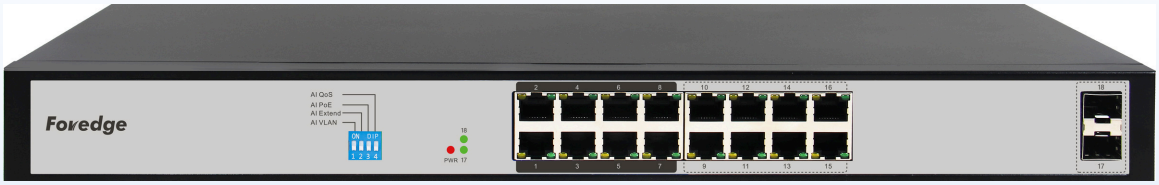
AI POE SWITCHES FOR SURVEILLANCE AND WI-FI

AI1016G-250W

16-Port Gigabit AI PoE Switch with Fibre Uplink

Full Gigabit Access | Plug and Play | AI Extend 250 m | 6 kV Surge Protection



Front panel — 16 gigabit PoE ports, 2 SFP fibre uplinks and the AI mode button

The AI1016G is the gigabit member of the AI PoE family. Sixteen gigabit PoE ports feed cameras, access points and IP phones at full speed — the right choice where 4 MP and higher cameras would saturate a 100 Mbps port — and two gigabit SFP slots carry the aggregate over fibre. It stays plug-and-play: four AI modes on a front-panel button cover isolation, 250 m reach, video priority and device recovery.

16	250 W	2	36 Gbps	250 m	6 kV
Gigabit PoE ports	PoE power budget	Gigabit SFP uplinks	Switching capacity	AI Extend, ports 1–8	Surge protection

Key Capabilities

Gigabit to Every Camera

All sixteen access ports run at 10/100/1000 Mbps. A 4 MP or 8 MP camera, or an access point serving a busy room, gets the full gigabit instead of contending for a 100 Mbps link — the difference shows up as dropped frames on a recorder, not as a warning light.

Plug and Play, Zero Configuration

No console, no web login, no VLAN plan. Power it, patch the cameras in, and it forwards — power is negotiated automatically for each connected device. The four AI modes are set by a front-panel button, not by a configuration file.

250 m on Ports 1–8

AI Extend switches the first eight ports to long-reach mode: power and data travel up to 250 metres on Cat 5e or better — two and a half times the 100 m limit that normally forces a mid-span cabinet.

The Camera That Hangs, Restarts Itself

AI PoE watches every powered port. When a camera or access point stops passing traffic, the switch cuts its power and restores it — the single most common site visit on a surveillance network, removed.

Video Gets Priority Under Load

AI QoS identifies video traffic and schedules it ahead of everything else when the uplink saturates, so recordings stay smooth on the channel that matters instead of degrading evenly across all of them.

6 kV Surge Protection on Every Port

Camera runs leave the building and come back on the same copper. Every port carries 6 kV lightning protection, with short-circuit, over-current and over-temperature protection on the power stage.

Typical Applications

CCTV & surveillance | Hotels & serviced apartments | Factory dormitories | Campuses & student housing | Wi-Fi AP and IP-phone feeds

Technical Specifications — Hardware

Product model	AI1016G-250W
Network interface	16 × 10/100/1000 Mbps RJ45 PoE ports (1–16) · 2 × Gigabit SFP fibre ports (17–18)
Standards	IEEE 802.3, 802.3i, 802.3u, 802.3x, 802.3z, 802.3ab, 802.3af, 802.3at
Switching capacity	36 Gbps (non-blocking)
Packet forwarding rate	26.8 Mpps
MAC address table	8 K
Forwarding mode	Store and forward
Switching architecture	Non-blocking · wire-speed forwarding on every port · 802.3x flow control · Auto MDI/MDIX
PoE standards	IEEE 802.3af / IEEE 802.3at
PoE power	250 W total system budget · 30 W maximum per port
PoE pinout	1/2 (+), 3/6 (–)
Protection	6 kV surge on all ports · PoE short-circuit, over-current and over-temperature protection · over-voltage and surge-current protection
LED indicators	1 × Power · 18 × Link/Act · 16 × PoE
Input power	AC 100–240 V, 50/60 Hz
Dimensions (L×W×H)	440 × 180 × 44 mm
Operating temperature	0 °C to 40 °C
Storage temperature	−40 °C to 70 °C
Operating humidity	10 % – 90 % RH, non-condensing
Storage humidity	5 % – 90 % RH, non-condensing
Certification	CE · RoHS · FCC · CCC

Four AI Modes, One Front-Panel Button

A button on the front panel enables each mode instantly — no console, no configuration.

AI VLAN
Isolates the access ports from one another, suppressing broadcast storms and lifting network performance.

AI Extend
Ports 1–8 switch to long-reach mode and carry power and data up to 250 m on Cat 5e or better.

AI PoE
Watches each powered device and cuts then restores power automatically when one stops responding.

AI QoS
Gives identified video traffic priority under congestion so camera streams stay smooth.

Panel Reference

Ports 1 – 16	10/100/1000 Mbps RJ45 with PoE output
Ports 17 – 18	Gigabit SFP fibre uplink
AI button	Cycles AI VLAN · AI Extend · AI PoE · AI QoS
Indicators	Power, plus Link/Act and PoE per port
Power	Internal supply, AC 100–240 V
Mounting	440 mm chassis, 1U rack

Ordering Information

MODEL	DESCRIPTION
AI1016G-250W	16 × 10/100/1000 Mbps PoE RJ45 + 2 × Gigabit SFP · plug and play · 250 W PoE budget

Recommended Optical Modules

MODEL	TYPE	REACH
SF310M-LC-500M	Gigabit SFP · multimode · 850 nm · LC · DDM	up to 500 m
SF312A-LC-10KM	Gigabit SFP · single-mode · 1310 nm · LC · DDM	up to 10 km

The uplink slots are Gigabit SFP. 10 Gigabit SFP+ modules (SF410M-LC-300M, SF412A-LC-10KM) are not compatible.

Related Foredge AI PoE Switches

MODEL	ACCESS PORTS	UPLINK	POE BUDGET	MANAGEMENT
AI6016	16 × 100M PoE	1 × SFP combo + 2 × GE	150 W	Plug and play
AI6024	24 × 100M PoE	1 × SFP combo + 2 × GE	250 W	Plug and play
AI1016G	16 × GE PoE	2 × GE SFP	150 W	Plug and play
AI2010GX	8 × GE PoE	2 × GE SFP	96 W	Managed L2

Also held in Riyadh stock. Ask us for the matching datasheet.

Warranty & Support

Warranty	Two years from date of purchase
Stock & replacement	Held in Riyadh · replacement within 48 hours
Technical support	Pre-sales design, configuration assistance and firmware from the distributor
Country of manufacture	China — Shenzhen Fengrunda Technology Co., Ltd.

Notes

- The 250 W budget is the rating of the unit supplied in Saudi Arabia, and is carried in its stock code. Some of the manufacturer's published material quotes 150 W for this chassis; the unit we supply is the 250 W build.
- AI Extend applies to ports 1–8 only, and requires Cat 5e cable or better.
- Specifications are taken from the manufacturer's published data and are subject to change without notice.
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