EDGE PoE Access Switches Series

EDGE Gigabit PoE+ Switches

The EDGE Managed Gigabit PoE+ Switch family delivers enterprise-class Layer 2 switching with Power-over-Ethernet-Plus (PoE+) in four port densities to fit every wiring closet, branch office, and IP surveillance deployment. All models share identical software features — VLAN, link aggregation, IGMP snooping, QoS, storm control, ACL-based security, and a browser-based web interface — and differ only in port count, PoE power budget, and physical dimensions. The IPEDGE-PoE-16 fits small installations and IP-telephone clusters, the IPEDGE-PoE-24 targets SMB access closets and mid-size Wi-Fi deployments, and the NG-PoE-48 serves dense access layers with full 802.3at PoE+ on every copper port.



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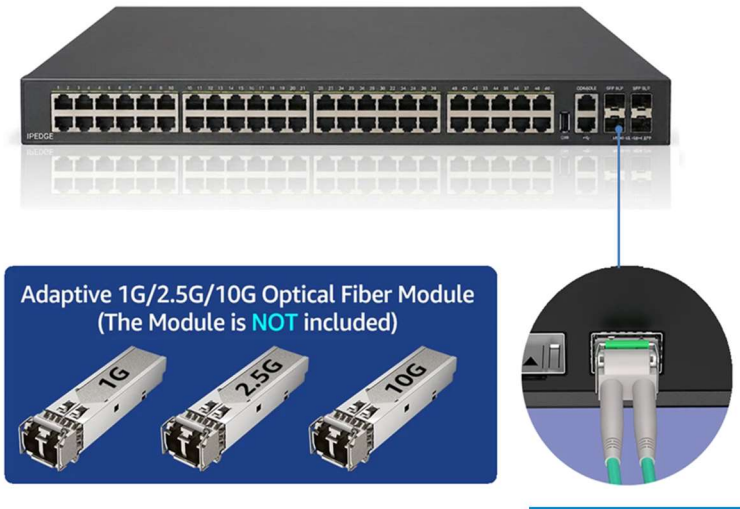
EDGE PoE Switch Specifications

Specification	NG-PoE-16 16-PORT	NG-PoE-24 24-PORT	NG-PoE-48 48-PORT
HARDWARE OVERVIEW			
Model Name	IPEDGE-PoE-16	IPEDGE-PoE-24	IPEDGE-PoE-48
Switch Silicon	Realtek / Intel / Marvell / Broadcom		
Form Factor	1U 19-inch rackmount, desktop optional	1U 19-inch rackmount	1U 19-inch rackmount
Dimensions (W x D x H)	280 x 170 x 44 mm	441 x 270 x 44 mm	441 x 280 x 44 mm
Weight (without packaging)	2.0 kg	3.6 kg	5.2 kg
Rack Mount Kit	Included		
NETWORK PORTS			
PoE+ Copper Ports (1GbE RJ45)	16 × 10/100/1000BASE-T	24 × 10/100/1000BASE-T	48 × 10/100/1000BASE-T
SFP Uplink Ports	2 × SFP (1GbE)	2 × SFP (1GbE)	4 × SFP (1GbE)
Console Port	1 × RJ45 RS-232 (115,200 bps)		
USB Port	1 × USB 2.0 (for config backup)		
Total Port Count	18 (16 PoE+ + 2 SFP)	26 (24 PoE+ + 2 SFP)	52 (48 PoE+ + 4 SFP)
Port Auto-Negotiation	Yes (10/100/1000)		
Auto MDI/MDI-X	Yes, all copper ports		
POWER-OVER-ETHERNET (PoE)			
PoE Standard	IEEE 802.3af (PoE) + 802.3at (PoE+)	IEEE 802.3af (PoE) + 802.3at (PoE+)	IEEE 802.3af (PoE) + 802.3at (PoE+)
PoE+ Ports	16 (all copper ports PoE-capable)	24 (all copper ports PoE-capable)	48 (all copper ports PoE-capable)
Per-Port Max Power	30 W (802.3at Type 2)		
Total PoE Power Budget	200 W	370 W	740 W
PoE Class Support	Class 0 – 4 (auto-detection)		
Per-Port Power Monitoring	Yes (real-time milliwatt)		
PoE Scheduling	Yes (time-range based, per port)		
PoE Priority	3 levels (Critical / High / Low)		
PoE Watchdog	Yes (auto-restart frozen PDs)		
SWITCHING PERFORMANCE			
Switching Capacity	36 Gbps (non-blocking)	52 Gbps (non-blocking)	104 Gbps (non-blocking)
Forwarding Rate (64B packets)	26.8 Mpps	38.7 Mpps	77.4 Mpps
Packet Buffer	512 KB	512 KB	1 MB
MAC Address Table	8,000 entries	8,000 entries	16,000 entries
Jumbo Frame Size	10 KB		
VLAN Support	Up to 4,094 (802.1Q)		
Forwarding Mode	Store-and-forward		

Specification	NG-PoE-16 16-PORT	NG-PoE-24 24-PORT	NG-PoE-48 48-PORT
LAYER 2 FEATURES			
VLAN	802.1Q, 802.1ad QinQ, port-based, protocol-based, MAC-based, voice VLAN, guest VLAN, management VLAN		
Spanning Tree	802.1D STP, 802.1w RSTP, 802.1s MSTP		
Link Aggregation	802.3ad LACP (up to 8 groups, 8 ports per group)	802.3ad LACP (up to 8 groups, 8 ports per group)	802.3ad LACP (up to 16 groups, 8 ports per group)
Multicast Snooping	IGMP v1/v2/v3 snooping, MLD v1/v2 snooping		
Storm Control	Broadcast / multicast / unknown-unicast, per port		
Loop Detection	Yes (per-VLAN, per-port)		
Port Mirroring	1-to-1, many-to-1, RX/TX/both		
ERPS Ring	Yes (ITU-T G.8032)		
QUALITY OF SERVICE (QoS)			
Priority Queues per Port	4 (802.1p)	4 (802.1p)	8 (802.1p + DSCP)
Scheduling	SPQ, WRR, SPQ+WRR hybrid		
CoS Classification	Port-based, 802.1p, DSCP, MAC, VLAN		
Rate Limiting	Per port, ingress and egress, 64 Kbps granularity		
Trust Mode	802.1p, DSCP, port-based		
SECURITY			
Access Control	802.1X (port-based, MAC-based), RADIUS, TACACS+		
Port Security	Static MAC, dynamic MAC learning limit, sticky MAC		
ACL	L2 / L3 / L4 ACLs, per-port, per-VLAN		
DHCP Snooping	Yes, with option 82		
DAI (Dynamic ARP Inspection)	Yes		
IP Source Guard	Yes		
Management VLAN	Yes (dedicated management VLAN)		
DoS Prevention	SYN flood, ICMP flood, port scan		
SSH / SSL	SSH v2, TLS 1.2 / 1.3 (HTTPS)		
MANAGEMENT			
Web GUI	Easy-to-use administrator GUI (browser-based, responsive)		
Command-Line Interface	Cisco-like CLI		
SNMP	v1, v2c, v3		
RMON	Groups 1, 2, 3, 9		
LLDP	802.1AB LLDP + LLDP-MED		
Configuration Backup	Local USB, remote TFTP / FTP / SCP		
Firmware Upgrade	Web, CLI, TFTP, dual image with rollback		
Syslog	Local, remote (RFC 3164 / 5424)		

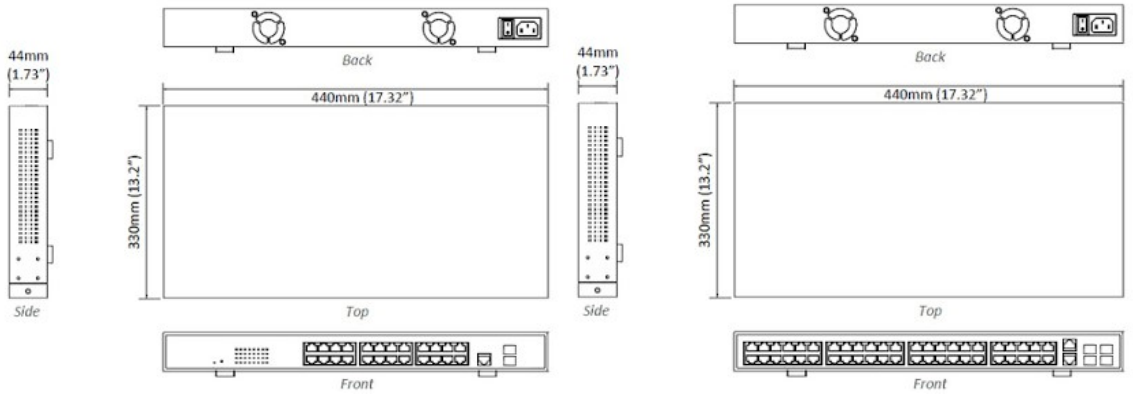
Specification	NG-PoE-16 16-PORT	NG-PoE-24 24-PORT	NG-PoE-48 48-PORT
NTP	Client and server		
IPv6 Management	Yes (dual-stack, SLAAC, static, DHCPv6)		
POWER AND ENVIRONMENTAL			
Power Supply	Internal 100-240 VAC, 50/60 Hz	Internal 100-240 VAC, 50/60 Hz	Internal 100-240 VAC, 50/60 Hz, single PSU
Max Power Consumption (with full PoE load)	260 W	430 W	850 W
Idle Power Consumption (no PoE load)	18 W	26 W	42 W
Thermal Dissipation (max)	887 BTU/hr	1,466 BTU/hr	2,899 BTU/hr
Cooling Fans	Fanless (passive cooling)	2 × 40 mm fans (auto-speed)	3 × 40 mm fans (auto-speed, hot-swap)
Acoustic Noise	0 dBA (fanless)	32 dBA typical	42 dBA typical
Operating Temperature	0 to 50 °C		
Storage Temperature	-40 to 70 °C		
Operating Humidity	10% to 90% non-condensing		
MTBF	880,000 hours	879,243 hours	620,000 hours
CERTIFICATIONS AND COMPLIANCE			
Safety	CE, UL / cUL 60950-1, EN 60950-1, CB Scheme		
EMC	FCC Part 15 Class A, CE EMC, EN 55032 Class A, EN 55024		
RoHS / REACH	RoHS 2 compliant, REACH compliant		
IEEE Compliance	802.3, 802.3u, 802.3ab, 802.3x, 802.3az, 802.3af, 802.3at, 802.3ad		



Flexible High-Speed Uplinks

Maximize network versatility with adaptive SFP/SFP+ optical fiber modules supporting seamless auto-negotiation across 1G, 2.5G, and 10G speeds. This flexible architecture allows your core infrastructure to adapt easily to varying bandwidth demands and legacy fiber connections without requiring hardware replacements.

Dimensions



Ordering Information

Aspect	EDGE-PoE-16 switch	EDGE-PoE-24 switch	EDGE-PoE-48 switch
Base SKU	EDGE-PoE-16	EDGE-PoE-24	EDGE-PoE-48
Description	16-port GbE PoE+ switch with 2 SFP uplinks	24-port GbE PoE+ switch with 2 SFP uplinks	48-port GbE PoE+ switch with 4 SFP uplinks
Included Accessories	Power cord, rack-mount kit, rubber feet, quick-start guide	Power cord, rack-mount kit, rubber feet, quick-start guide	Power cord, rack-mount kit, quick-start guide
Optional Accessories	SFP-1G-SX (1G multi-mode SFP) SFP-1G-LX (1G single-mode SFP)	SFP-1G-SX (1G multi-mode SFP) SFP-1G-LX (1G single-mode SFP)	SFP-1G-SX (1G multi-mode SFP) SFP-1G-LX (1G single-mode SFP) RACK-1U-DET (1U desktop shelf)
Hardware Warranty	3 years return-to-base		
Optional On-Site Warranty	EDGE-ENT-ONSITE-3Y (3-year NBD)		
IPEDGE Support Subscription	EDGE-SW-SUP-1Y (per-device, 24x7 TAC)		
Refresh Cycle	5-7 years (typical hardware lifecycle)		

LANEX

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