

AI POE SWITCHES FOR SURVEILLANCE AND WI-FI

AI2010GX

8-Port Gigabit Layer 2 Managed AI PoE Switch

Managed Layer 2

96 W PoE Budget

802.1X · SNMP · Apollo

6 kV Surge Protection



Front panel — 8 gigabit PoE ports, 2 SFP fibre uplinks, status LEDs and the AI mode button

The AI2010GX is the managed member of the AI PoE family, in a compact 225 mm chassis. Eight gigabit PoE ports and two gigabit SFP slots come with a full Layer 2 feature set — 4 K VLANs, L2-L4 ACLs, eight QoS queues, STP/RSTP/MSTP, 802.1X with Radius and Tacacs+, SNMP v1/v2/v3 and Apollo cloud management — while the four AI modes stay available on the front-panel button for sites that never open a console.

8

Gigabit PoE ports

96 W

PoE power budget

2

Gigabit SFP uplinks

20 Gbps

Switching capacity

Layer 2

Fully managed

225 mm

Compact chassis

Key Capabilities

Managed, in a Compact Chassis

A 225 mm body that fits a wall cabinet or a shallow rack, with the software of a full managed switch: 4 K VLANs, MAC and IP VLANs, voice VLAN, L2-L4 ACLs, eight QoS queues and SP, WRR, WFQ scheduling.

Loop Protection That Holds

STP, RSTP and MSTP with loop, root-bridge, TC and BPDU protection and BPDU filtering — so a patch cable looped back by a contractor does not take down the floor.

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.

Enterprise Authentication

IEEE 802.1X with Radius and Tacacs+, HTTPS, SSL v3, TLS v1 and SSH v1/v2, IP-MAC-Port binding, ARP and IP source protection, DoS defence, DHCP snooping and port isolation.

PoE You Can Schedule

Total power limiting, per-port priority, scheduled supply windows and live chip-status readout: cameras can be powered down overnight, and the least important device sheds first when the budget is exceeded.

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

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.

Technical Specifications — Hardware

Product model	AI2010GX
Network interface	8 × 10/100/1000 Mbps RJ45 PoE ports · 2 × Gigabit SFP fibre ports
Standards	IEEE 802.3, 802.3i, 802.3u, 802.3ab, 802.3z, 802.3ad, 802.3x, 802.3af/at, 802.1p, 802.1q, 802.1w, 802.1d, 802.1s
Switching capacity	20 Gbps (non-blocking)
Packet forwarding rate	14.9 Mpps
MAC address table	8 K
Packet buffer	4.1 Mb
Forwarding mode	Store and forward
PoE standards	IEEE 802.3af / IEEE 802.3at
PoE power	96 W total system budget · 30 W maximum per port
PoE pinout	1/2 (+), 3/6 (–)
Protection	6 kV surge on all ports · PSE short-circuit · PoE overload · over-temperature, over-voltage and surge-current protection
LED indicators	10 × Link/Act · 8 × PoE · 1 × Power · 1 × SYS
Input power	AC 100–240 V, 50/60 Hz
Dimensions (L×W×H)	225 × 120 × 35 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

Technical Specifications — Software

VLAN	4 K VLANs · 802.1Q VLAN · MAC VLAN · IP VLAN · Voice VLAN
DHCP	DHCP snooping
MAC address table	IEEE 802.1d compliant · automatic learning and ageing · static, dynamic and filtering entries
Security	Password protection · access restriction by port, IP and MAC address · HTTPS, SSL v3, TLS v1, SSH v1/v2 · IP-MAC-Port binding · ARP protection, IP source protection, DoS protection · DHCP snooping and attack defence · 802.1X and AAA · port security and port isolation · CPU protection
PoE management	PoE total power limit · PoE chip status check · port priority · scheduled power-supply windows
ACL	L2 to L4 packet filtering · port mirroring · port redirection · flow rate limiting · QoS remarking
QoS	8 queues per port · port, 802.1p and DSCP priority · SP, WRR, SP+WRR and WFQ scheduling
Spanning tree	STP (802.1d), RSTP (802.1w) and MSTP (802.1s) · loop protection, root-bridge protection, TC protection, BPDU protection and BPDU filtering
Multicast	IGMP v1/v2 snooping · multicast VLAN · multicast filtering, packet statistics and unknown-multicast discard
Storm suppression	Broadcast, multicast and unknown-unicast suppression
Link aggregation	Static and dynamic aggregation · IP, MAC and mixed load-balancing modes · up to 32 aggregation groups
IPv6	IPv6 Ping · IPv6 Tracert · IPv6 Telnet · IPv6 SSH · IPv6 SSL
Management & maintenance	Web (HTTP, HTTPS, SSL v3) · CLI (Telnet, SSH v1/v2) · SNMP v1/v2/v3 · LLDP and RMON · CPU and memory monitoring · system log with graded warnings · Ping, Tracert and cable diagnostics · Foredge Apollo cloud platform

Ordering Information

MODEL	DESCRIPTION
AI2010GX	8 × 10/100/1000 Mbps PoE RJ45 + 2 × Gigabit SFP · Layer 2 managed · 96 W PoE budget

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.



Front panel — 8 gigabit PoE ports, 2 SFP fibre uplinks, status LEDs and the AI mode button

Panel Reference

Ports 1 – 8	10/100/1000 Mbps RJ45 with PoE output
SFP 1 – 2	Gigabit fibre uplink
AI button	Cycles AI VLAN · AI Extend · AI PoE · AI QoS
Indicators	Power and SYS, plus Link/Act and PoE per port
Management	Web, Telnet, SSH and SNMP over the network; Apollo cloud
Power	Internal supply, AC 100–240 V

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.

Notes

- The 96 W budget covers eight standard cameras at roughly 12 W each. Where several ports need the full 30 W, size the load before ordering.
- This model has no console port; management is over the network by web, Telnet, SSH or SNMP.
- Specifications are taken from the manufacturer's published data and are subject to change without notice.
- Foredge is a trademark of Shenzhen Fengrunda Technology Co., Ltd. All other marks are the property of their respective owners.