-	1
	Number of Fixed 10/100/1000Mbps UTP / GE SFP	-	-	2 / 2
	Number of Fixed 10/100Mbps UTP / FE SFP	4 / 1	4 / 1	-
	Number of Mini Module Slots	4	4	3
	Number of Network Module Slots	-	1	2
	Number of Compact Flash Slots	1	1	1
	Number of Internal Slots	2	2	2
	Form Factor	1	1	2
	Number of Power Supply Slots	1	1	2
Physical	Weight	5.46Kg (MPU+PSU)	6.42Kg (MPU+PSU)	10.72Kg (MPU+PSU)
	Height	1.75inch (4.45cm)	1.75inch (4.45cm)	3.5inch (8.89 cm)
	Width	17.38inch (44.15cm)	17.38inch (44.15cm)	17.38inch (44.15cm)
	Depth	13.8 inch (35.05cm)	16.5inch (41.91cm)	16.5inch (41.91cm)
	Rack-Mounting	Yes : 19- and 23-inch options	Yes : 19- and 23-inch options	Yes : 19- and 23-inch options

Ubigate™ iBG Series Convergence Platform

Transform Your Network
Experience
the Power of Ubigate™



Ubigate iBG2006 Rear Panel



Ubigate iBG2006 Front Panel

Switch Router Specifications	
Forwarding Performance	150 Kpps (iBG2006) 300 Kpps (iBG2016) 500 Kpps (iBG3026)
WAN Protocols	ISDN BRI/PRI, HDLC FR/MLFR, PPP/MLPPP, PPP/MLPPP over ISDN FR Congestion Management and Traffic Policing DDR (Dial-on Demand Routing) PPP over Ethernet, PPP over FR, MLPPP over FR
Layer 2 Protocols	VLAN(802.1q, Port, Subnet*) Multiple STP (Support Backward Compatibility with STP & RSTP) Port Mirroring 802.1x Authentication IGMP Snooping
Routing Protocols	Static Routing, OSPF v1/v2, RIP v1/v2, BGP4**, IGMP v1/v2 PIM-SM, DVMRP, IGMP v3, PIM-SSM VRRP Policy-Based Forwarding/Routing
QoS	DiffServ Classification (MF, Flow Label) - Marker/Meter (srTCM/trTCM) - Policing/Shaping - Queuing (CBQ, PQ) - Scheduling (Deficit RR) - Congestion Avoidance (WRED) Bandwidth Guarantee, Auto QoS, LF&I Mapping of IPQoS to Frame Relay, QoS for FR PVC, Queuing for IPSec Encryption Engine
Voice Specifications	
System Interface and Signaling	Analog FXS, E&M, FXO Analog DID (Direct Inward Dial) BRI Q.931 T1-CAS E&M, FXO, FXS E1-CAS R2 MFC/DTMF T1/E1 ISDN PRI Q.931, T1/E1 Q.SIG T1 R1 CAMA Trunk
System Features	PSTN Fallback, Survivable Telephony Call Admission Control (CAC) FAX over IP Distinctive dial tone, Distinctive ring Number Analysis and Routing Local Voice Busy Out (LVBO) DTMF Signaling over IP Early Media Handling Private Line Automated Ringdown (PLAR) Audible/Visible MWI for Analog Phone
Supplementary Services	Caller ID/Name, Call Forwarding, Call Hold/Retrieve, Call Pickup Call Transfer Call Waiting Incoming Call Blocking
Protocols	SIP, H.323, RTP/RTCP, cRTP, S/MIME, TLS, sRTP VoIP over IPv6(SIP, H.323, RTP) (iBG2006 : '08.Q3) HTTP Digest Authentication
DSP Features	Codec: G.711, G723.1, G.726, G.729 A/B Echo Cancellation(G.168-2002) Comfort Noise Generation (CNG) Voice Activity Detection (VAD) Tone - MF/DTMF Tone - Dial, Ringback, Busy, Congestion, Wait, Hold, Progressing, Howling, Programmable, etc.
AAA	802.1x, RADIUS, TACACS+
Load Balancing	Per Flow (ECMP, LACP*) Per Packet
Management	SNMP v1/v2/v3, RMON(1,2,3,9), CLI, Telnet, SNMP, TFTP, DHCP SSHv2, SSH over IPv6 Web-based Device Manager, MIBs Logging, Diagnostic System Image Rollback Hot-swap Handling*
IPv6	H/W Forwarding in LAN Switching* Dual Stack Configured Tunnel 6to4, NAT-PT(ALG) ('08.Q4) Routing (RIPng, OSPFv3, BGP4+) PIMv6-SM, PIMv6-SSM MLD (Multicast Listener Discovery Protocol)
Security Specifications	
Firewall	<ul style="list-style-type: none"> •Stateful Packet Inspection •NAT (Static, Dynamic, PAT) •SIP ALG •Application Content filtering <ul style="list-style-type: none"> - Block Java based on extension - Block URLs based on file extensions - Block ActiveX based on file extensions - FTP's protocol command Filtering - SMTP's protocol command Filtering •Cyber Defense Engine <ul style="list-style-type: none"> - DDoS/DoS, IP Spoofing, IP/TCP fragment attack protection (Protection for 60+ attacks) •Traffic Scheduling •URL Filtering •Rate limiting <ol style="list-style-type: none"> 1.Maximum connections per policy basis 2.Connection creation rate per policy basis 3.Bandwidth per policy basis
VPN	<ul style="list-style-type: none"> •H/W acceleration (Onboard, Optional VPN Acceleration Card) •IPSec for Site to Site, Remote Access •IPSec <ul style="list-style-type: none"> - Protocols : ESP, AH, AH over ESP - Encryption : DES-CBC, 3DES-CBC, AES-CBC(128, 192, 256) - Hashing : HMAC-SHA1, HMAC-MD5 - Modes : Tunnel, Transport, Config Mode •IKE <ul style="list-style-type: none"> - Authentication : Preshared, RSA/DSA Signatures, Xauth - Modes : Main, Aggressive, Quick - Diffie-Hellman Group : Group 1(MODP 768), 2(MODP 1024), 5(MODP 1536) - Encryption : DES, 3DES, AES(128,192,256) - Hash : SHA1, MD5 •L2TP, GRE •PKI Support (SCEP, Manual, CRL, OCSP) •IPSec NAT Traversal •Certified by ICASA

* Not support in iBG2006
** Future in iBG2006
IPv6 : iBG2006 in '08.Q3

Specifications are subject to change without prior notice

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