

H60 series

Outdoor IP67 / IK10 L2 PRO Gigabit PoE Switches



The H60 series of IP67/IK10 L2 PRO 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.

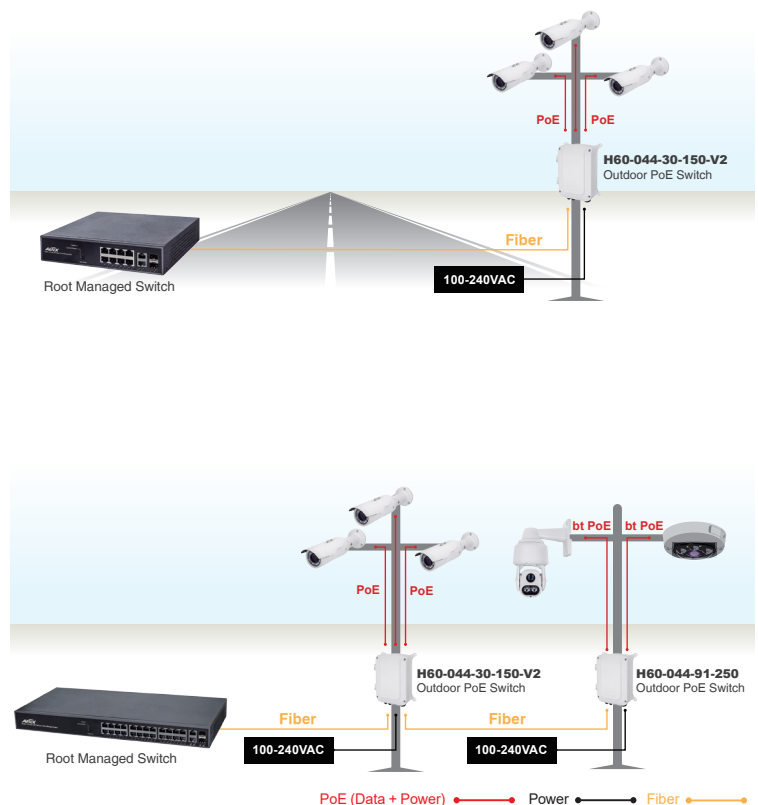
The H60 series provides multi-port Gigabit PoE (10M/100M/1G) delivering data and power to PoE PDs over a single network cable and additional SFP transceiver slots for flexible uplink. The H60 series has three sub models classified as power source equipment (PSE) and provide PoE budget up to 30W or 90W 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-V2, H60-084-30-250-V2, H60-044-30-DC-V2)
- 90W bt/PoH PoE per port (H60-022-90-120, H60-044-90-250, H60-084-90-600)
- 90W bt PoE per port (H60-044-91-250, H60-044-91-DC)
- 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

Edit

Previous

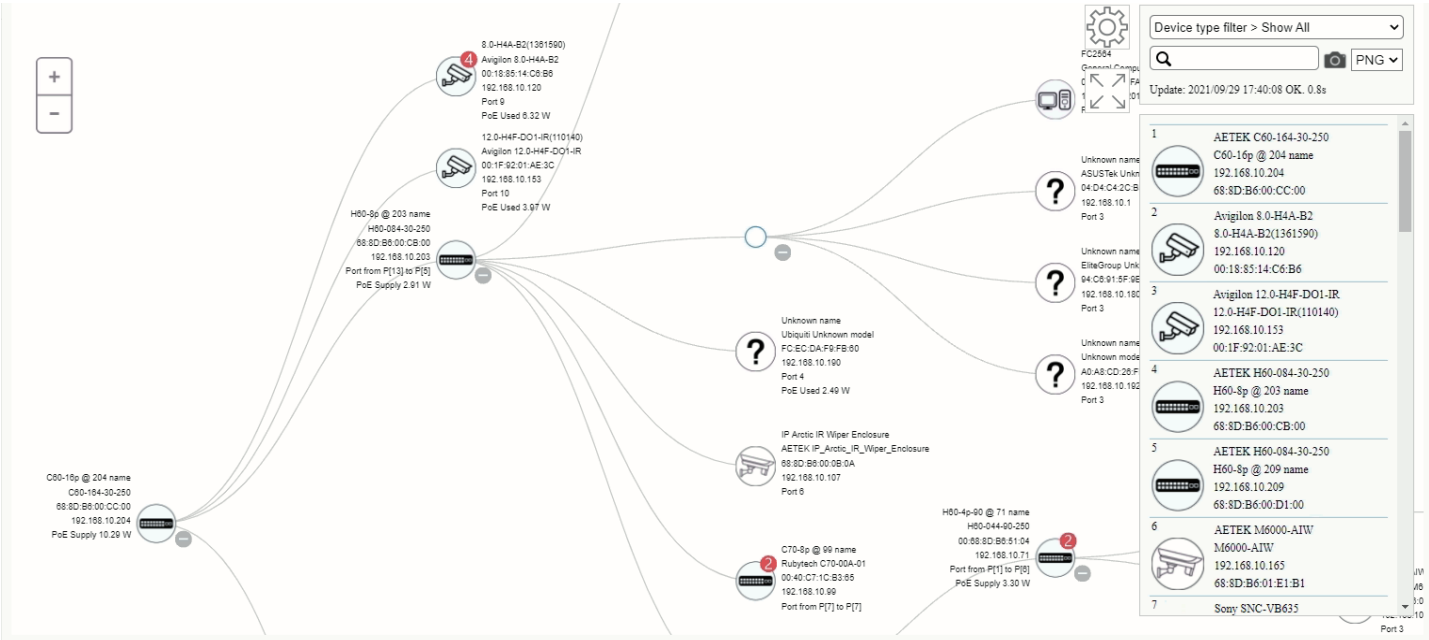
1

2

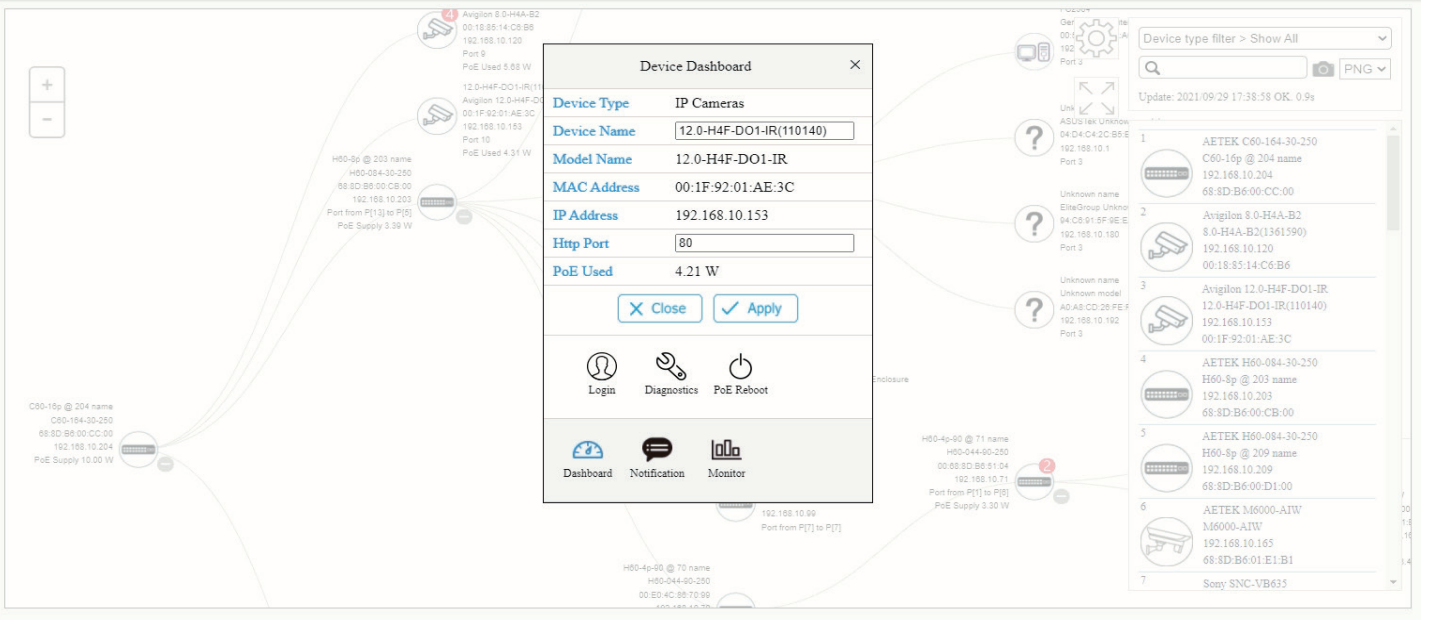
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Next

Topology View



Device Dashboard



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

1

2

3

15

Device type filter > Show All

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

1

AETEK C60-164-30-250
C60-16p @ 204 name
192.168.10.204
68:8D:B6:00:CC:00

X

2

Avigilon 8.0-H4A-B2
8.0-H4A-B2(1361590)
192.168.10.120
00:18:85:14:C6:B6

X

3

Avigilon 12.0-H4F-DO1-IR
12.0-H4F-DO1-IR(110140)
192.168.10.153
00:1F:92:01:AE:3C

X

4

AETEK H60-084-30-250
H60-8p @ 203 name
192.168.10.203
68:8D:B6:00:CB:00

X

5

AETEK H60-084-30-250
H60-8p @ 209 name
192.168.10.209
68:8D:B6:00:D1:00

X

6

AETEK M6000-AIW
M6000-AIW
192.168.10.165

X

Draggable: ONE

Google Map View

Search Box

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

1

AETEK C60-164-30-250
C60-16p @ 204 name
192.168.10.204
68:8D:B6:00:CC:00

X

2

Avigilon 8.0-H4A-B2
8.0-H4A-B2(1361590)
192.168.10.120
00:18:85:14:C6:B6

X

3

Avigilon 12.0-H4F-DO1-IR
12.0-H4F-DO1-IR(110140)
192.168.10.153
00:1F:92:01:AE:3C

X

4

AETEK H60-084-30-250
H60-8p @ 203 name
192.168.10.203
68:8D:B6:00:CB:00

X

5

AETEK H60-084-30-250
H60-8p @ 209 name
192.168.10.209
68:8D:B6:00:D1:00

X

6

AETEK M6000-AIW
M6000-AIW
192.168.10.165

X

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

1

AETEK C60-164-30-250
C60-16p @ 204 name
192.168.10.204
68:8D:B6:00:CC:00

X

2

Avigilon 8.0-H4A-B2
8.0-H4A-B2(1361590)
192.168.10.120
00:18:85:14:C6:B6

X

3

Avigilon 12.0-H4F-DO1-IR
12.0-H4F-DO1-IR(110140)
192.168.10.153
00:1F:92:01:AE:3C

X

4

AETEK H60-084-30-250
H60-8p @ 203 name
192.168.10.203
68:8D:B6:00:CB:00

X

5

AETEK H60-084-30-250
H60-8p @ 209 name
192.168.10.209
68:8D:B6:00:D1:00

X

6

AETEK M6000-AIW
M6000-AIW
192.168.10.165

X

7

Sony SNC-VB635

PoE Features

- IEEE802.3at (PoE+ 30W),bt 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]			
ApplyRefresh					

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	
IEEE 802.1X	IEEE802.1X: RADIUS authentication, authorization and accounting, MD5 hash, guest VLAN, single/multiple host mode and single/multiple sessions, Supports IGMP-RADIUS based 802.1X, Dynamic VLAN assignment
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.
RADIUS/ TACACS+	Supports RADIUS and TACACS+ authentication. Switch as a client
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

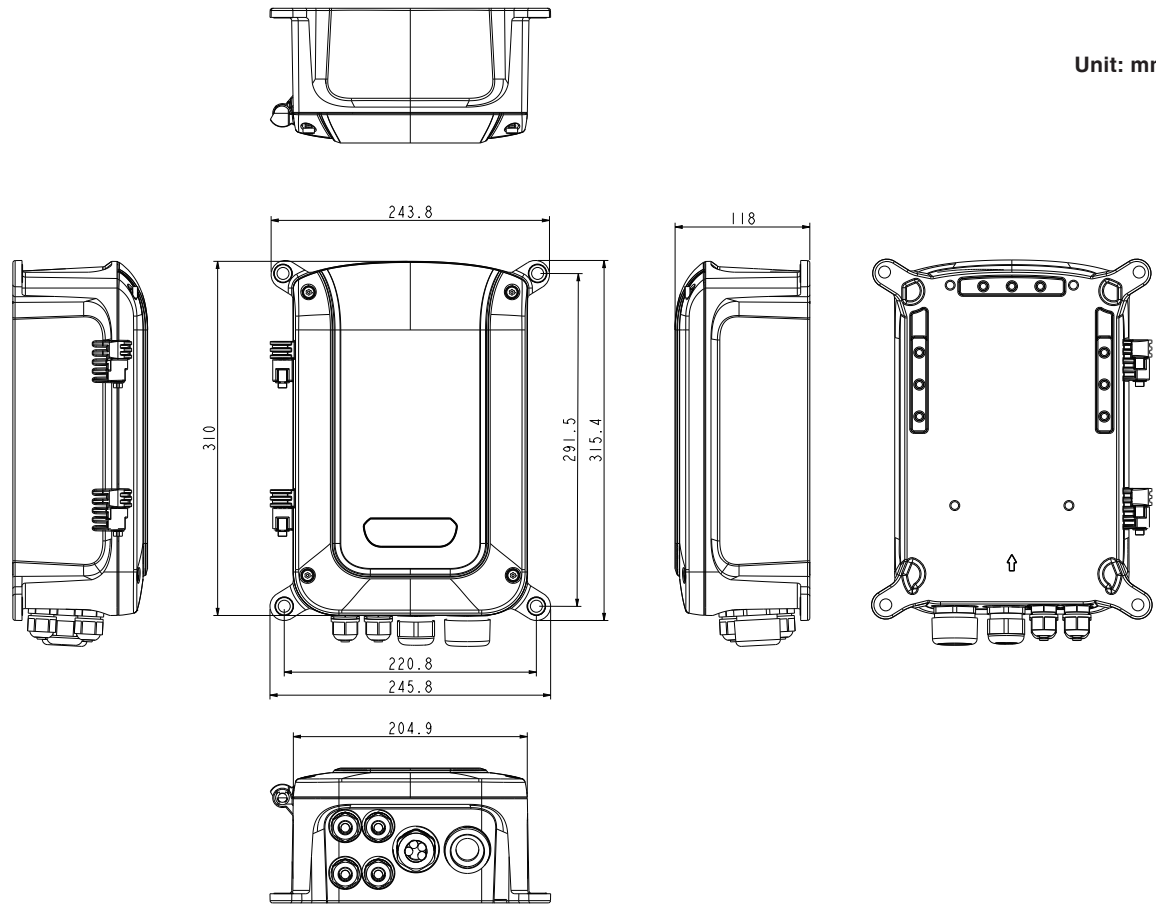
	H60-022-90-120	H60-044-30-150-V2	H60-044-90-250	H60-044-91-250
Networking				
Total Gigabit Ethernet Ports	4	8	8	8
Gigabit Ethernet 802.3af/at/bt PoE Ports	2 x 90W bt/PoH PoE	4 x 30W at PoE	4 x 90W bt/PoH PoE	4 x 90W bt PoE
Gigabit Ethernet SFP Ports (100M/1G)	2	2	2	2
Gigabit Ethernet RJ45 Ports	-	2	2	2
Forwarding Capacity	11.904Mpps	11.904Mpps	11.904Mpps	11.904Mpps
Mac Table	8K	8K	8K	8K
Jumbo Frames	9,216 Bytes	9,216 Bytes	9,216 Bytes	9,216 Bytes
Switching Capacity	8 Gbps	16 Gbps	16 Gbps	16 Gbps
Power				
Input Voltage	100~240VAC and 48-56VDC Backup Input Power	100~240VAC and 48-56VDC Backup Input Power	100~240VAC and 48-56VDC Backup Input Power	100~240VAC and 48-56VDC Backup Input Power
Output Power per PoE Port	PoE IEEE 802.3af (Max. 15.4W) PoE+ IEEE 802.3at (Max. 30W) PoE++ IEEE 802.3bt/PoH (Max. 90W)	PoE IEEE 802.3af (Max. 15.4W) PoE+ IEEE 802.3at (Max. 30W)	PoE IEEE 802.3af (Max. 15.4W) PoE+ IEEE 802.3at (Max. 30W) PoE++ IEEE 802.3bt/PoH (Max. 90W)	PoE IEEE 802.3af (Max. 15.4W) PoE+ IEEE 802.3at (Max. 30W) PoE++ IEEE 802.3bt (Max. 90W)
Output PoE Power Pin Assignment	12(-), 36(+), 45(+), 78(-)	12(+), 36(-)	12(-), 36(+), 45(+), 78(-)	12(-), 36(+), 45(+), 78(-)
System Power Consumption (without PoE)	10W	10W	10W	10W
PoE Output Power Budget	120W	120W	240W	240W
Surge Protection per PoE Port	6KV	6KV	6KV	6KV
Surge Protection for AC power	10KV	40KV	40KV	40KV
Mechanical				
Dimensions (W x D x H)	199.88 x 255.22 x 90 mm	245.8 x 315.4 x 118 mm	245.8 x 315.4 x 118 mm	245.8 x 315.4 x 118 mm
Weight	3.2 kg (7.05 lb)	4.2 kg (9.26 lb)	4.3 kg (9.48 lb)	4.3 kg (9.48 lb)
DI/DO	-	1/1	1/1	1/1
Console	RJ45	RJ45	RJ45	RJ45
Reset Button	2~7 sec.: Reset 7~12 sec.: Restore default	2~7 sec.: Reset 7~12 sec.: Restore default	2~7 sec.: Reset 7~12 sec.: Restore default	2~7 sec.: Reset 7~12 sec.: Restore default
Environmental				
IP Rating	IP67	IP67	IP67	IP67
IK Rating	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

Specifications

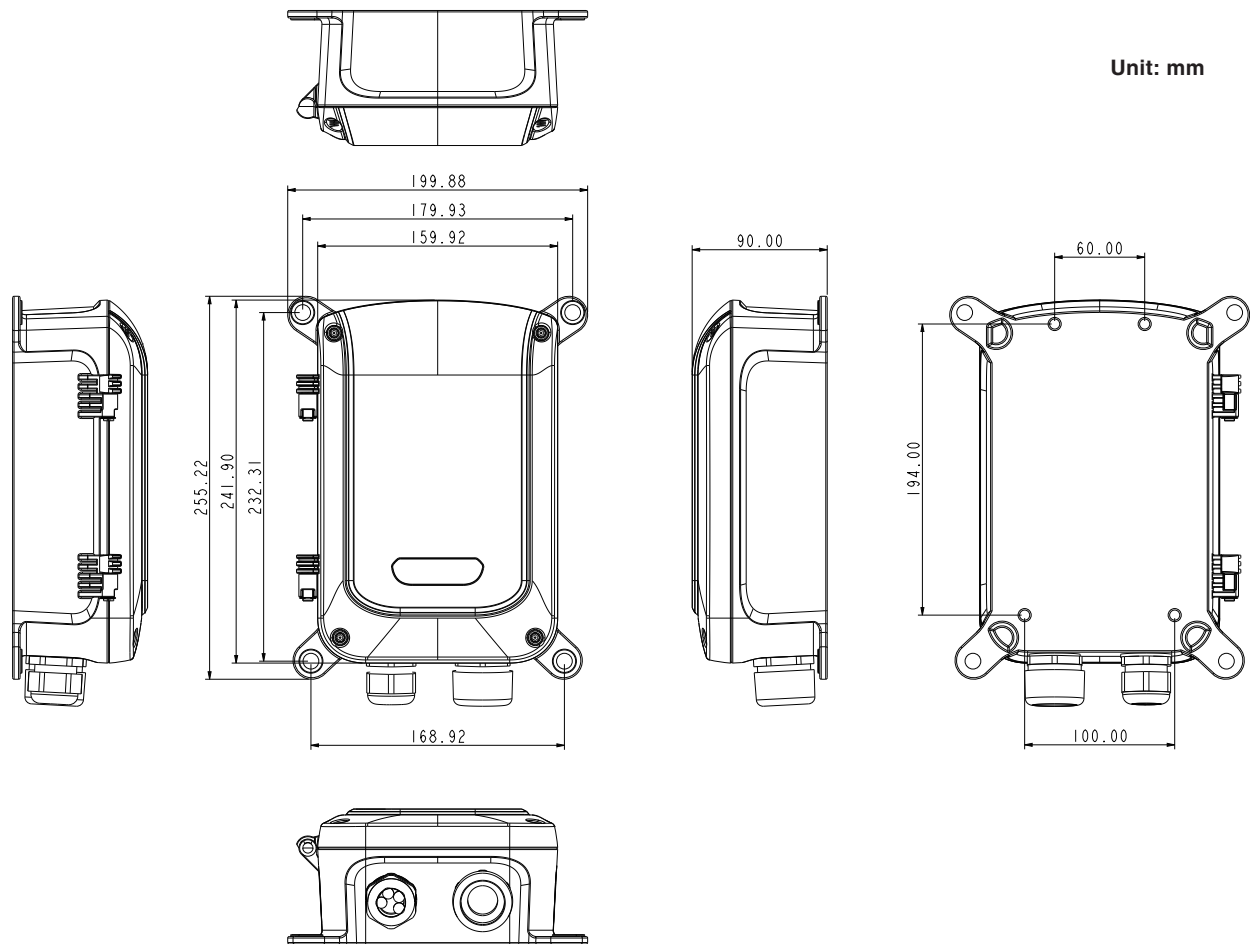
	H60-084-30-250-V2	H60-084-90-600	H60-044-30-DC-V2	H60-044-91-DC
Networking				
Total Gigabit Ethernet Ports	12	12	8	8
Gigabit Ethernet 802.3af/at/bt PoE Ports	8 x 30W at PoE	8 x 90W bt/PoH PoE	4 x 30W at PoE	4 x 90W bt PoE
Gigabit Ethernet SFP Ports (100M/1G)	4	4	2	2
Gigabit Ethernet RJ45 Ports	-	-	2	2
Forwarding Capacity	17.856Mpps	17.856Mpps	11.904Mpps	11.904Mpps
Mac Table	8K	8K	8K	8K
Jumbo Frames	9,216 Bytes	9,216 Bytes	9,216 Bytes	9,216 Bytes
Switching Capacity	24 Gbps	24 Gbps	16 Gbps	16 Gbps
Power				
Input Voltage	100~240VAC and 48-56VDC Backup Input Power	100~240VAC and 48-56VDC Backup Input Power	Dual 12-56VDC	Dual 12-56VDC
Output Power per PoE Port	PoE IEEE 802.3af (Max. 15.4W) PoE+ IEEE 802.3at (Max. 30W)	PoE IEEE 802.3af (Max. 15.4W) PoE+ IEEE 802.3at (Max. 30W) PoE++ IEEE 802.3bt/PoH (Max. 90W)	PoE IEEE 802.3af (Max. 15.4W) PoE+ IEEE 802.3at (Max. 30W)	PoE IEEE 802.3af (Max. 15.4W) PoE+ IEEE 802.3at (Max. 30W) PoE++ IEEE 802.3bt (Max. 90W)
Output PoE Power Pin Assignment	12(+), 36(-)	12(-), 36(+), 45(+), 78(-)	12(+), 36(-)	12(-), 36(+), 45(+), 78(-)
System Power Consumption (without PoE)	10W	10W	10W	10W
PoE Output Power Budget	240W	480W at 50°C (122°F) 360W at 65°C (149°F)	12VDC: 90W 24VDC: 120W 48VDC: 120W	12VDC: 90W 24VDC: 160W 48VDC: 360W
Surge Protection per PoE Port	6KV	6KV	6KV	6KV
Surge Protection for AC power	40KV	40KV	-	-
Mechanical				
Dimensions (W x D x H)	245.8 x 315.4 x 118 mm	245.8 x 315.4 x 118 mm	245.8 x 315.4 x 118 mm	245.8 x 315.4 x 118 mm
Weight	4.37 kg (9.63 lb)	4.9 kg (10.8 lb)	4.2 kg (9.26 lb)	4.3 kg (9.48 lb)
DI/DO	1/1	1/1	1/1	1/1
Console	RJ45	RJ45	RJ45	RJ45
Reset Button	2~7 sec.: Reset 7~12 sec.: Restore default	2~7 sec.: Reset 7~12 sec.: Restore default	2~7 sec.: Reset 7~12 sec.: Restore default	2~7 sec.: Reset 7~12 sec.: Restore default
Environmental				
IP Rating	IP67	IP67	IP67	IP67
IK Rating	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	-	-
Surge	EN61000-4-5	EN61000-4-5	EN61000-4-5	EN61000-4-5

Dimension

- H60-044-30-150-V2 / H60-044-90-250 / H60-044-91-250 / H60-084-30-250-V2 / H60-084-90-600 / H60-044-30-DC-V2 / H60-044-91-DC



- H60-022-90-120



Ordering Information

PoE Switches			
• H60-022-90-120 • 2xGbE bt / PoH PoE (90W) • + 2xGbE SFP • 100~240VAC, 120W power budget 	• H60-044-30-150-V2 • 4xGbE at PoE (30W) • + 2xGbE SFP • + 2xGbE RJ45 • 100~240VAC, 120W power budget 	• H60-044-90-250 • 4xGbE bt / PoH PoE (90W) • + 2xGbE SFP • + 2xGbE RJ45 • 100~240VAC, 240W power budget 	• H60-044-91-250 • 4xGbE bt PoE (90W) • + 2xGbE SFP • + 2xGbE RJ45 • 100~240VAC, 240W power budget 
PoE Switches			
• H60-084-30-250-V2 • 8xGbE at PoE (30W) • + 4xGbE SFP • 100~240VAC, 240W power budget 	• H60-084-90-600 • 8xGbE bt/PoH PoE (90W) • + 4xGbE SFP • 100~240VAC • 480W power budget at 50°C (122°F) • 360W power budget at 65°C (149°F) 	• H60-044-30-DC-V2 • 4xGbE at PoE (30W) • + 2xGbE SFP • + 2xGbE RJ45 • 12~56VDC Input 	• H60-044-91-DC • 4xGbE bt PoE (90W) • + 2xGbE SFP • + 2xGbE RJ45 • 12~56VDC Input 

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		Corner Mount Bracket	
			
AT-100 Pole Mount Adapter	AT-101 Pole Mount Adapter		
Fiber Splice Tray			
			
AT-302 Fiber Splice Tray	AT-303-V2 Fiber Splice Tray		