

Simpler & Smarter Networking for SMBs

iPECS

ES-2000 Series

iPECS Ethernet Switch ES-2000 Advanced Smart Switch Series

iPECS ES-2000 SWITCHES ARE PERFECT FOR SMBs LOOKING FOR BALANCED SOLUTIONS BETWEEN ADVANCED SWITCHING FEATURES AND AFFORDABILITY.



Overview

iPECS ES-2000 Series are advanced smart Layer 2 switches which are optimized for SMBs looking for reliable and cost effective workgroup switches along with key switching features. These simple to install and easy to manage switches enable administrators to quickly and easily build networks at an affordable cost.

ES-2000 series comes in 9 models from Fast Ethernet to Gigabit Ethernet offering multiple choices to address various demands and network environments flexibly and affordably. In addition, ES-2000 series delivers key layer 2 switching features, QoS, built-in security and Power over Ethernet (POE). The user-friendly intuitive GUI makes it easy to configure the ES-2000 to meet the customer needs.

To reduce the complexity and often time-consuming configuration process, LG-Ericsson offers an industry-unique solution, the Unified Device Manager (iPECS UDM). UDM enables network administrators to quickly and easily manage multiple iPECS switches across the network.

These LG-Ericsson switches also incorporate the latest technologies such as Green Ethernet and PoE plus. ES-2000 switches can connect to high power consuming devices like 802.11n APs and multimedia videophones by providing up to 30 watts to these devices while connecting to other low power devices.

Highlights

Easy to Install

Auto-negotiation, Auto-MDI/MDIX, At-a-glance status LEDs

Smart Management

Managing multiple iPECS switches from a single intuitive graphic user interface

Green Ethernet

Environment friendly design for power saving including Energy Efficient Ethernet and via link status and cable length

VoIP and UC Friendly

Advanced L2/L3 QoS, Economical & Flexible POE via 802.3af & 802.3at

Secure Networking

Secured authentication and encryption, Port security and filtering

iPECS ES-2000 Series



ES-2026
• 24 ports 10/100Base-TX • 2 ports Gigabit Combo



ES-2026P
• 24 ports 10/100Base-TX • PoE on all ports



ES-2050
• 48 ports 10/100Base-TX • 2 ports Gigabit Combo



ES-2010G
• 8 ports 10/100/1000Base-T • 2 ports SFPs



ES-2010GP
• 8 ports 10/100/1000Base-T • PoE on all ports



ES-2024G
• 24 ports 10/100/1000Base-T • 4 ports shared SFPs



ES-2024GP
• 24 ports 10/100/1000Base-T • PoE on all ports



ES-2052G
• 48 ports 10/100/1000Base-T • 4 ports SFPs



ES-2052GP
• 48 ports 10/100/1000Base-T • PoE on all ports

Key Benefits

Easy to Install

iPECS Ethernet Switches employ plug and play capabilities such as Auto-negotiation for speed and duplex mode, Auto-MDI/MDIX, and at-a-glance status LED's right on top of the ports. Its intuitive web user interface makes the installation and administration much easier.

Smart Management

LG-Ericsson offers a unique management tool, the Unified Device Manager (iPECS UDM), which enables the management of all iPECS product lines from IP Telephony to Data Networks via a single management interface. iPECS UDM simplifies network administration and management through the use of a single consistent and familiar interface.

Green Ethernet

iPECS ES-2000G Gigabit Ethernet Switches incorporate a range of green Ethernet technologies to help you save energy costs for your network. The Switches use the latest Energy Efficient Ethernet standard to make better use of the Ethernet ports or they can detect link status and cable length, allowing each port to power down when the port is not connected or using shorter cables.

Advanced Quality of Service

Prioritization of the data on the network is essential in order to ensure that mission critical applications such as voice are delivered in a timely manner. The iPECS Ethernet Switches are able to classify packets into one of four different priority queues and serve each packet in the priority queues using WRR (Weighted Round Robin) or SPQ (Strict Priority Queuing) method.

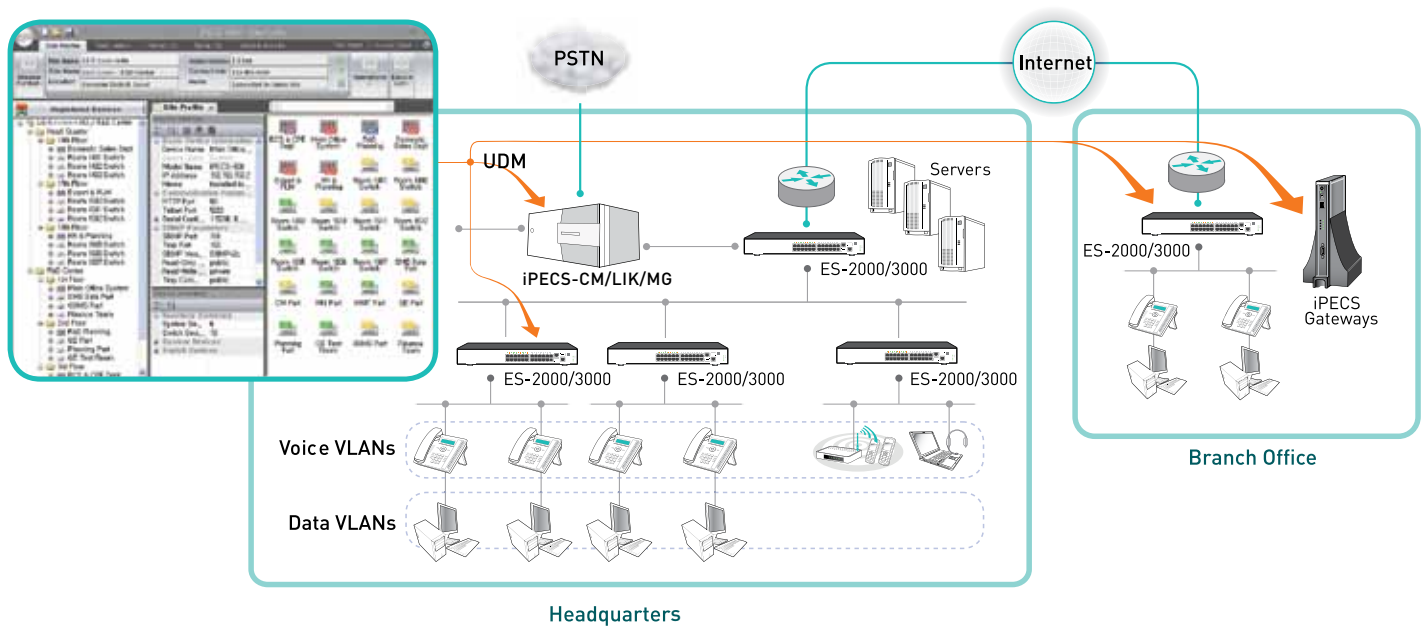
Flexible Power over Ethernet (POE models only)

The LG-Ericsson iPECS Ethernet POE switches are designed to support both 802.3af and 802.3at standards. Therefore, SMBs flexibly and cost effectively connect standard and high powered devices on a single LG-Ericsson POE switch. In addition, the PoE control and monitoring can be easily managed via the intuitive web user interface.

Secure Networking

iPECS ES-2000 Ethernet Switches support key security features like RADIUS authentication and authorization as well as multi-layer filtering. All web management sessions are secured with HTTPS encryption.

Converged Network using iPECS Ethernet Switch Solutions



Feature Specifications

| List | Feature | Specifications | ES-2024 / 2026 Models | ES-2010 Models | ES-2050 / 2052 Models |
|---|----------------------------|--|-------------------------|-----------------------|-----------------------|
| L2 Switching | Spanning tree protocols | 802.1d (STP) / 802.1w (RSTP) | Yes | Yes | Yes |
| | | 802.1s (MSTP), BPDU filter / guard | | Yes | |
| | Link Aggregation (802.3ad) | Max number of groups | 12 | 5 | 12 |
| | | Max number of members per group | 8 | 8 | 8 |
| | VLAN | VLAN IDs | 4096 | 4096 | 4096 |
| | | Max Number of active VLANs per Switch | 128 | 4K | 256 |
| | | Port VLAN, Voice VLAN | Yes | Yes | Yes |
| | | MAC / IP based VLAN, Private VLAN | | Yes | |
| | LLDP (802.1ab) | Link Layer Discovery Protocol, LLDP-MED | Yes | Yes | Yes |
| | Multicast | IGMP Snooping v1/2, IGMP proxy v1/2/3, Querier v1/2, immediate / fast leave | Yes | | Yes |
| Max Number of multicast groups | | 128 | 128 | 128 | |
| Traffic Control | QoS | Number of Queues | 4 | 8 | 8 |
| | | IP Precedence, DSCP, Marking / Remarking | Yes | Yes | Yes |
| | | Strict Priority Queuing, Weighted Round Robin Queuing | Yes | Yes | Yes |
| | ACL | L2 / L3 / L4 based ACL | Yes | Yes | Yes |
| | | Max number of ACL rules | 512 | 256 | 512 |
| | MAC limit | MAC limit per port | Yes | Yes | Yes |
| | Rate Limiting / Shaping | Port based rate limiting / shaping | Yes | Yes | Yes |
| | Storm control | Broadcast and Multicast packet control | Yes | Yes | Yes |
| | Port Security | Static / Dynamic port security (MAC based) | Yes | Yes [Dynamic only] | Yes |
| | Security | Authentication | RADIUS / TACACS+ Client | Yes | Yes |
| RADIUS accounting | | | | Yes | |
| 802.1x Extensible Authentication | | | Yes | Yes | Yes |
| 802.1x Multiple Host Multiple Authentication per Port | | | Yes | Yes | Yes |
| 802.1x RADIUS assigned VLAN in MHMA mode | | | Yes | Yes | Yes |
| User / password authentication (Up to 5 users) | | | Yes | Yes | Yes |
| Management | Access (Command interface) | HTTP, HTTPS, SNMP v1/2/3, SNMP trap (RFC 1215) | Yes | Yes | Yes |
| | MIB | TCP / IP based internets (RFC 1213), RMON v1 (RFC 2819) | Yes | Yes | Yes |
| | DHCP | DHCP Client | Yes | Yes | Yes |
| | Port Mirroring | Received traffic, Transmit traffic, Received and Transmit traffic, N:1 mirroring | Yes | Yes | Yes |
| | Network Time | SNTP (RFC 2030) | Yes | Yes | Yes |
| | Backup | Configuration file upload / download | Yes | Yes | Yes |
| | Firmware upgrade | Firmware backup / upgrade | Yes | Yes (Upgrade only) | Yes |
| | IP Clustering | IP Clustering up to 36 switches | Yes | | Yes |

Technical Specifications

| List | Detailed list | ES-2026 | ES-2026P | ES-2050 | ES-2010G | ES-2010GP | ES-2024G | ES-2024GP | ES-2052G | ES-2052GP |
|--|--|-------------------------|-------------------------|-------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Performance | Switching Fabric Capacity (Gbps) | 8.8 | 8.8 | 13.6 | 20 | 20 | 48 | 48 | 104 | 104 |
| | Packet Forwarding Throughput (Mpps) | 6.6 | 6.6 | 10.12 | 14.88 | 14.88 | 35.7 | 35.7 | 77.3 | 77.3 |
| | Flash Memory | 16M | 16M | 16M | 16M | 16M | 16M | 16M | 16M | 16M |
| | DRAM | 128M | 128M | 128M | 32M | 32M | 128M | 128M | 128M | 128M |
| | MAC Address Capacity | 8K | 8K | 16K | 8K | 8K | 8K | 8K | 16K | 16K |
| | MTU / Jumbo Frames support | 10K | 10K | 10K | 9K | 9K | 10K | 10K | 10K | 10K |
| | Auto-negotiation, Auto-MDI / MDIX | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Port | 10 / 100Base-TX Ports per Unit | 24 | 24 | 48 | | | | | | |
| | 10 / 100 / 1000Base-T Ports per Unit | 2 | 2 | 2 | 8 | 8 | 24 | 24 | 48 | 48 |
| | Type of Built-in uplink ports | 2 pair combo RJ45 / SFP | 2 pair combo RJ45 / SFP | 2 pair combo RJ45 / SFP | 2 SFP | 2 SFP | 4 shared SFP | 4 shared SFP | 4 SFP | 4 SFP |
| | Types of GBIC and SFP support | SFP (SX, LX, LH, FX) | SFP (SX, LX, LH, FX) | SFP (SX, LX, LH, FX) | SFP (SX, LX, LH, FX) | SFP (SX, LX, LH, FX) | SFP (SX, LX, LH, FX) | SFP (SX, LX, LH, FX) | SFP (SX, LX, LH, FX) | SFP (SX, LX, LH, FX) |
| Management | Reset button | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| PoE | PoE Support on all ports based on 802.3af | | Yes | | | Yes | | Yes | | Yes |
| | PoE+ Support on all ports based on 802.3at | | Yes | | | Yes | | Yes | | Yes |
| | PoE Power Indication and safety | | Yes | | | Yes | | Yes | | Yes |
| | Auto disable after exceeding power budget | | Yes | | | Yes | | Yes | | Yes |
| | Dynamic Power Allocation | | Yes | | | Yes | | Yes | | Yes |
| PoE Power budget | | 185W | | | 75W | | 185W | | 410W | |
| Power | 19" Rack Space (EIA standard RU) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | Height (mm) | 44 | 44 | 44 | 36 | 44 | 44 | 44 | 44 | 44 |
| | Width (mm) | 440 | 440 | 440 | 195 | 330 | 440 | 440 | 440 | 440 |
| | Depth (mm) | 210 | 280 | 280 | 115 | 203 | 210 | 280 | 280 | 379 |
| | Weight (Kg) | 1.7 | 3.2 | 2.96 | 0.74 | 2.2 | 1.7 | 3.32 | 3.14 | 5.27 |
| Power | 100-240 VAC, 50 / 60Hz | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | Max power consumption (Watts) | 17 | 245 | 42 | 15 | 85 | 23 | 252 | 65 | 530 |
| | Power Saving | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Environmental | Operating Temperature (°C) | 0 to 50 °C | 0 to 50 °C | 0 to 50 °C | 0 to 50 °C | 0 to 50 °C | 0 to 50 °C | 0 to 50 °C | 0 to 50 °C | 0 to 50 °C |
| | Storage Temperature (°C) | -40 to 70 °C | -40 to 70 °C | -40 to 70 °C | -40 to 70 °C | -40 to 70 °C | -40 to 70 °C | -40 to 70 °C | -40 to 70 °C | -40 to 70 °C |
| | Operating Humidity (non-condensing) | 10% to 90% | 10% to 90% | 10% to 90% | 10% to 90% | 10% to 90% | 10% to 90% | 10% to 90% | 10% to 90% | 10% to 90% |
| | Storage Humidity (non-condensing) | 10% to 90% | 10% to 90% | 10% to 90% | 10% to 90% | 10% to 90% | 10% to 90% | 10% to 90% | 10% to 90% | 10% to 90% |
| | Operating Altitude (meters) | 4000m | 4000m | 4000m | 4000m | 4000m | 4000m | 4000m | 4000m | 4000m |
| Certifications | EMC Compliance - FCC class A, CE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | Safety Compliance - UL, CB | Yes | Yes | Yes | Yes (CB only) | Yes (CB only) | Yes | Yes | Yes | Yes |
| | Korea (KCC), Australia (C-Tick) | Yes | Yes | | | | Yes | Yes | | |
| Environmental Regulation Compliance | WEEE, RoHS | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | PFOS, Reach | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |