

# *Ubigate iES4000 Series Ethernet Switches*

**iES4028F** (non PoE)

**iES4028FP** (PoE)

**iES4024GP** (Gigabit PoE)



- **Single Manufacturer Solution**
  - **Complete VoIP solution**
- **Customer Choice**
  - **Integrated OfficeServ Data Modules**
  - **Standalone Ubigate Ethernet switch**
- **BCS Quota Credit**
- **No Recurring Maintenance Support Fees**

## iES Switch Scalability

Performance and Service

### iES4024GP



- 22 10/100/1000 BASE-T Ports with PoE
- 2 Gigabit combo ports
- 1 Console port

### iES4028FP



- 24 10/100 BASE-T Ports with PoE
- 2 Gigabit combo ports
- 1 Console port

### iES4028F



- 24 10/100 BASE-T Ports
- 4 Gigabit combo ports
- 1 Console port

Small Biz/Branch

Small-Mid Biz/Branch

Mid Biz/Large Branch

# Ubigate iES4000 Series Value Proposition

## Gigabit Port Density

- Up to 4 separate Gigabit Ports in a 1 Rack Unit chassis
- Higher Performance / Price Ratio

## IP Clustering

- Up to 36 units managed from a single IP address

## VLAN

- Support VLANs for GVRP LAN registration
- Support Voice VLAN for IPT

## QOS

- Ideal for VOIP deployments
- COS bit marking

## Security

- Support AAA based on Radius / TACACS+
- 802.1x based security
- Abundant Security Features (DHCP snooping, etc)



iES Series

## Ubigate™ iES4028F

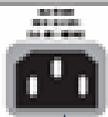
24-port 10/100 Managed Layer 2 Switch and 4 GE ports.

Console Port

LED Indicators  
- System Indicator  
- Ports Status

Access Ports  
- 24 10/100 Ports

Uplink Ports  
- 4 Ports Combo GE



Power Socket

## Ubigate™ iES4028FP

24-port 10/100 Managed Layer 2 Switch with PoE and 4 GE ports.

### LED Indicators

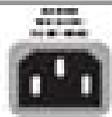
- System Indicator
- Ports Status

### Access Ports

- 24 10/100 Ports
- POE

### Uplink Ports

- 2 Ports Combo GE
- 2 10/100/1000 Ports



Power Socket



Console Port

## Ubigate™ iES4024GP

**22-port 10/100/1000 Managed Layer 2 Switch with PoE and 2 Combo ports.**

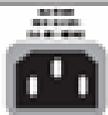
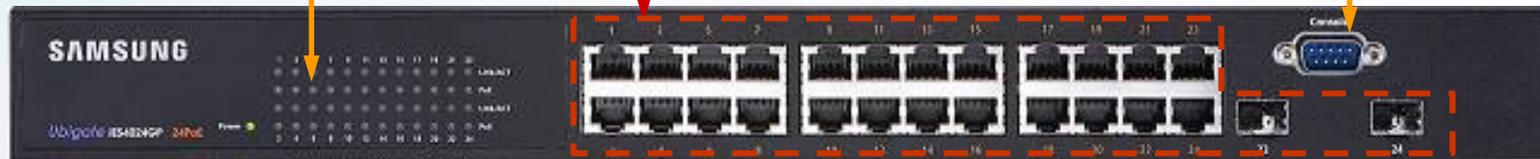
### LED Indicators

- System Indicator
- Ports Status

### Access & Uplink Ports

- 22 Ports 10/100/1000BASE-T with PoE
- 2 Ports Combo GE with PoE

### Console Port



### Power Socket

# Product Specifications - Hardware

	iES4028FP	iES4028F	iES4024GP
<b>Ports</b>	<ul style="list-style-type: none"> <li>• 24 10/100BASE-T ports with POE</li> <li>• 2 10/100/1000BASE-T ports</li> <li>• 2 Gigabit combo ports</li> <li>• 1 Console port</li> </ul>	<ul style="list-style-type: none"> <li>• 24 10/100BASE-T ports</li> <li>• 4 Gigabit combo ports</li> <li>• 1 Console port</li> </ul>	<ul style="list-style-type: none"> <li>• 22 10/100/1000BASE-T ports with POE</li> <li>• 2 Gigabit combo ports with POE</li> <li>• 1 Console port</li> </ul>
<b>SWITCHING FABRIC</b>	<ul style="list-style-type: none"> <li>• 12.8Gbps</li> <li>• 9.5Mpps</li> </ul>	<ul style="list-style-type: none"> <li>• 12.8Gbps</li> <li>• 9.5Mpps</li> </ul>	<ul style="list-style-type: none"> <li>• 48Gbps</li> <li>• 35.7Mpps</li> </ul>
<b>SWITCHING DB</b>	<ul style="list-style-type: none"> <li>• 8K MAC address entries</li> </ul>	<ul style="list-style-type: none"> <li>• 8K MAC address entries</li> </ul>	<ul style="list-style-type: none"> <li>• 8K MAC address entries</li> </ul>
<b>WEIGHT</b>	<ul style="list-style-type: none"> <li>• 4.13kg</li> <li>• 9.11 lbs</li> </ul>	<ul style="list-style-type: none"> <li>• 3kg</li> <li>• 6.7 lbs</li> </ul>	<ul style="list-style-type: none"> <li>• 4.33kg</li> <li>• 9.53 lbs</li> </ul>
<b>DIMENSIONS</b>	<ul style="list-style-type: none"> <li>• 4.3 x 44 x 33 cm</li> <li>• 1.7 x 17.3 x 12.992 inch</li> </ul>	<ul style="list-style-type: none"> <li>• 4.3 x 44 x 17.2 cm</li> <li>• 1.7 x 17.3 x 6.7 inch</li> </ul>	<ul style="list-style-type: none"> <li>• 4.3 x 44 x 32 cm</li> <li>• 1.7 x 17.3 x 12.6inch</li> </ul>
<b>AC INPUT</b>	<ul style="list-style-type: none"> <li>• 100 to 240 V, 50-60 Hz</li> </ul>	<ul style="list-style-type: none"> <li>• 100 to 240 V, 50-60 Hz</li> </ul>	<ul style="list-style-type: none"> <li>• 100 to 240 V, 50-60 Hz</li> </ul>
<b>POWER CONSUMPTION</b>	<ul style="list-style-type: none"> <li>• 225W (System 45W, POE 180W)</li> </ul>	<ul style="list-style-type: none"> <li>• 30W</li> </ul>	<ul style="list-style-type: none"> <li>• 225W (System 45W, POE 180W)</li> </ul>
<b>POWER-OVER-ETHERNET</b>	<ul style="list-style-type: none"> <li>• Maximum output power per port: 15.4 W</li> <li>• Maximum output power per port: 7.5 W simultaneously</li> </ul>	<ul style="list-style-type: none"> <li>• NA</li> </ul>	<ul style="list-style-type: none"> <li>• Maximum output power per port: 15.4 W</li> <li>• Maximum output power per port: 7.5 W simultaneously</li> </ul>
<b>NETWORK INTERFACE</b>	<ul style="list-style-type: none"> <li>• 10/100 BASE-T ports</li> <li>• 10/100/1000 BASE-T ports</li> <li>• SFP Transceiver slots supporting SX, LX and ZX SFP</li> <li>• Multimode fiber cable; 62.5/125 or 50/125 microns</li> <li>• Single mode fiber cable: 9/125 micron</li> </ul>		<ul style="list-style-type: none"> <li>• N/A</li> </ul>

# Product Specifications – Software

Features	Description
<b>Flow Control</b>	<ul style="list-style-type: none"> <li>• IEEE 802.3x for full duplex mode</li> <li>• Back pressure flow control half duplex mode</li> </ul>
<b>Spanning tree</b>	<ul style="list-style-type: none"> <li>• IEEE 802.1D STP</li> <li>• IEEE 802.1w RSTP</li> <li>• IEEE 802.1s MSTP</li> <li>• Spanning Tree Fast Forwarding</li> <li>• Auto Edge</li> <li>• Loop Protection</li> </ul>
<b>VLAN</b>	<ul style="list-style-type: none"> <li>• 802.1Q Tag-based VLAN</li> <li>• 802.1Q Port-based VLAN</li> <li>• 802.1v Protocol-based VLAN</li> <li>• 256 VLANs entries out of 4K VLAN IDs</li> <li>• GVRP</li> <li>• Voice VLAN</li> </ul>
<b>IGMP snooping</b>	<ul style="list-style-type: none"> <li>• V1,v2,v3</li> <li>• Querier</li> <li>• Immediate Leave</li> <li>• Filtering and throttling</li> </ul>
<b>Link Aggregation</b>	<ul style="list-style-type: none"> <li>• IEEE 802.3ad with LACP</li> <li>-8 aggregation groups up to 8 ports</li> </ul>
<b>MVR</b>	<ul style="list-style-type: none"> <li>• Yes</li> </ul>
<b>Jumbo Frame</b>	<ul style="list-style-type: none"> <li>• 10K in gigabit ports</li> </ul>
<b>QnQ</b>	<ul style="list-style-type: none"> <li>• Yes</li> </ul>
<b>Quality of Service</b>	<ul style="list-style-type: none"> <li>• Priority queue                             <ul style="list-style-type: none"> <li>-Scheduling : Strict priority, WRR</li> <li>-4 queues per port</li> </ul> </li> <li>• DiffServ</li> <li>• COS                             <ul style="list-style-type: none"> <li>-IEEE 802.1p, DSCP based COS</li> </ul> </li> <li>• Rate limiting (Per Port based)                             <ul style="list-style-type: none"> <li>-Ingress, Egress</li> </ul> </li> </ul>

Description	Description
<b>Security</b>	<ul style="list-style-type: none"><li>• Storm Control<ul style="list-style-type: none"><li>-Broadcast storm</li><li>-Multicast storm</li><li>-DLF (Destination Lookup Failure)</li></ul></li><li>• MAC Address filtering</li><li>• Username/Password authentication</li><li>• Access control list (L2/L3/L4)</li><li>• AAA<ul style="list-style-type: none"><li>-RADIUS, TACACS+</li></ul></li><li>• MAC based Authentication</li><li>• HTTPS/SSL</li><li>• SSHv1/v2</li><li>• 802.1x<ul style="list-style-type: none"><li>-Port-Based</li><li>-Supplicant Support</li><li>-VLAN Assignment</li><li>-Guest VLAN</li><li>-Co-works with Radius, TACACS+ server</li></ul></li><li>• Management Interface Access filtering<ul style="list-style-type: none"><li>-SNMP, WEB, Telnet</li></ul></li><li>• DHCP Snooping</li><li>• IP Source Guard</li></ul>

Description	Description
<b>Management</b>	<ul style="list-style-type: none"><li>• Management method<ul style="list-style-type: none"><li>-Web-based</li><li>-Telnet (4 sessions)</li></ul></li><li>• Software download<ul style="list-style-type: none"><li>-TFTP, Xmodem</li></ul></li><li>• Dual Firmware Images</li><li>• Configuration file download<ul style="list-style-type: none"><li>-TFTP</li></ul></li><li>• SNMP v1/v2c/v3</li><li>• RMON (group 1, 2, 3, 9)</li><li>• BOOTP<ul style="list-style-type: none"><li>-Client</li></ul></li><li>• DHCP<ul style="list-style-type: none"><li>-Client</li><li>-Relay(Option82)</li></ul></li><li>• Port mirroring (one-to-many)</li><li>• Event/Error Log<ul style="list-style-type: none"><li>-Local, Syslog, SMTP</li></ul></li><li>• Remote Ping</li><li>• SNTP</li><li>• NTP</li><li>• IEEE 802.1ab(LLDP)</li><li>• UPnP</li><li>• Banner</li><li>• Web authentication</li><li>• IP Clustering (36 members)</li></ul>

## CLI BASED →

```
Username: admin
Password:
```

```
CLI session with the Ubigate iES4024GP* is opened.
To end the CLI session, enter [Exit].
```

```
Console#configure
Console(config)#username guest password 0 [password]
Console(config)#username admin password 0 [password]
Console(config)#
```

## WEB BASED →

Cluster: Commander

Unit: 1

Mode: Active

**SAMSUNG**

Ubigate iES-DM  
Samsung iES Device Manager

Ubigate iES4024GP

- Link Up - Link Down

**TREE VIEWER**

- Home
- System
- SNTP
- SNMP
- Security
- Port
- PoE
- Address Table
- Spanning Tree
- VLAN
- LLDP
- Priority
- QoS
- IGMP Snooping
- MVR

**CONTENTS VIEWER**

### L2 Gigabit Ethernet PoE Standalone Switch

System Name	<input type="text"/>
Object ID	1.3.6.1.4.1.236.4.1.12.1.103
Location	<input type="text"/>
Contact	<input type="text"/>
System Up Time	6 days, 20 hours, 52 minutes, and 44.40 seconds

[Telnet](#) - Connect to textual user interface

[Support](#) - Send mail to technical support

[Contact](#) - Connect to Connect to Samsung Web Page

Apply Revert Help

**Effective June 7th, 2010 the new Ubigate Ethernet Switches can be ordered online on GSBN or by using the Excel Order Form (available for download, for Samsung Direct Dealers and Samsung Distributors, on GSBN under Communication→Sales and Marketing →Downloads → Order Form). The new part numbers are listed below.**

## Ubigate

UBIGATE ETHERNET SWITCHES		\$US	\$CAN
IES-4028F/XAR	iES 24 port 10/100M Layer 2 Managed Ethernet Switch <b>3 Year Warranty</b>	\$350.00	\$364.00
IES-4028FP/XAR	iES 24 port 10/100M Layer 2 Managed PoE Ethernet Switch <b>3 Year Warranty</b>	\$775.00	\$806.00
IES-4024GP/XAR	iES 22 port 10/100/1000M Layer 2 Managed PoE Ethernet Switch <b>3 Year Warranty</b>	\$1,150.00	\$1,196.00

**Each Ubigate iES4000 Series Ethernet Switch includes a printed copy of an Installation Manual and a CD containing this manual and the Management Guide in PDF format.**

**Ubigate documentation is also available for downloading on the on the Samsung's GSBN website at <http://www.samsunggsbn.com/>.**

<i>Documentation</i>	<i>Location on GSBN</i>
iES4028F Installation Manual	Communication → Technical Support → Downloads → Ubigate
iES4028FP Installation Manual	
iES4024GP Installation Manual	
iES4000 Series Management Guide for the iES4028F, iES4028FP, and iES4024GP	
Ubigate iES4000 Series Sales Brochure	Communication → Sales and Marketing → Downloads → Brochures
Ubigate iES4000 Series Customizable Sales Brochure	Communication → Sales and Marketing → Downloads → Dealer Templates —OR— Communication → Sales and Marketing → Downloads → Reseller Templates
Ubigate iES4000 Series Introduction Presentation	Communication → Sales and Marketing → Downloads → General Description

**Samsung provides a convenient online Ubigate iES4000 Series (#4010-01-0L) certification course for technicians to access and learn about the Ubigate Ethernet Switches on their own time. The cost of the Ubigate iES4000 Series course is \$50.00.**

**Successful completion of this certification course is required to receive Technical Support on the Ubigate iES4000 Ethernet switches.**

**If you have any questions related to this training course please refer to *Training Bulletin TN060710: Ubigate iES4000 Series Ethernet Switches Online Certification Course*, or contact the Samsung Training Department at 800-876-4782 Opt 3 or 972-792-2094 or via e-mail at [BCS.Training@samsung.com](mailto:BCS.Training@samsung.com).**

## Q & A

**Thank You  
for  
Attending**