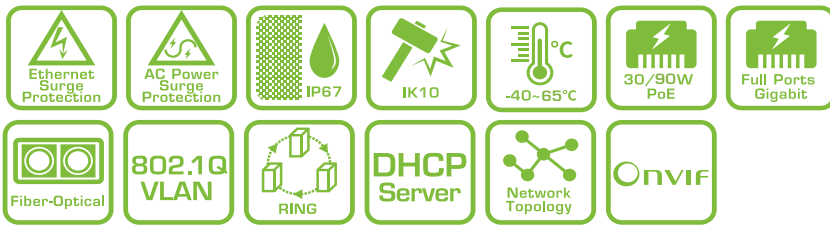


H60 series

IP67 / IK10 L2 PRO Gigabit PoE Switches



The H60 series of IP67/IK10 Pro L2 Managed PoE Switches are designed with 6KV Ethernet port surge protection, 40KV surge protection in power supply, and harden-graded standard to operate between -40° C and 65° C for harsh weather conditions. They enable outdoor connections of PoE PDs to the network such as outdoor IP cameras, wireless APs, and other outdoor industrial applications.

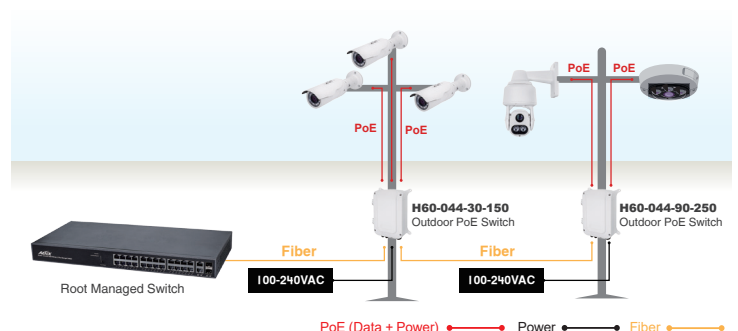
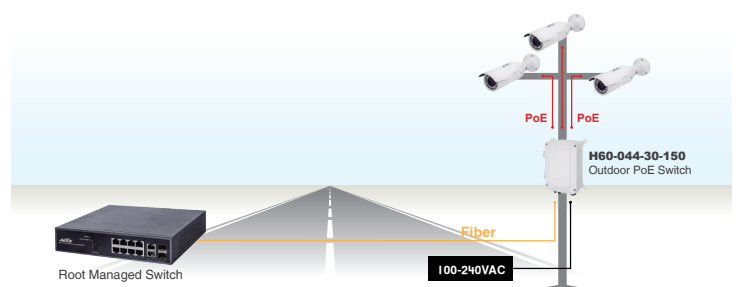
The H60 series provides multi-port Gigabit PoE (10M/100M/1G) delivering data and power to PoE PDs over a single network cable and additional SFP transceiver slots for flexible uplink. The H60 series has three sub models classified as power source equipment (PSE) and provide PoE budget up to 30W or 90W per port.

Besides general functions of L2 plus & basic L3 switch such as QoS, security, spanning tree, cable length measurement, and SNMP v1/v2c/v3, a dedicated web graphic user interface of IP surveillance is easy to configure and manage ONVIF cameras. It automatically generates camera topology maps, cable diagnostic, and PoE management.

Features

- Layer 2 Switch
 - 802.1d (STP), 802.1w (RSTP), 802.1s (MSTP)
 - Loop protection
 - SNMP v1/v2c/v3
 - QoS
 - VLAN
 - Ethernet cable length measurement
 - DHCP Server
- Network Topology System
 - Automatic discovery for ONVIF camera
 - Generates camera topology map automatically
 - Cable diagnostic & reboot camera remotely
 - PoE management
 - Topology view / Floor view / Google map
 - Monitor / Configure / Manage ONVIF camera thru web
- Flexible SFP transceiver ports for uplink
- IP67 standard
- IK10 impact rated cast aluminum housing
- Operating temperature between -40°C and 65°C
- Compliant IEEE802.3at 30W per port (H60-044-30-150, H60-084-30-250)
- 90W bt/PoH PoE per port (H60-044-90-250)
- 90W bt PoE per port (H60-044-91-250)
- Supports 10/100/1000Mbps data rates
- 6KV PoE surge protection
- IEEE 802.3az Energy Efficient Ethernet standard for green power

Applications



Device List

Show 10 entries Search:

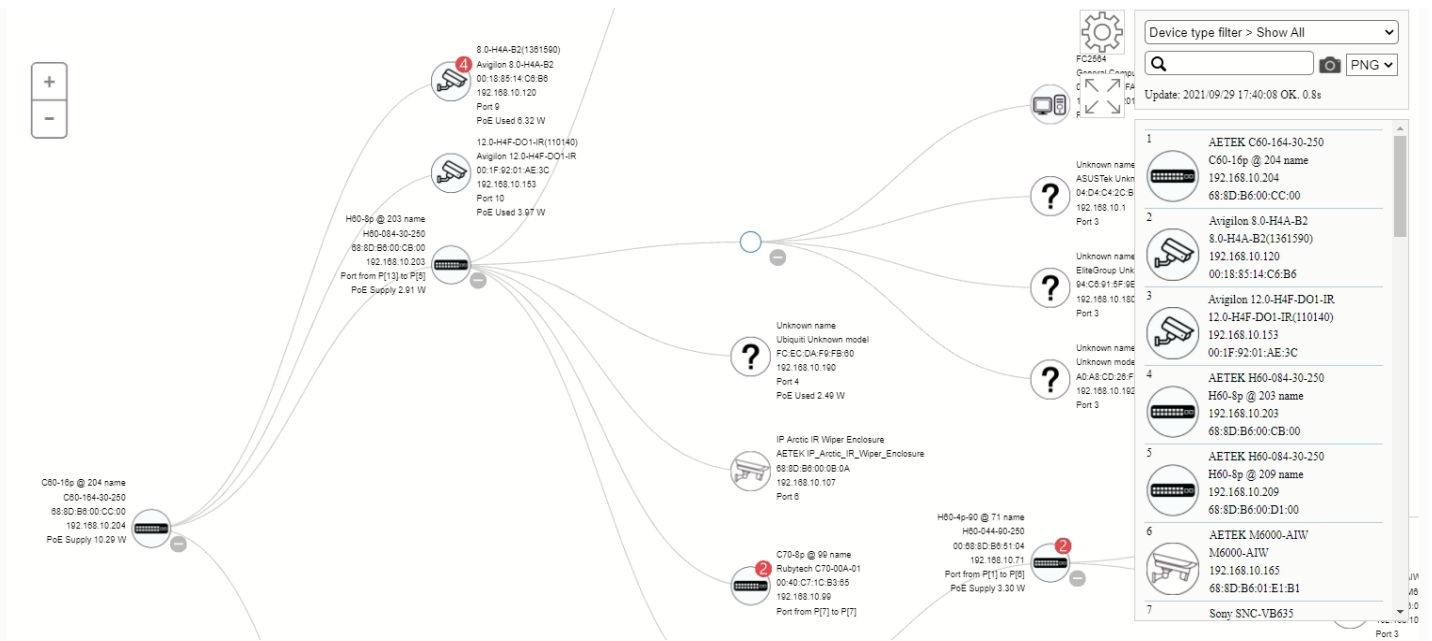
Status	Device Type	Model Name	Device Name	MAC	IP Address
Online	PoESW	H60-084-30-250	H60-8p @ 203 name	68:8D:B6:00:CB:00	192.168.10.203
Online	PoESW	H60-084-30-250	H60-8p @ 209 name	68:8D:B6:00:D1:00	192.168.10.209
Online	IPMX	M6000-AIW	M6000-AIW	68:8D:B6:01:E1:B1	192.168.10.165
Online	IP Camera	SNC-VB635	Sony	D8:D4:3C:DD:F5:C7	192.168.10.122
Online	IP Camera	WV-S1131	Panasonic_WV-S1131	BC:C3:42:71:79:D0	192.168.10.104
Online	IPSG	SD-504	SD-504	68:8D:B6:00:00:01	192.168.10.108
Online	PC	General Computer	FC2564	00:50:56:2D:FA:AC	192.168.10.201
Online	Others	Unknown model	Unknown name	04:D4:C4:2C:B5:EC	192.168.10.1
Online	Others	Unknown model	Unknown name	94:C6:91:5F:9E:EA	192.168.10.180
Online	PC	General Computer	MIS-TEMP-NB4	A0:A8:CD:26:FE:FD	192.168.10.192

Showing 1 to 10 of 29 entries

Previous 1 2 3 Next

[Edit](#)

Topology View



Device Dashboard

The Device Dashboard for the selected camera (Avigilon 12.0-H4F-DO1-IR) includes the following information:

- Device Type:** IP Cameras
- Device Name:** 12.0-H4F-DO1-IR
- Model Name:** 12.0-H4F-DO1-IR
- MAC Address:** 00:1F:92:01:AE:3C
- IP Address:** 192.168.10.153
- Http Port:** 80
- PoE Used:** 4.21 W

 Control buttons include:

- Close
- Apply
- Login
- Diagnostics
- PoE Reboot
- Dashboard
- Notification
- Monitor

Floor Map View

Device Dashboard

Device Type	PoE Switches
Device Name	H60-4p-90 @ 73 name
Model Name	H60-044-90-250
MAC Address	00:E0:4C:51:04:0A
IP Address	192.168.10.73
Http Port	80
PoE Supply	0 W
API Account	admin73
API Password	passwd73

Close Apply

Login Upgrade PoE Config Diagnostics

Dashboard Notification

Device type filter > Show All

Update: 2021/09/29 17:44:22 OK. 0.7s

- AETEK C60-164-30-250
C60-16p @ 204 name
192.168.10.204
68:8D:B6:00:CC:00
- Avigilon 8.0-H4A-B2
8.0-H4A-B2(1361590)
192.168.10.120
00:18:85:14:C6:B6
- Avigilon 12.0-H4F-DO1-IR
12.0-H4F-DO1-IR(110140)
192.168.10.153
00:1F:92:01:AE:3C
- AETEK H60-084-30-250
H60-8p @ 203 name
192.168.10.203
68:8D:B6:00:CB:00
- AETEK H60-084-30-250
H60-8p @ 209 name
192.168.10.209
68:8D:B6:00:D1:00
- AETEK M6000-AIW
M6000-AIW
192.168.10.165

Draggable: ONE

Google Map View

Device Dashboard

Device Type	PoE Switches
Device Name	H60-8p @ 203 name
Model Name	H60-084-30-250
MAC Address	68:8D:B6:00:CB:00
IP Address	192.168.10.203
Http Port	80
PoE Supply	2.54 W
API Account	admin203
API Password	passwd203

Close Apply

Upgrade PoE Config

Dashboard Notification

Device type filter > Show All

Update: 2021/09/29 17:48:45 OK. 1.4s

- AETEK C60-164-30-250
C60-16p @ 204 name
192.168.10.204
68:8D:B6:00:CC:00
- Avigilon 8.0-H4A-B2
8.0-H4A-B2(1361590)
192.168.10.120
00:18:85:14:C6:B6
- Avigilon 12.0-H4F-DO1-IR
12.0-H4F-DO1-IR(110140)
192.168.10.153
00:1F:92:01:AE:3C
- AETEK H60-084-30-250
H60-8p @ 203 name
192.168.10.203
68:8D:B6:00:CB:00
- AETEK H60-084-30-250
H60-8p @ 209 name
192.168.10.209
68:8D:B6:00:D1:00
- AETEK M6000-AIW
M6000-AIW
192.168.10.165

Draggable: ONE Animation: OFF

Cable Diagnostics

Diagnostics

Device Type	IP Cameras
Device Name	12.0-H4F-DO1-IR(110140)
Model Name	12.0-H4F-DO1-IR
MAC Address	00:1F:92:01:AE:3C
IP Address	192.168.10.153

Icon	Diagnostics
1	AETEK C60-164-30-250 C60-16p @ 204 name 192.168.10.204 68:8D:B6:00:CC:00 Port: 10 ✓ Connection ok Speed: 100M ✓ Cable Status ok
3	Avigilon 12.0-H4F-DO1-IR 12.0-H4F-DO1-IR(110140) 192.168.10.153 00:1F:92:01:AE:3C

Back

Device type filter > Show All

Update: 2021/09/29 17:40:48 OK. 0.7s

- AETEK C60-164-30-250
C60-16p @ 204 name
192.168.10.204
68:8D:B6:00:CC:00
- Avigilon 8.0-H4A-B2
8.0-H4A-B2(1361590)
192.168.10.120
00:18:85:14:C6:B6
- Avigilon 12.0-H4F-DO1-IR
12.0-H4F-DO1-IR(110140)
192.168.10.153
00:1F:92:01:AE:3C
- AETEK H60-084-30-250
H60-8p @ 203 name
192.168.10.203
68:8D:B6:00:CB:00
- AETEK H60-084-30-250
H60-8p @ 209 name
192.168.10.209
68:8D:B6:00:D1:00
- AETEK M6000-AIW
M6000-AIW
192.168.10.165
- Sony SNC-VB635

PoE Features

- IEEE802.3at (PoE+ 30W),bt / PoH 90W
- Max. allowed 30W / 90W per port
- Port status table

PoE Port Configuration						
Local Port	PD Class	Power Used	Current Used	Priority	Port Status	
1	-	0.00 [W]	0 [mA]	high	No PD detected	
2	-	0.00 [W]	0 [mA]	high	No PD detected	
3	-	0.00 [W]	0 [mA]	high	No PD detected	
4	class0	2.65 [W]	50 [mA]	high	on	
5	-	0.00 [W]	0 [mA]	high	No PD detected	
6	-	0.00 [W]	0 [mA]	high	No PD detected	
7	-	0.00 [W]	0 [mA]	high	No PD detected	
8	-	0.00 [W]	0 [mA]	high	No PD detected	
Total		2.00 [W]				





Specifications - Software

PoE Management	
Port Configuration	Supports per port PoE configuration function
PoE Scheduling	Supports per port PoE scheduling to turn on/off the PoE devices (PDs).
Auto-checking	Check the link status of PDs. Reboot PDs if there is no responses
Power Delay	The switch provides power to the PDs based on delay time when PoE switch boots up, in order to protect switch from misuse of the PDs.
IP Surveillance Graphical User Interface Specifications	
Automatic Discovery	Discover IP cameras complying ONVIF automatically
Topology View	Generate Topology maps to manage IP cameras
Floor view	It's easy to drag and drop PoE devices and help you to build smart workforces
Map view	Enhance efficiency to drag and drop devices and monitor surroundings on google map
Traffic Monitoring	Comprehensive chart to show traffic status
PoE Management	Reboot IP camera, Scheduling PoE on/off, alive checking, Power delay as PoE switch boots up, PoE configuration
Layer 2 Switching Specifications	
Spanning Tree Protocol	MAC Bridges Standard Spanning Tree (STP) 802.1d, Rapid Spanning Tree (RSTP) 802.1w, Multiple Spanning Tree (MSTP) 802.1s
IP/Mac Port Trunking	Link Aggregation Control Protocol (LACP) IEEE 802.3ad , Static aggregation.
VLAN	Supports up to 4K VLANs simultaneously (out of 4096 VLAN IDs), Port-based VLAN, 802.1Q tag-based VLAN
IGMP v1/v2 Snooping	IGMP limits bandwidth-intensive multicast traffic to only the requesters.
Layer 3 Switching Specifications	
DHCP Server	Assign IP to DHCP clients
Security	
Port Security	Locks MAC addresses to ports, and limits the number of learned MAC address
Storm Control	Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port
Loop Protection	To prevent unknown unicast, broadcast and multicast loops in Layer 2 switching configurations.
QoS	
Classification	Port based, 802.1p VLAN priority based
Bandwidth Control	Ingress policer, Egress shaping and rate control, Per port
Management software	
Port Mirroring	Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe. Up to N-1 (N is Switch's Ports) ports can be mirrored to single destination port. A single session is supported.
IEEE 802.1ab (LLDP)	Used by network devices for advertising their identities, capabilities, and neighbors on an IEEE 802ab local area network, Support LLDP-MED extensions
Web GUI Interface	Built-in switch configuration utility for browser-based device configuration
SNMP	SNMP version1, 2c, 3
Flow Control	The IEEE 802.3x standard for monitoring high speed switched networks. It gives complete visibility into the use of networks enabling performance optimization, accounting/billing for usage, and defense against security threats
Firmware Upgrade	Web browser upgrade HTTP and TFTP
NTP	Network Time Protocol (NTP) is a networking protocol for clock synchronization between computer systems over packet-switched
Other Management	System, HTTP, DHCP Client, Cable Diagnostics, Syslog, IPV4/IPV6 Management, SSH, Telnet

Specifications

	H60-044-30-150	H60-044-90-250	H60-044-91-250	H60-084-30-250
Networking Specifications				
Total Gigabit Ports	8	8	8	12
Gigabit PoE Ports (10M/100M/1G)	4 x 30W PoE	4 x 90W bt / PoH	4 x 90W bt	8 x 30W PoE
SFP Slots (100M/1G)	2	2	2	4
Gigabit Ports (RJ45)	2	2	2	-
Forwarding Capacity	11.904Mpps	11.904Mpps	11.904Mpps	17.856Mpps
Mac Table	8 k	8 k	8 k	8k
Jumbo Frames	9,216 Bytes	9,216 Bytes	9,216 Bytes	9,216 Bytes
Switching Capacity	16 Gbps	16 Gbps	16 Gbps	24 Gbps
Power Specifications				
Input Voltage	100VAC ~ 240VAC 280VAC 4hr 300VAC 1min.	100VAC ~ 240VAC 280VAC 4hr 300VAC 1min.	100VAC ~ 240VAC 280VAC 4hr 300VAC 1min.	100VAC ~ 240VAC 280VAC 4hr 300VAC 1min.
Power Consumption	150W	250W	250W	250W
Backup Power Input Voltage	48VDC ~ 56VDC	48VDC ~ 56VDC	48VDC ~ 56VDC	48VDC ~ 56VDC
Output Voltage Range /per PoE Port	54 VDC PoE IEEE 802.3af (Max. 15.4W) output PoE+ IEEE802.3at (Max. 30W) output	54 VDC PoE IEEE 802.3af (Max. 15.4W) output PoE+ IEEE802.3at (Max. 30W) output bt/PoH PoE (Max. 90W) output	54 VDC PoE IEEE 802.3af (Max. 15.4W) output PoE+ IEEE802.3at (Max. 30W) output bt PoE (Max. 90W) output	54 VDC PoE IEEE 802.3af (Max. 15.4W) output PoE+ IEEE802.3at (Max. 30W) output
PoE Power Budget	120W	240W	240W	240W
Surge Protection /each PoE Port	6KV	6KV	6KV	6KV
Surge Protection for AC Power	40KV	40KV	40KV	40KV
Mechanical Specifications				
Dimensions (L x W x H)	245.8 x 315.4 x 118mm	245.8 x 315.4 x 118mm	245.8 x 315.4 x 118mm	245.8 x 315.4 x 118mm
Weight	4.2KG	4.3KG	4.3KG	4.37KG
Connectors	M16 x 4, M25 x 2	M16 x 4, M25 x 2	M16 x 4, M25 x 2	M16 x 4, M25 x 2
DI/DO	1/1	1/1	1/1	1/1
Console	RJ45	RJ45	RJ45	RJ45
Reset Button	Yes	Yes	Yes	Yes
Environmental Specifications				
Weather Rating	IP67	IP67	IP67	IP67
Vandal Proof	IK10	IK10	IK10	IK10
Operating Temperature	-40°C~ 65°C (-40°F~ 149°F)	-40°C~ 65°C (-40°F~ 149°F)	-40°C~ 65°C (-40°F~ 149°F)	-40°C~ 65°C (-40°F~ 149°F)
Storage Temperature	-40°C~ 85°C (-40°F~ 185°F)	-40°C~ 85°C (-40°F~ 185°F)	-40°C~ 85°C (-40°F~ 185°F)	-40°C~ 85°C (-40°F~ 185°F)
Operating Humidity	5% ~ 95% non-condensing	5% ~ 95% non-condensing	5% ~ 95% non-condensing	5% ~ 95% non-condensing
Certifications				
EMC	CE,FCC,VCCI, C-Tick Class A	CE,FCC,VCCI, C-Tick Class A	CE,FCC,VCCI, C-Tick Class A	CE,FCC,VCCI, C-Tick Class A
Safety	EN62368-1	EN62368-1	EN62368-1	EN62368-1
Surge	EN61000-4-5	EN61000-4-5	EN61000-4-5	EN61000-4-5

Ordering Information

PoE Switches							
	H60-044-30-150 <ul style="list-style-type: none"> 4xGbE PoE (30W) + 2xGbE SFP + 2xGbE RJ45 100~240VAC, 120W power budget 		H60-044-90-250 <ul style="list-style-type: none"> 4xGbE bt / PoH PoE (90W)+2xGbE SFP + 2xGbE RJ45 100~240VAC, 240W power budget 		H60-044-91-250 <ul style="list-style-type: none"> 4xGbE bt PoE (90W)+2xGbE SFP + 2xGbE RJ45 100~240VAC, 240W power budget 		H60-084-30-250 <ul style="list-style-type: none"> 8xGbE PoE (30W) + 4xGbE SFP 100~240VAC, 240W power budget

Optional Accessories

SFP Modules



SFP-ISX-X5

Industrial Gigabit SFP Transceiver

- MMF
- 0.5 km
- -40° C ~85° C



SFP-ISX-02

Industrial Gigabit SFP Transceiver

- MMF
- 2 km
- -40° C ~85° C



SFP-ILX-10

Industrial Gigabit SFP Transceiver

- SMF
- 10 km
- -40° C ~85° C



SFP-ILX-40

Industrial Gigabit SFP Transceiver

- SMF
- 40 km
- -40° C ~85° C

Pole Mount Brackets



AT-100

Pole Mount Adapter



AT-101

Pole Mount Adapter

Corner Mount Bracket



AT-200

Corner Mount Adapter

Fiber Splice Tray



AT-303 / AT-303-V2

Fiber Splice Tray