



PoE Product Line

Outdoor PoE Switch • PoE Switch • PoE Injector • PoE Extender • PoE Surge Protector



IP67 / IK10 Outdoor PoE Switch

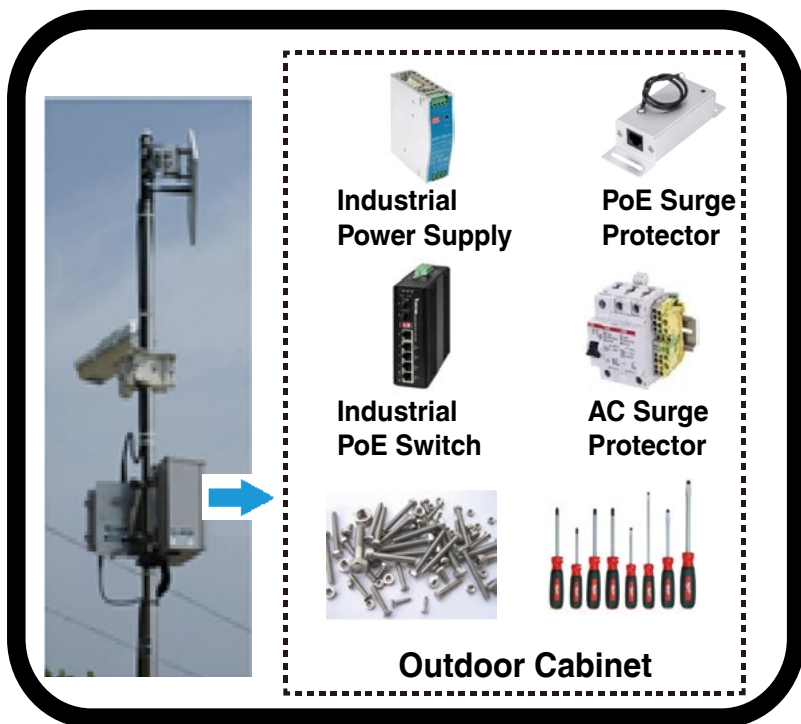
H21 Fast Ethernet EXPoE Switch

H40 Gigabit Ethernet PoE Switch

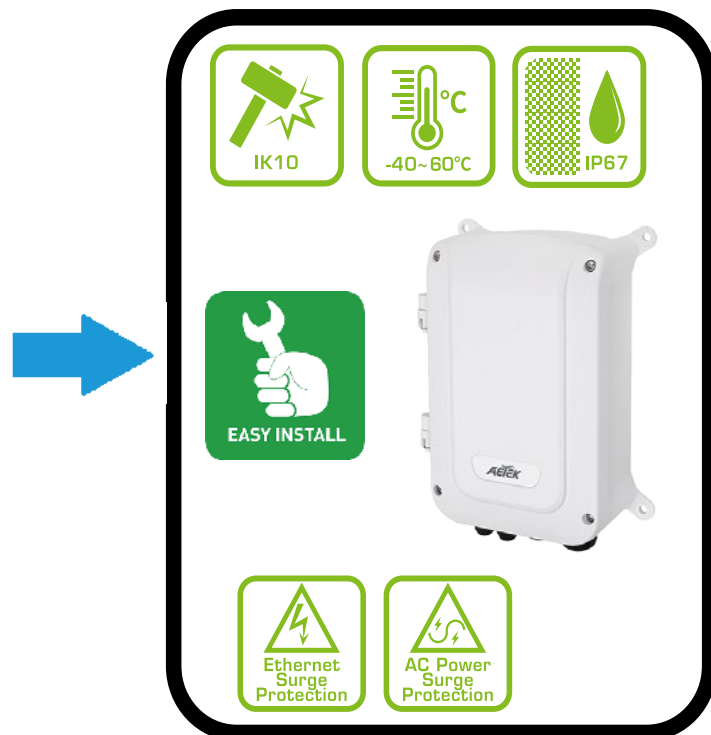
H80 L2 Plus Gigabit Ethernet PoE Switch



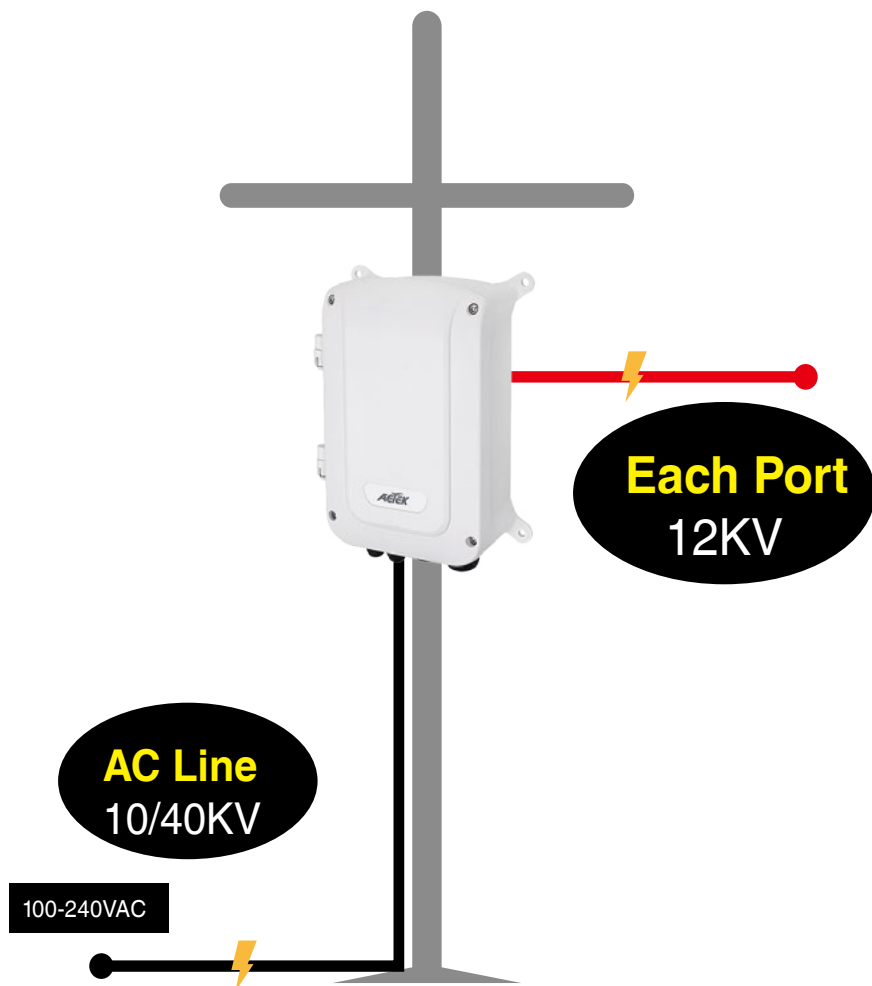
Traditional Outdoor PoE Switch Solution



All-in-One Outdoor PoE Switch Solution



Lightning Surge Protection



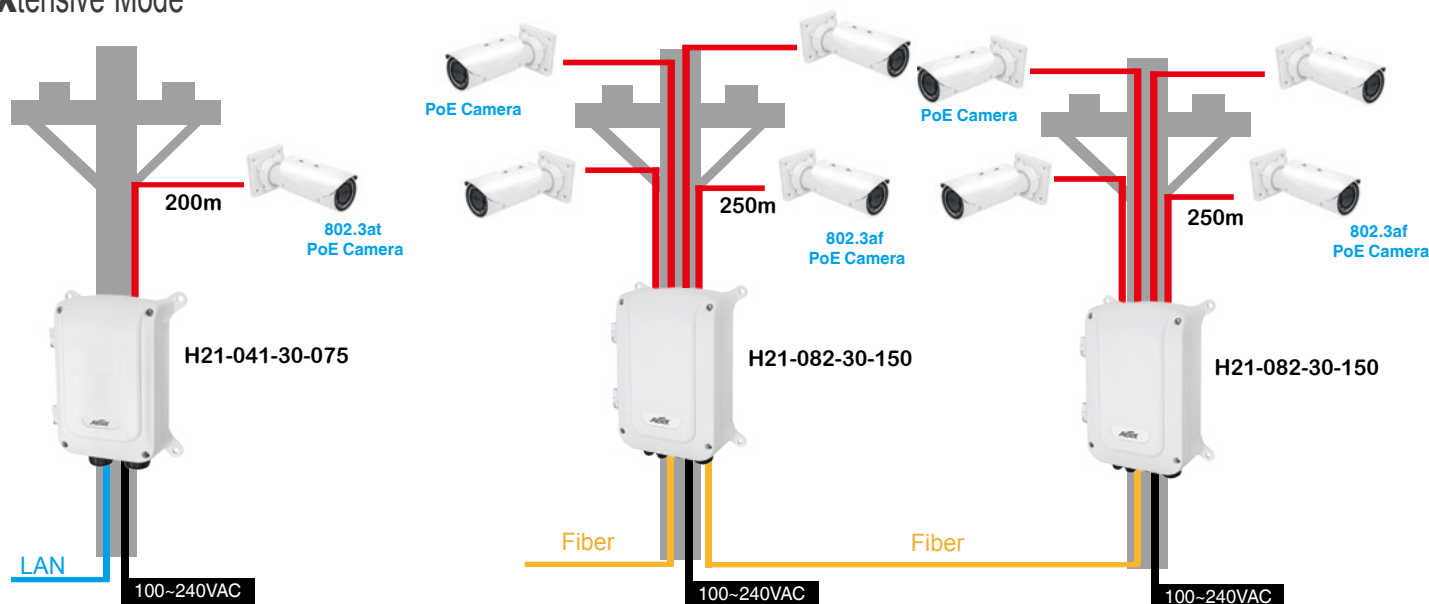
H21 series

Outdoor Fast Ethernet EXPoE Switch



- 12KV PoE surge protection
- 10KV/40KV AC power surge protection
- 30% range of input voltage tolerance
- Circuit protection prevents power interference
- EX mode “off” reaches PoE camera up to 100m@100Mbps
- EX mode “on” reaches 802.3af camera up to 250m@10Mbps
- EX mode “on” reaches 802.3at camera up to 200m@10Mbps

Extensive Mode

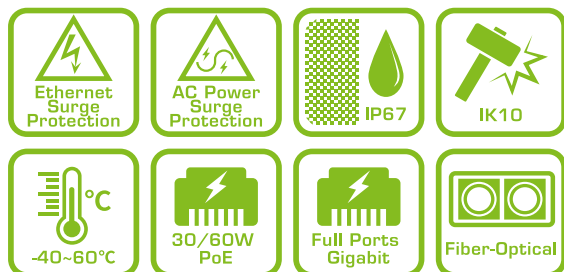


H21 H/W Matrix Table

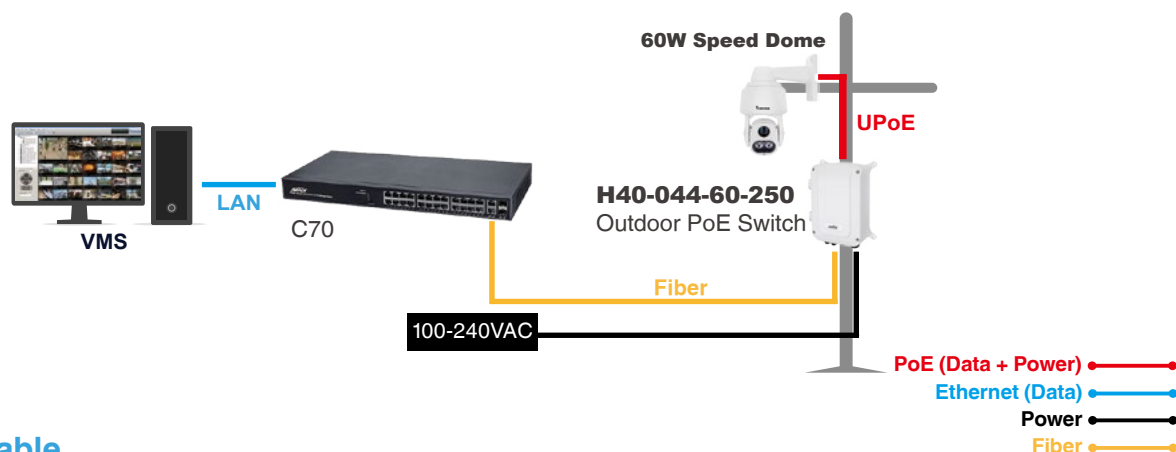
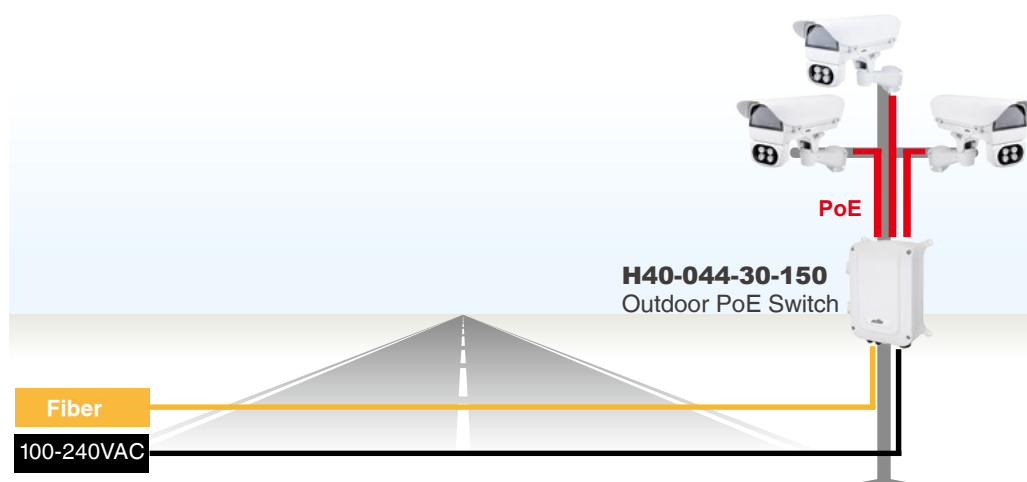
	H21-041-30-075	H21-082-30-150
Total Fast Ethernet Ports	5	8
Total Gigabit Ports	-	2
PoE Port@EX Mode OFF	4x30W PoE ports	8x30W PoE ports
PoE Port@EX Mode ON	2x30W EXPoE + 2x30W PoE ports	2x30W EXPoE + 6x30W PoE ports
Fast Ethernet Ports (RJ45)	1	-
Gigabit RJ45/SFP Combo Ports	-	2
PoE Surge Protection	12KV	12KV
Power Surge Protection	10KV	40KV
Weather Rating	IP67	IP67
Vandal Proof	IK10	IK10
Operating Temperature	-40°C~ 60°C (-40°F~ 140°F)	-40°C~ 60°C (-40°F~ 140°F)

H40series

Outdoor Gigabit Ethernet PoE Switch



- IP67/IK10 cast aluminum housing
- 30W per port IEEE802.3at compliant
- 60W per port UPoE (H40-044-60-250 only)
- Supports 10/100/1000Mbps data rates
- Flexible SFP transceiver ports for uplink

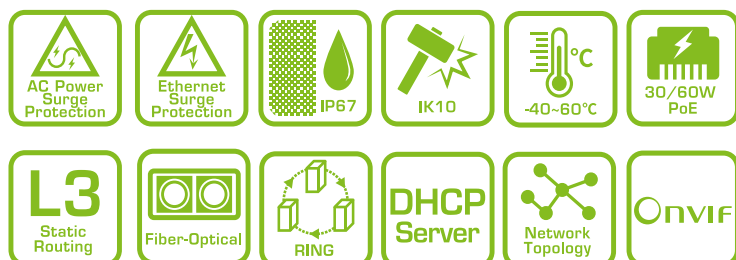


H40 H/W Matrix Table

	H40-044-30-150	H40-044-60-250	H40-082-30-250
Total GbE Port	8	8	10
GbE PoE Port	4x30W	4x60W	8x30W
SFP slot (100M/1GbE)	2	2	2
GbE Port(RJ45)	2	2	-
PoE Surge Protection	12KV	6KV	12KV
Power Surge Protection	40KV	40KV	40KV
Weather Rating	IP67	IP67	IP67
Vandal Proof	IK10	IK10	IK10
Operating Temperature	-40°C~ 60°C (-40°F~ 140°F)	-40°C~ 60°C (-40°F~ 140°F)	-40°C~ 60°C (-40°F~ 140°F)

H80 series

Outdoor L2+ GbE ONVIF PoE Switch

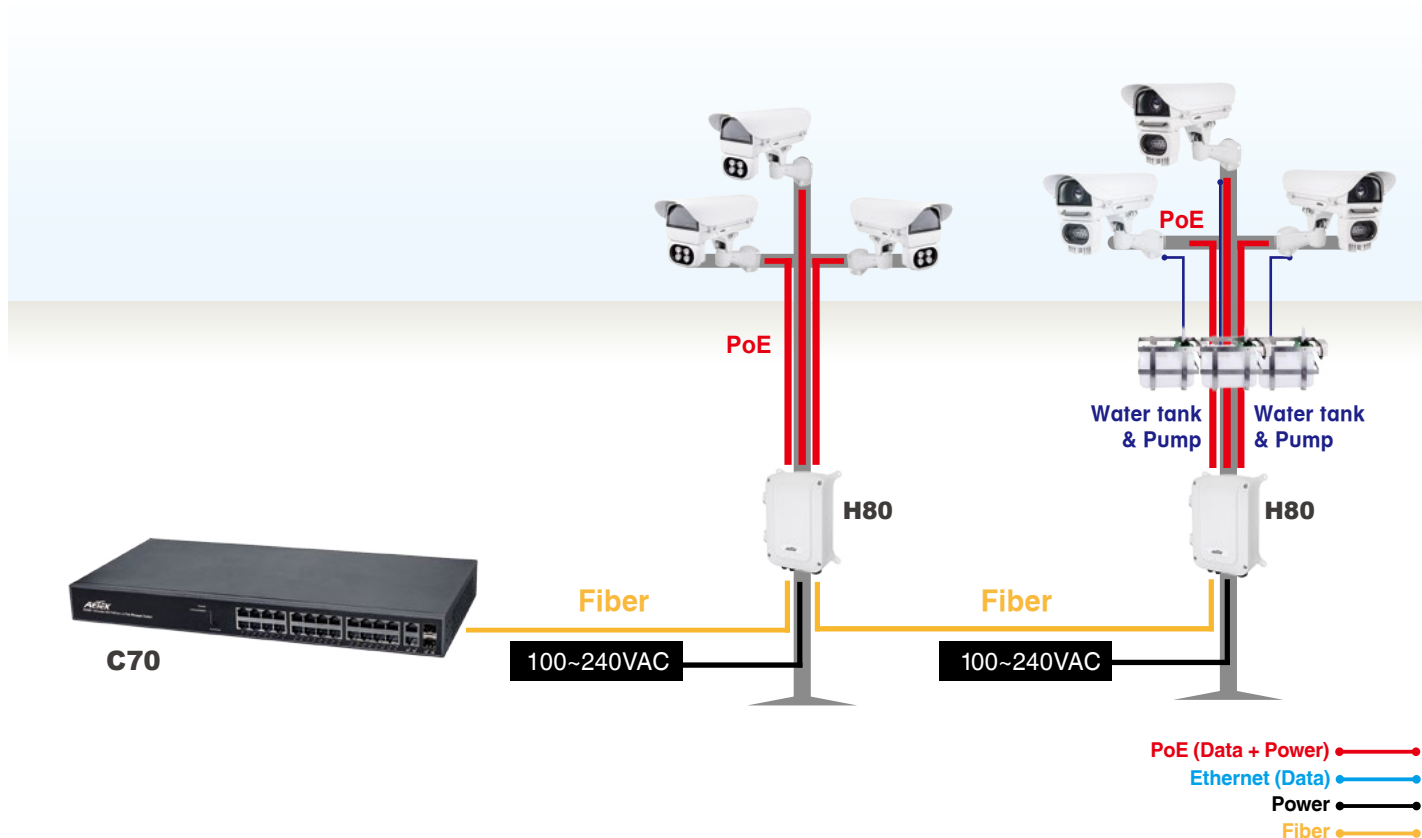


ONVIF Camera Controller

- Automatic discovery for ONVIF camera
- Generate camera topology automatically
- Graphic grouping VLAN
- Cable diagnostic & reboot camera remotely
- PoE management
- Topology view/Floor view/Google map
- Monitor/Configure/Manage ONVIF camera remotely

Layer 2 Plus

- IPV4 and IPV6 protocol
- IPV4/IPV6 L3 static routing
- 802.1d (STP), 802.1w (RSTP), 802.1s (MSTP)
- SNMP v1/v2c/v3
- VLAN
- Ethernet cable length measurement
- DHCP Server



H80 H/W Matrix Table

	H80-044-30-150	H80-044-60-250	H80-084-30-250
Total GbE Port	8	8	12
GbE PoE Port	4x30W	4x60W	8x30W
SFP slot (100M/1GbE)	2	2	4
GbE Port(RJ45)	2	2	-
PoE Surge Protection	6KV	6KV	6KV
Power Surge Protection	40KV	40KV	40KV
Weather Rating	IP67	IP67	IP67
Vandal Proof	IK10	IK10	IK10
Operating Temperature	-40°C~ 60°C (-40°F~ 140°F)	-40°C~ 60°C (-40°F~ 140°F)	-40°C~ 60°C (-40°F~ 140°F)

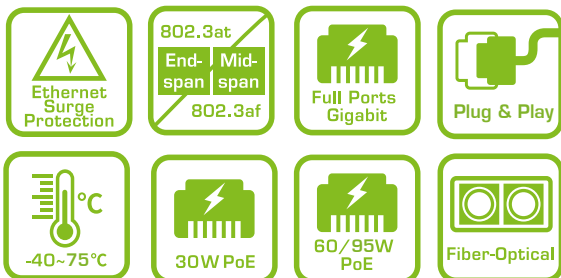
Harden-Graded Industrial PoE Switch

H30 Gigabit Ethernet PoE Switch

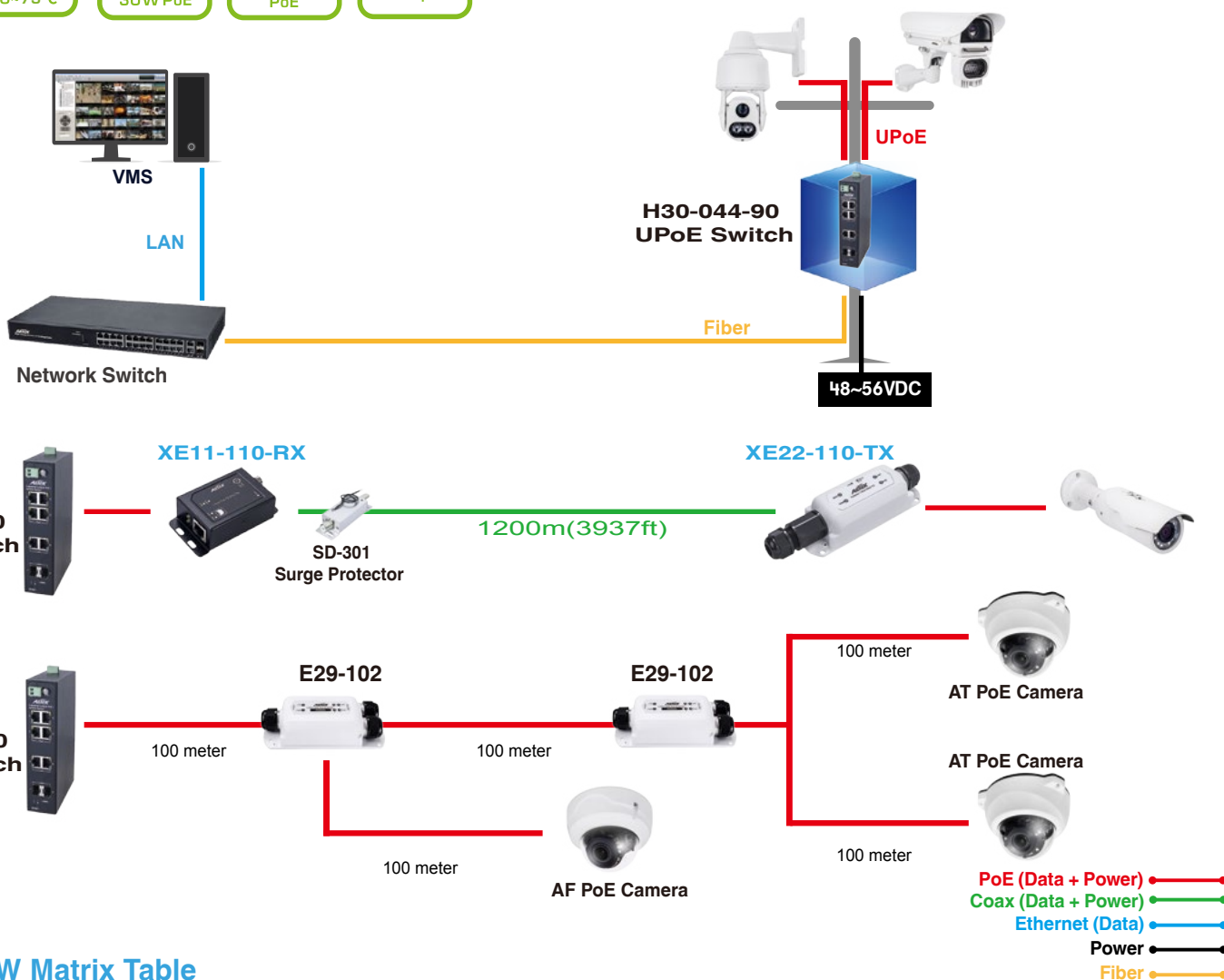


H30series

Harden-Graded Industrial Unmanaged PoE Switches



- IP30 housing
- 30W per port IEEE802.3at compliant
- 60/95W per port UPoE (H30-044-90 only)
- Supports 10/100/1000Mbps data rates
- Flexible SFP transceiver ports for uplink



H30 H/W Matrix Table

	H30-044-30	H30-082-30	H30-044-90
Total GbE Port	8	10	8
GbE PoE Port	4x30W	8x30W	4x60W/95W
SFP slot (100M/1GbE)	2	2	2
GbE Port(RJ45)	2	-	2
PoE Surge Protection	12KV	12KV	12KV
Operating Temperature	-40°C~ 75°C (-40°F~ 167°F)	-40°C~ 75°C (-40°F~ 167°F)	-40°C~ 75°C (-40°F~ 167°F)
Power Supply:	NDR-120-48 : 120W / 48~55VDC output , 100~240VAC Input		
	NDR-240-48 : 240W / 48~55VDC output , 100~240VAC Input		

Surveillance PoE Switch

C11 Surveillance EXPoE Switch

H21 Outdoor Surveillance EXPoE Switch



C11 series

Surveillance EXPoE Switch



- 4/12KV PoE surge protection
- 4KV AC power surge protection
- 30% range of input voltage tolerance
- Circuit protection prevents power interference
- EX mode “off” reaches PoE camera up to 100m@100Mbps
- EX mode “on” reaches 802.3af camera up to 250m@10Mbps
- EX mode “on” reaches 802.3at camera up to 200m@10Mbps

C11-042-30-065 2xFE PoE + 2xFE EXPoE + 2xFE unmanaged PoE Switch		C11-082-30-120 6xFE PoE + 2xFE EXPoE + 2xFE unmanaged PoE Switch	
	- 2xFE PoE + 2xFE EXPoE + 2xFE @EX mode ON - 4xFE PoE + 2xFE @EX mode OFF - 65W Power Budget - Supports 802.3af/802.3at - 4KV PoE surge protection - 4KV Power surge protection - Extra 30% of input voltage tolerance		- 6xFE PoE + 2xFE EXPoE + 2xFE @EX mode ON - 8xFE PoE + 2xFE @EX mode OFF - 120W Power Budget - Supports 802.3af/802.3at - 4KV PoE surge protection - 4KV Power surge protection - Extra 30% of input voltage tolerance
C11-082-31-120 6xFE PoE + 2xFE EXPoE + 1xGbE(RJ45) + 1xGbE(SFP) unmanaged PoE Switch		C11-162-30-250 8xFE PoE + 8xFE EXPoE + 2xGbE (RJ45/SFP) combo unmanaged PoE Switch	
	- 6xFE PoE + 2xFE EXPoE + 1xGbE(RJ45) + 1xGbE(SFP) @EX mode ON - 8xFE PoE + 1xGbE(RJ45) + 1xGbE(SFP) @EX mode OFF - 120W Power Budget - Supports 802.3af/802.3at - 4KV PoE surge protection - 4KV Power surge protection - Extra 30% of input voltage tolerance		- 8xFE PoE + 8xFE EXPoE + 2xGbE (RJ45/SFP) combo @EX mode ON - 16xFE PoE + 2xGbE(RJ45/SFP) combo @EX mode OFF - 250W Power Budget - Supports 802.3af/802.3at - 12KV PoE surge protection - 4KV Power surge protection - Extra 30% of input voltage tolerance
C11-242-30-380 16xFE PoE + 8xFE EXPoE + 2xGbE (RJ45/SFP) combo unmanaged PoE Switch			
		- 16xFE PoE + 8xFE EXPoE + 2xGbE (RJ45/SFP) combo @EX mode ON - 24xFE PoE + 2xGbE(RJ45/SFP) combo @EX mode OFF - 380W Power Budget - Supports 802.3af/802.3at - 12KV PoE surge protection - 4KV Power surge protection - Extra 30% of input voltage tolerance	

EXtensive Mode OFF

100~240VAC

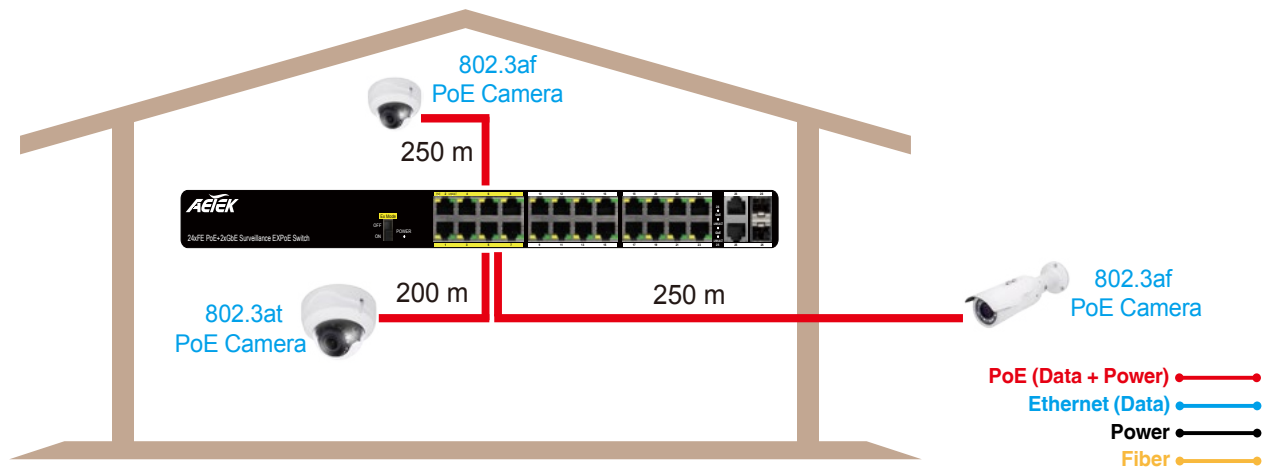


EXtensive Mode ON

100~240VAC



100~240VAC



Range Guide

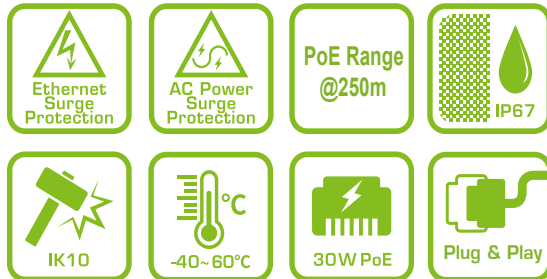
	EX Port@ EX Mode ON	Any Port@ EX Mode OFF
802.3af PoE IP Camera	250m @ 10Mbps	100m @ 100Mbps
802.3at PoE IP Camera	200m @ 10Mbps	100m @ 100Mbps

C11 H/W Matrix Table

	C11-042-30-065	C11-082-30-120	C11-082-31-120	C11-162-30-250	C11-242-30-380
Total FE port	6	10	8	16	24
FE PoE port @ EX mode OFF	4x30W PoE ports	8x30W PoE ports	8x30W PoE ports	16x30W PoE ports	24x30W PoE ports
FE PoE port @ EX mode ON	2x30W EXPoE + 2x30W PoE ports	2x30W EXPoE + 6x30W PoE ports	2x30W EXPoE + 6x30W PoE ports	8x30W EXPoE + 8x30W PoE ports	8x30W EXPoE + 16x30W PoE ports
FE port	2	2	-	-	-
Total GE port	-	-	2	2	2
GbE RJ45/SFP combo port	-	-	-	2	2
GbE RJ45 port	-	-	1	-	-
GbE SFP port	-	-	1	-	-
PoE Surge Protection	4KV	4KV	4KV	12KV	12KV
Power Surge Protection	4KV	4KV	4KV	4KV	4KV
Power Budget	65W	120W	120W	250W	380W

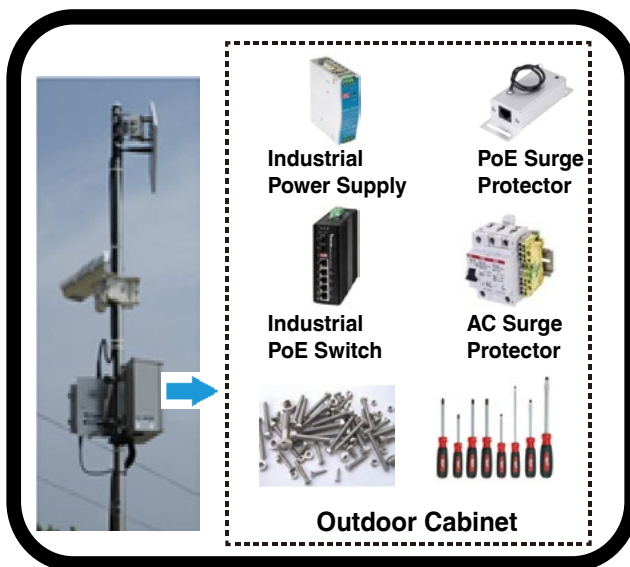
H21series

Outdoor Surveillance EXPoE Switch



- 12KV PoE surge protection
- 10KV/40KV AC power surge protection
- 30% range of input voltage tolerance
- Circuit protection prevents power interference
- EX mode “off” reaches PoE camera up to 100m@100Mbps
- EX mode “on” reaches 802.3af camera up to 250m@10Mbps
- EX mode “on” reaches 802.3at camera up to 200m@10Mbps

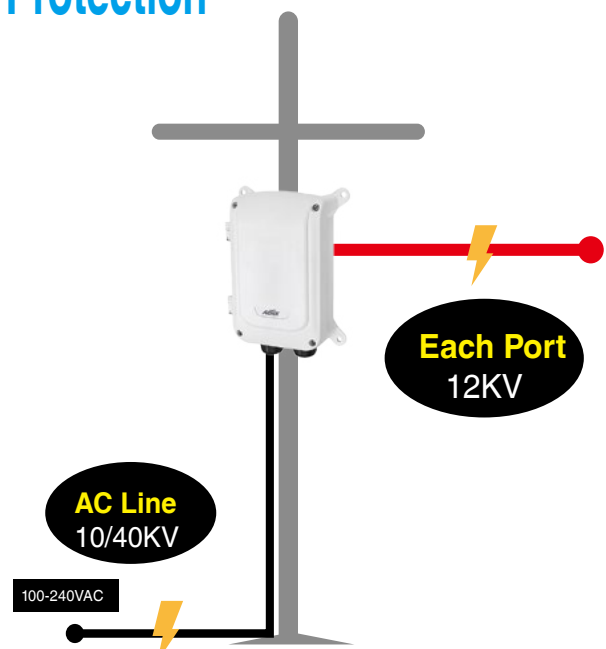
Traditional Outdoor PoE Switch Solution



All-in-One Outdoor PoE Switch Solution

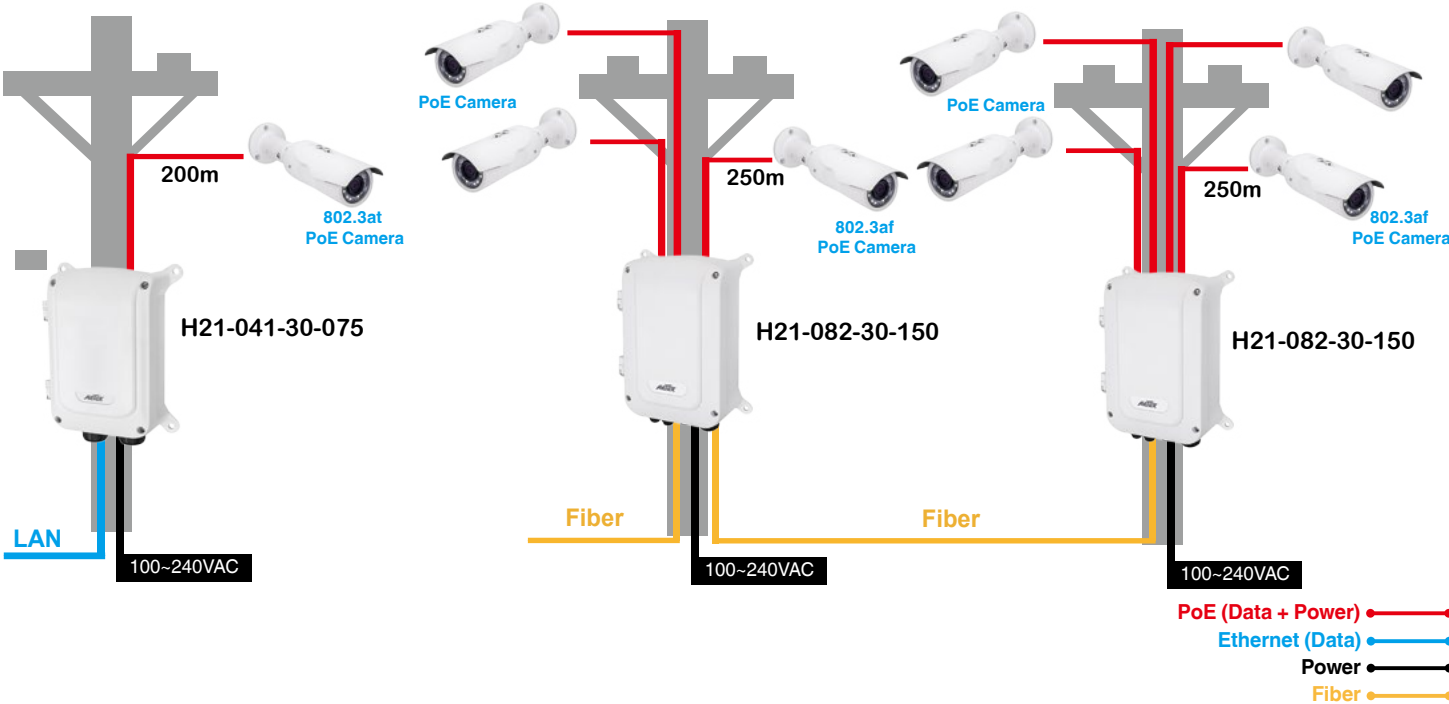


Lightning Surge Protection



H21-041-30-075 2xFE PoE + 2xFE EXPoE + 1xFE unmanaged PoE Switch		H21-082-30-150 6xFE PoE + 2xFE EXPoE + 2xGbE (RJ45/SFP) combo unmanaged PoE Switch	
	- 2xFE PoE + 2xFE EXPoE + 1xFE @EX mode ON - 4xFE PoE + 1xFE @EX mode OFF - 75W Power Budget - Supports 802.3af/802.3at - 12KV PoE surge protection - 10KV Power surge protection - Extra 30% of input voltage tolerance - IP67 / IK10		- 6xFE PoE + 2xFE EXPoE + 2xGbE (RJ45/SFP) combo @EX mode ON - 8xFE PoE + 2xGbE(RJ45/SFP) combo @EX mode OFF - 150W Power Budget - Supports 802.3af/802.3at - 12KV PoE surge protection - 40KV Power surge protection - Extra 30% of input voltage tolerance - IP67 / IK10

EXtensive Mode



Range Guide		
	EX Port@ EX Mode ON	Any Port@ EX Mode OFF
802.3af PoE IP Camera	250m@10Mbps	100m@100Mbps
802.3at PoE IP Camera	200m@10Mbps	100m@100Mbps

H21 H/W Matrix Table

	H21-041-30-075	H21-082-30-150
Total Fast Ethernet Ports	5	8
Total Gigabit Ports	-	2
PoE Port@EX Mode OFF	4x30W PoE ports	8x30W PoE ports
PoE Port@EX Mode ON	2x30W EXPoE + 2x30W PoE ports	2x30W EXPoE + 6x30W PoE ports
Fast Ethernet Ports (RJ45)	1	-
Gigabit RJ45/SFP Combo Ports	-	2
PoE Surge Protection	12KV	12KV
Power Surge Protection	10KV	40KV
Weather Rating	IP67	IP67
Vandal Proof	IK10	IK10
Operating Temperature	-40°C~ 60°C (-40°F~ 140°F)	-40°C~ 60°C (-40°F~ 140°F)

L2 Gigabit Ethernet ONVIF Switch

C50

L2 GbE ONVIF PoE Switch

H80

Outdoor L2+ GbE ONVIF PoE Switch

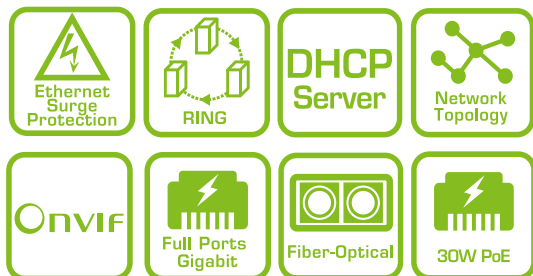
C70

Master L2+ GbE ONVIF Switch



C50 series

L2 GbE ONVIF PoE Switch

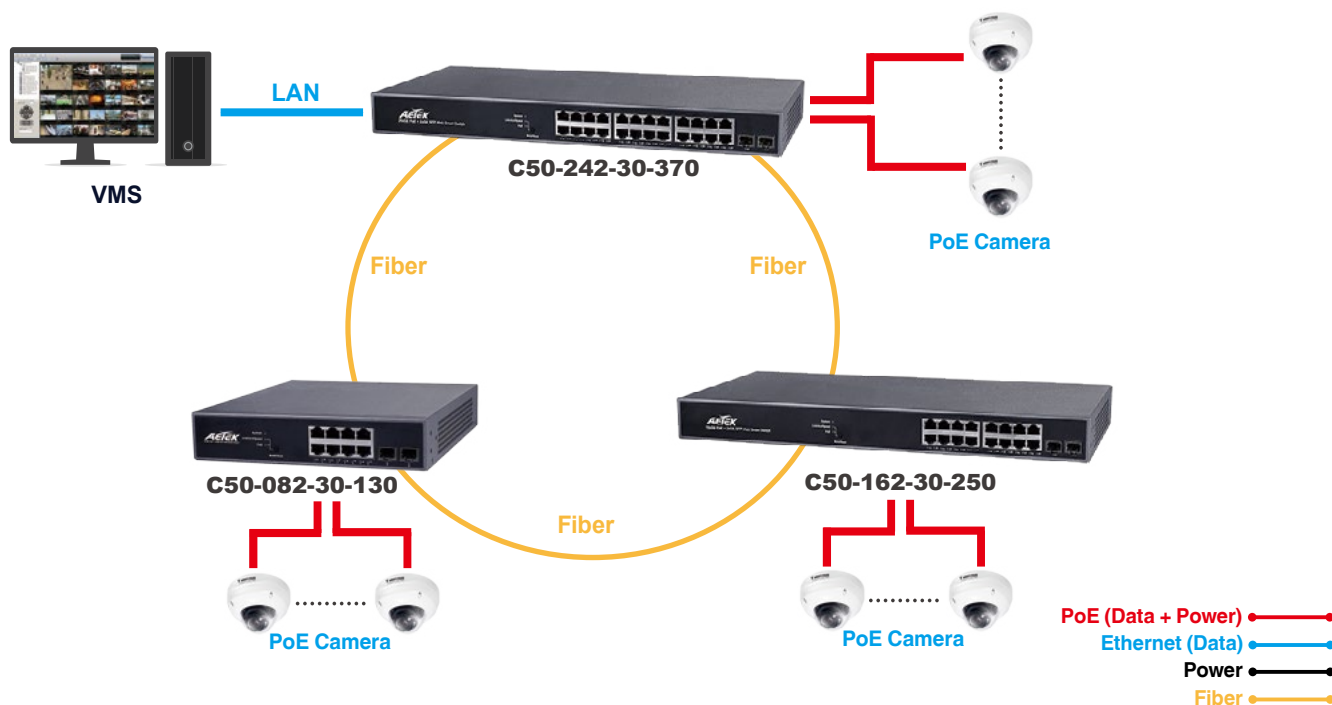
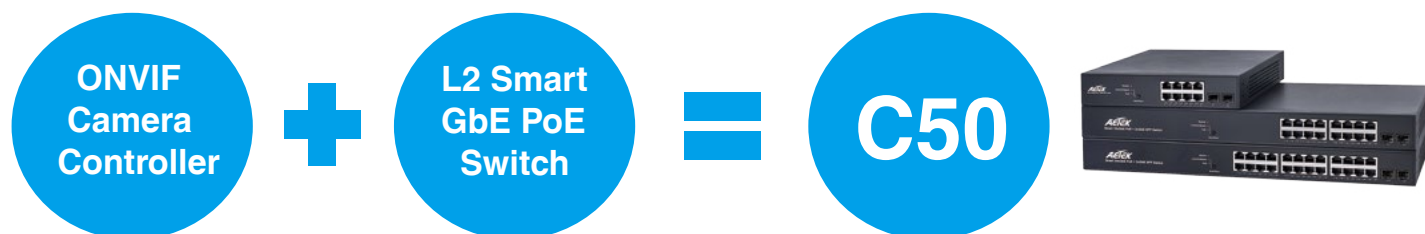


ONVIF Camera Controller

- Automatic discovery for ONVIF camera
- Generate camera topology automatically
- Graphic grouping VLAN
- Cable diagnostic & reboot camera remotely
- PoE management
- Topology view/Floor view/Google map
- Monitor/Configure/Manage ONVIF camera remotely

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

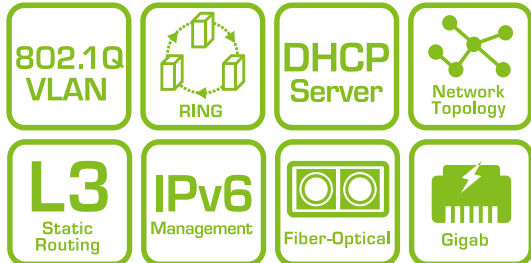


C50 H/W Matrix Table

	C50-082-30-130	C50-162-30-250	C50-242-30-370
Total GbE Port	10	18	26
GbE PoE Port	8x30W	16x30W	24x30W
SFP slot (100M/1GbE)	2	2	2
GbE Port(RJ45)	-	-	-
PoE Surge Protection	6KV	6KV	6KV
Operating Temperature	0°C~ 50°C (-32°F~ 122°F)	0°C~ 50°C (-32°F~ 122°F)	0°C~ 50°C (-32°F~ 122°F)

C70 series

Master L2+ GbE ONVIF Switch

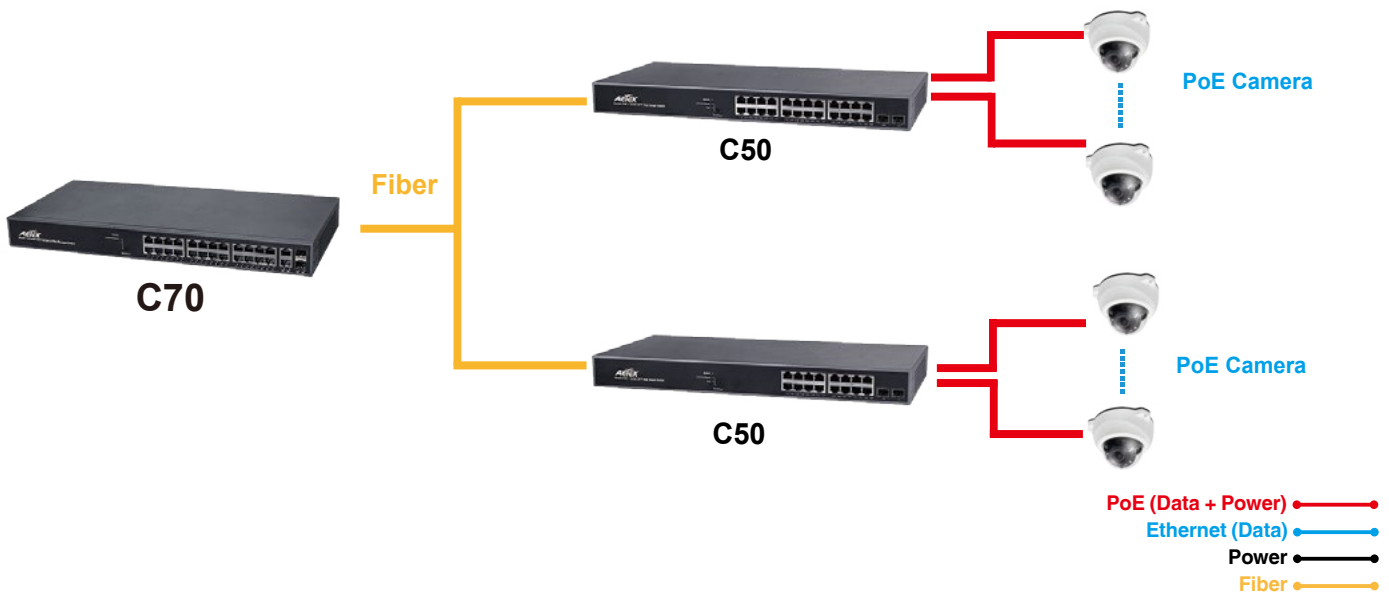
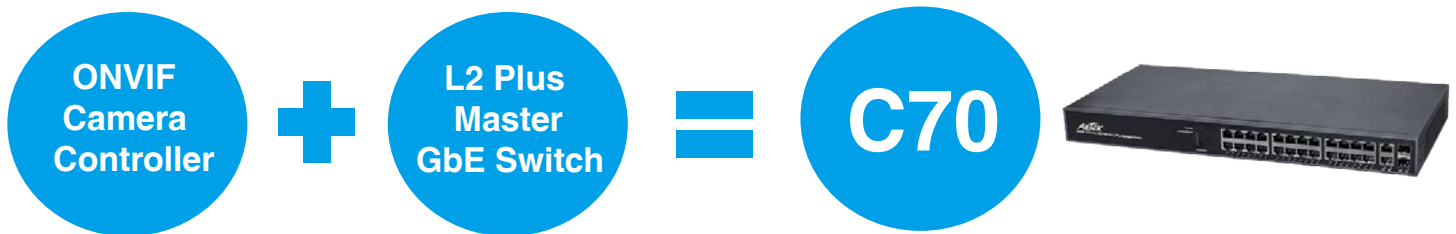


ONVIF Camera Controller

- Automatic discovery for ONVIF camera
- Generate camera topology automatically
- Graphic grouping VLAN
- Cable diagnostic & reboot camera remotely
- PoE management
- Topology view/Floor view/Google map
- Monitor/Configure/Manage ONVIF camera remotely

Layer 2 Plus

- IPV4 and IPV6 protocol
- IPV4/IPV6 L3 static routing
- 802.1d (STP), 802.1w (RSTP), 802.1s (MSTP)
- SNMP v1/v2c/v3
- VLAN
- Ethernet cable length measurement
- DHCP Server



C70 H/W Matrix Table

	C70-00A-01	C70-00E-01	C70-00F-01
Total Port	10	26	28
GbE RJ45 Port	8	24	-
GbE SFP Port	2	2	20
GbE RJ45/SFP combo Port	2	2	2
1G/10G SFP+ Ports	-	-	4
Operating Temperature	0°C~ 50°C (-32°F~ 122°F)	0°C~ 50°C (-32°F~ 122°F)	0°C~ 50°C (-32°F~ 122°F)

H80 series

Outdoor L2+ GbE ONVIF PoE Switch

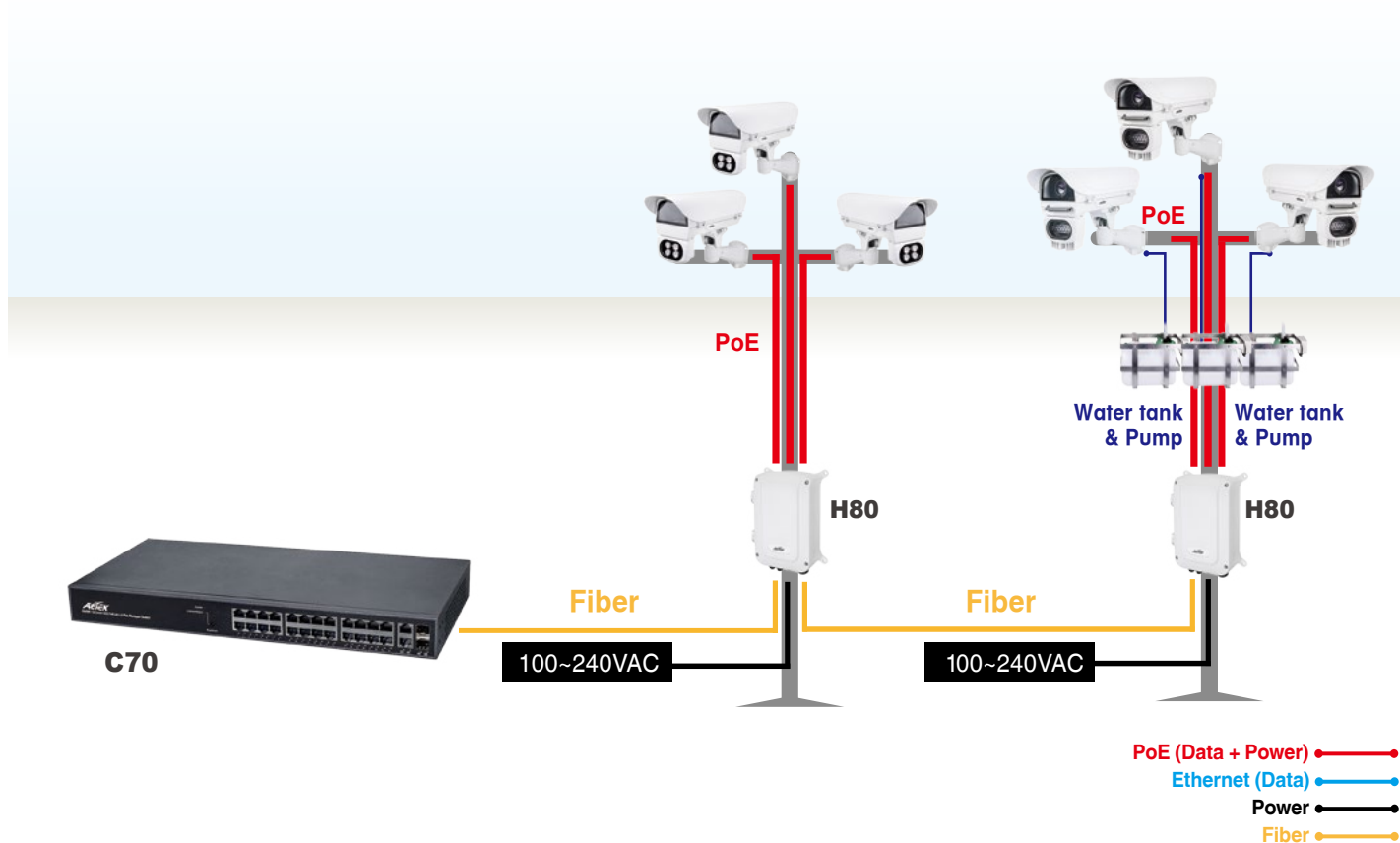


ONVIF Camera Controller

- Automatic discovery for ONVIF camera
- Generate camera topology automatically
- Graphic grouping VLAN
- Cable diagnostic & reboot camera remotely
- PoE management
- Topology view/Floor view/Google map
- Monitor/Configure/Manage ONVIF camera remotely

Layer 2 Plus

- IPV4 and IPV6 protocol
- IPV4/IPV6 L3 static routing
- 802.1d (STP), 802.1w (RSTP), 802.1s (MSTP)
- SNMP v1/v2c/v3
- VLAN
- Ethernet cable length measurement
- DHCP Server



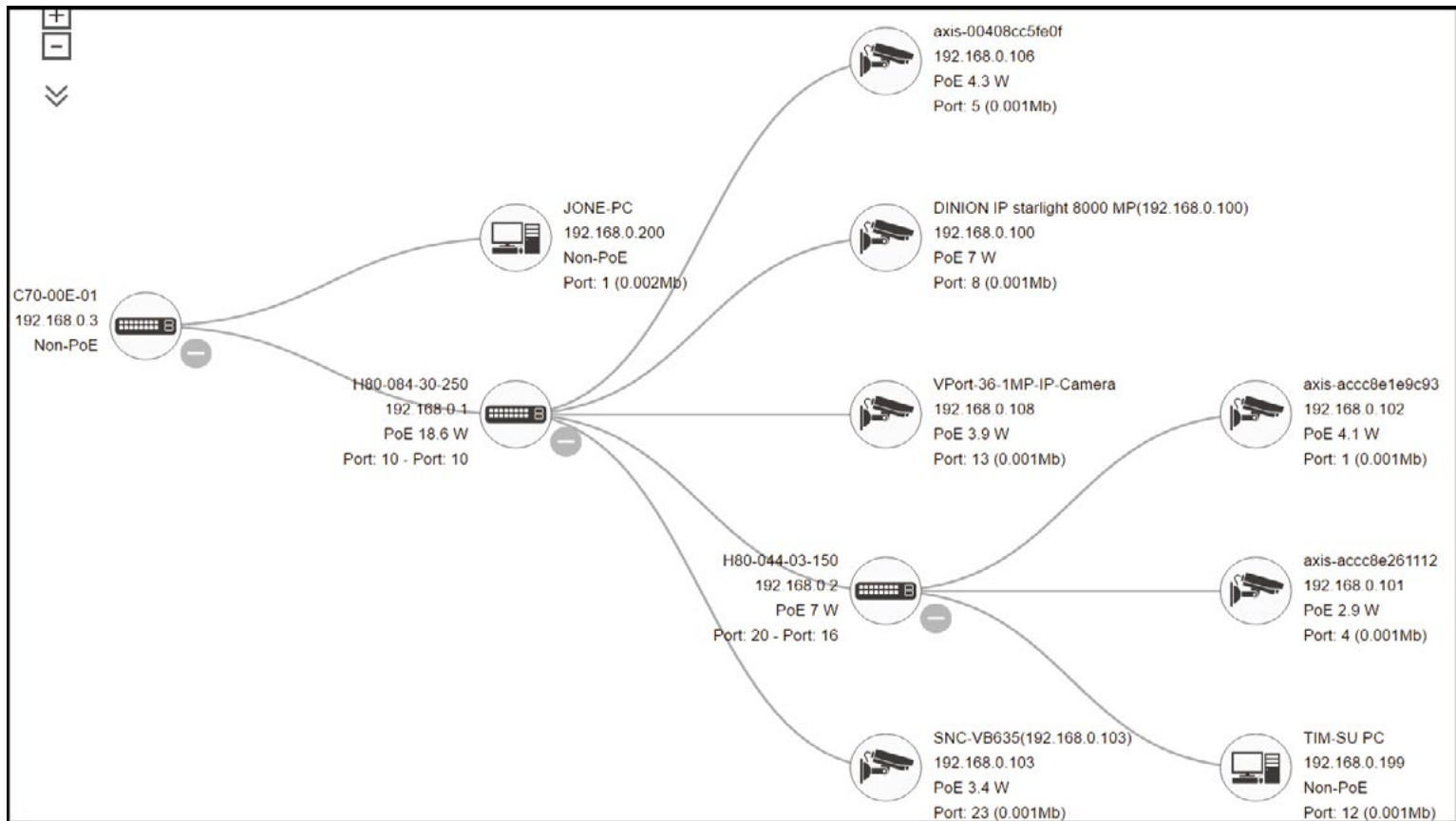
H80 H/W Matrix Table

	H80-044-30-150	H80-044-60-250	H80-084-30-250
Total GbE Port	8	8	12
GbE PoE Port	4x30W	4x60W	8x30W
SFP slot (100M/1GbE)	2	2	4
GbE Port(RJ45)	2	2	-
PoE Surge Protection	6KV	6KV	6KV
Power Surge Protection	40KV	40KV	40KV
Weather Rating	IP67	IP67	IP67
Vandal Proof	IK10	IK10	IK10
Operating Temperature	-40°C~ 60°C (-40°F~ 140°F)	-40°C~ 60°C (-40°F~ 140°F)	-40°C~ 60°C (-40°F~ 140°F)

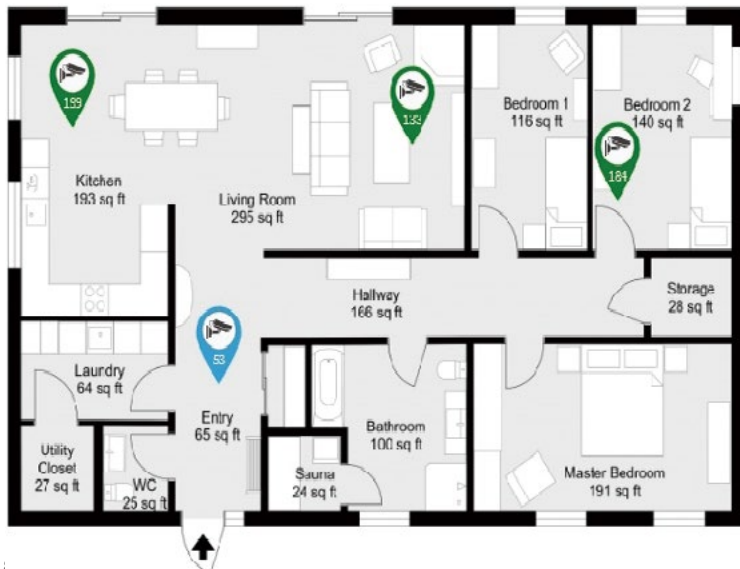
ONVIF Camera Controller

- Automatic discovery for ONVIF camera
- Generate camera topology automatically
- Graphic grouping VLAN
- Cable diagnostic & reboot camera remotely
- PoE management
- Topology view/Floor view/Google map view
- Monitor/Configure/Manage ONVIF camera remotely

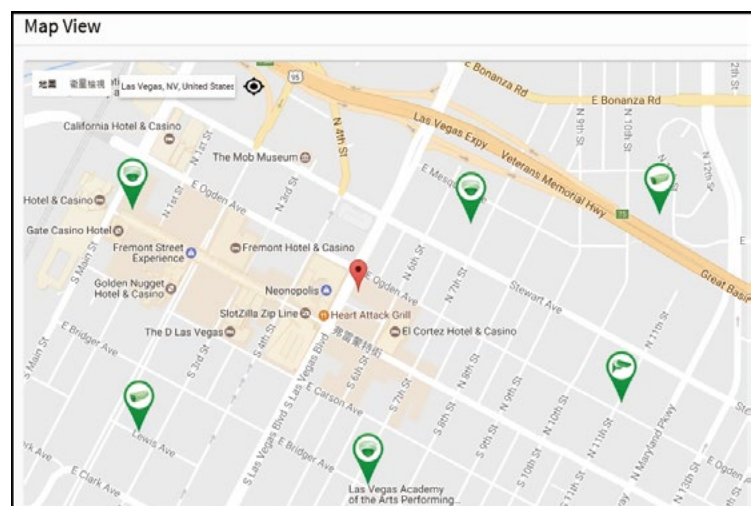
Topology View



Floor Map View



Google Map View



ONVIF Camera Controller

Device List

☐ Remove	Status	Device Type	Model Name	Device Name	MAC	IP Address
☐	Online	IP Camera	Arecont AV5125IR	AV5125IR-34	00-1A-07-05-1E-34	10.66.20.25
☐	Online	IP Camera	Avigilon 12.0-H4F-DO1-IR	C12-0-H4F-DO1-IR-201607250142.AVIGILON	00-1F-92-01-AE-3E	10.66.20.32
☐	Online	IP Camera	Avigilon 12.0-H4F-DO1-IR	C12-0-H4F-DO1-IR-201612016439.AVIGILON	00-1F-92-01-C6-D7	10.66.20.31
☐	Online	IP Camera	AXIS Q1604	axis-00408cc5fe0f	00-40-8C-C5-FE-0F	10.66.20.23
☐	Online	IP Camera	BOSCH DINION IP starlight 8000 MP	DINION IP starlight 8000 MP(10.66.20.26)	00-07-5F-8C-0B-3F	10.66.20.26
☐	Online	IP Camera	Dahua IPC-HFW5200D	DVR	90-02-A9-2C-85-01	10.66.20.30
☐	Online	IP Camera	MOXA VPort 36-1MP-T	VPort-36-1MP-IP-Camera	00-90-E8-3C-7B-89	10.66.20.28
☐	Online	IP Camera	Sony SNC-VB635	SNC-VB635(10.66.20.21)	D8-D4-3C-DD-F5-C7	10.66.20.21
☐	Online	IP Camera	VIVOTEK IP9171-HP	IP9171-HP	00-02-D1-3F-73-16	10.66.20.22
☐	Online	PC	General PC	JONE-PC	94-DE-80-AC-23-11	10.66.20.200

Camera Dashboard

DINION IP starlight 8000...

Device Type	IP Camera
Device Name	DINION IP starlight 8000 MP(192
Model Name	BOSCH DINION IP starlight 8000 MP
Mac Address	00-07-5f-8c-0b-3f
IP Address	192.168.0.100
Http Port	80
PoE Used	6.4 W

Login

Diagnostics

PoE Reboot

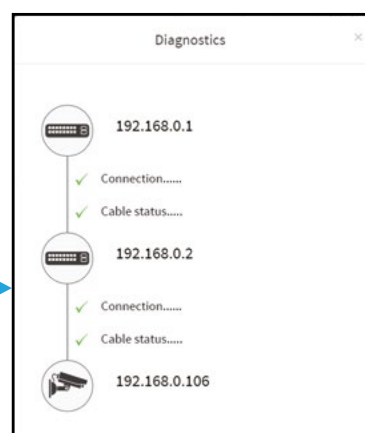
Dashboard

Notification

Monitor



Cable Disgnostic




PoE Reboot




Reboot Camera



Automatic discovery ONVIF Cameras



PoE Surge Protector

SD Series



PoE Extender

E19/E29 Series



UPoE Injector

Indoor/Outdoor Series

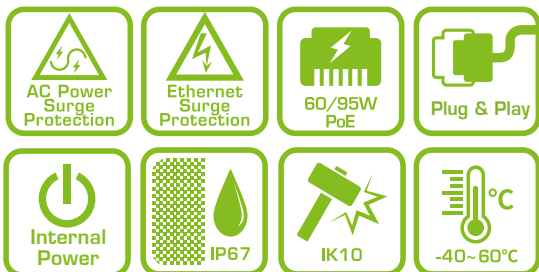


Indoor/Outdoor series

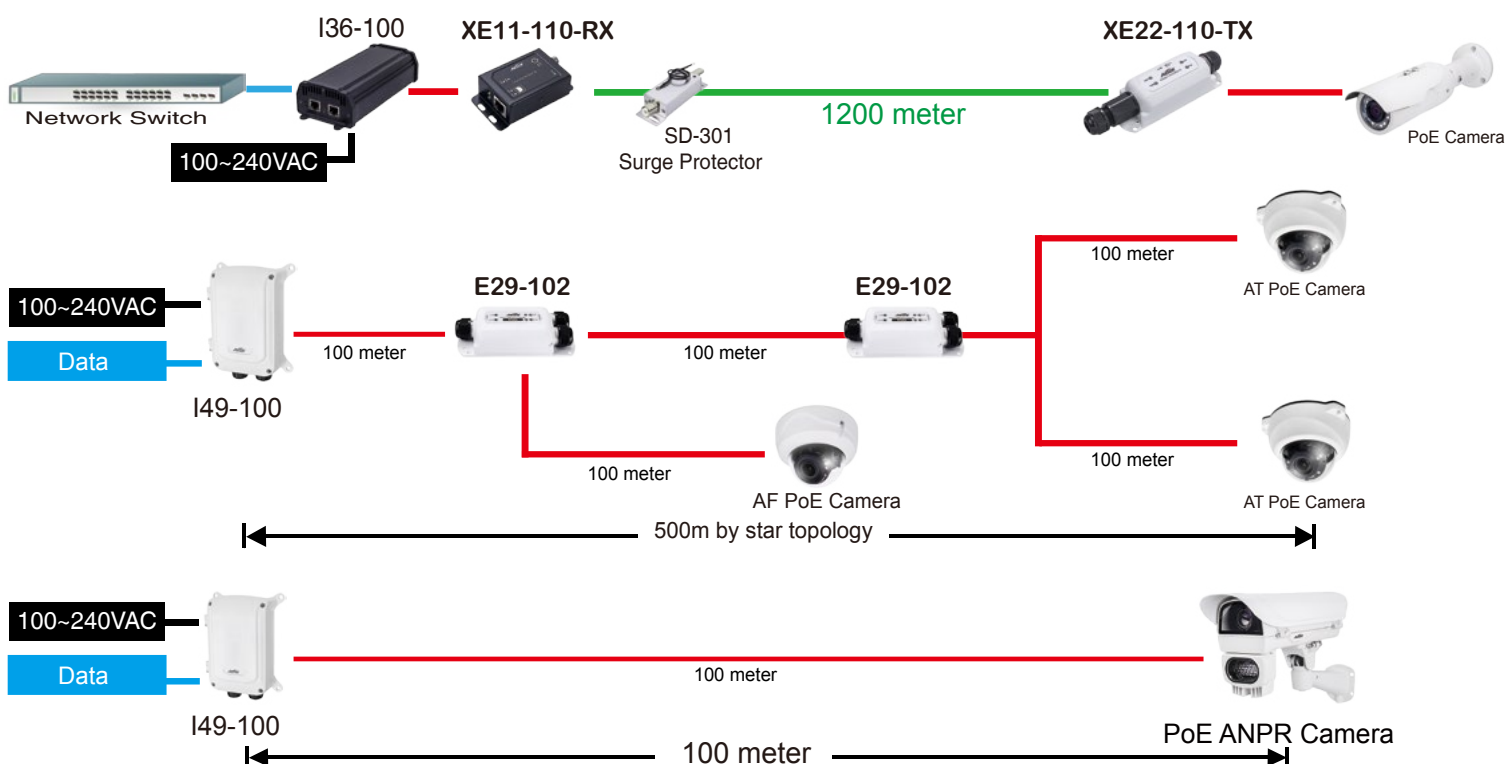
Gigabit 60W/95W UPoE Injector



I36-100 / I39-100 I46-100 / I49-100



I36-100 : 60W UPoE Injector
I39-100 : 95W UPoE Injector
I46-100 : Outdoor 60W UPoE Injector
I49-100 : Outdoor 95W UPoE Injector



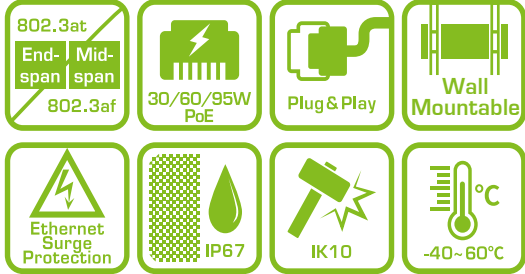
Coax (Data + Power) ———
 PoE (Data + Power) ———
 Ethernet (Data) ———
 Power ———
 Fiber ———

UPoE Injector Matrix Table

	I36-100 (60W)	I39-100 (95W)	I46-100 (60W)	I49-100 (95W)
GbE 10/100/1000Mbps Port	v	v	v	v
IEEE 802.3af PoE	v	v	v	v
IEEE 802.3at PoE	v	v	v	v
60W UPoE	v	v	v	v
95W UPoE	-	v	-	v
Power Surge Protection	4KV	4KV	10KV	10KV
PoE Surge Protection	12KV	12KV	12KV	12KV
IP67 / IK10	-	-	v	v
Operating Temperature	-10°C~50°C (14°F~22°F)	-20°C~ 30°C (14°F~ 86°F)@95W -20°C~ 40°C (14°F~104°F)@80W -20°C~ 50°C (14°F~122°F)@70W	-40°C~60°C (-40°F~140°F)	-40°C~60°C (-40°F~140°F)

E19/E29 series

30W/60W/95W PoE Extender

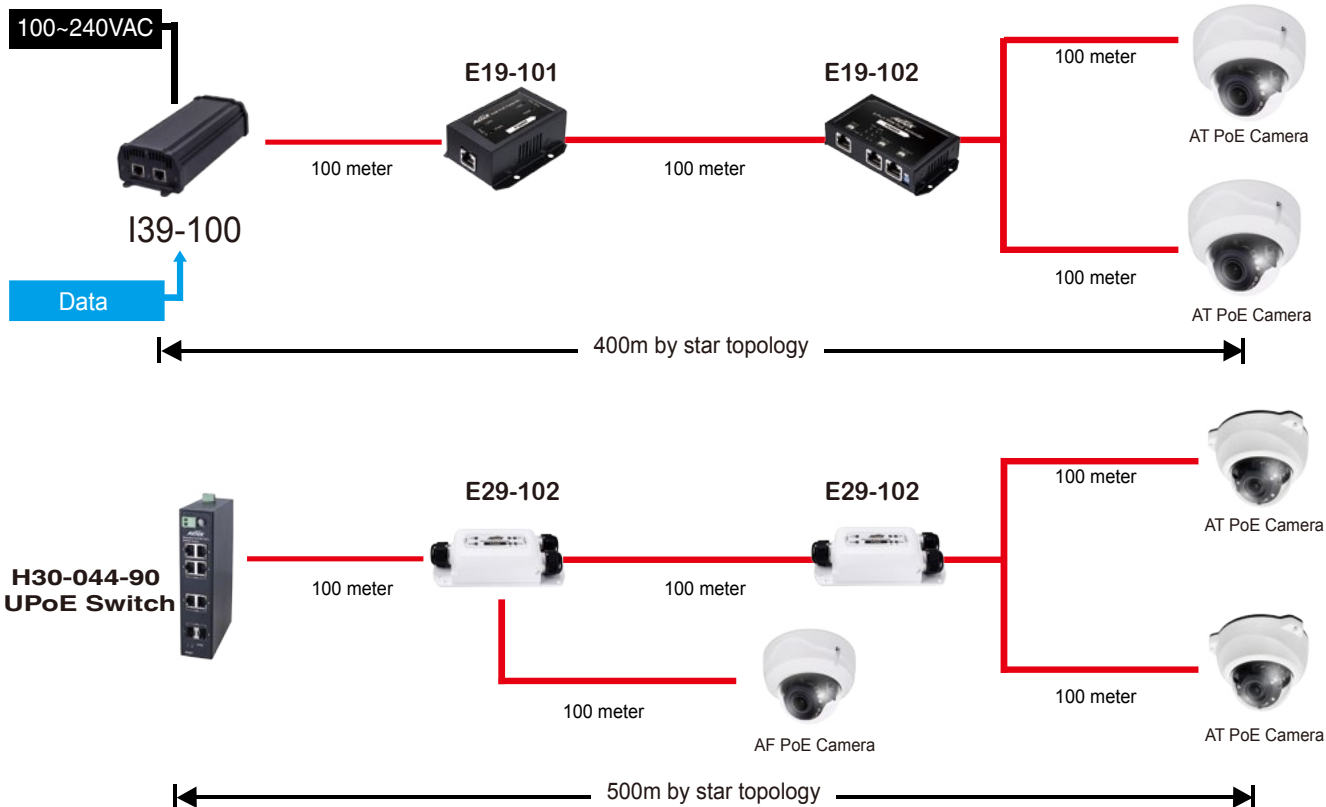


E19-101 : 1-to-1 FE PoE Extender

E19-102 : 1-to-2 FE PoE Extender

E29-101 : 1-to-1 Outdoor FE PoE Extender

E29-102 : 1-to-2 Outdoor FE PoE Extender



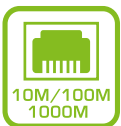
PoE (Data + Power) —●—
Ethernet (Data) —●—
Power —●—
Fiber —●—

PoE Extender Matrix Table

	E19-101	E19-102	E29-101	E29-102
FE Ethernet Port	v	v	v	v
IEEE 802.3af PoE	v	v	v	v
IEEE 802.3at PoE	v	v	v	v
60W UPoE	v	v	v	v
95W UPoE	v	v	v	v
PoE Surge Protection	2KV	2KV	12KV	12KV
IP67	-	-	v	v
IK10	-	-	v	v
Operating Temperature	0°C~50°C (32°F~122°F)	0°C~50°C (32°F~122°F)	-40°C~60°C (-40°F~140°F)	-40°C~60°C (-40°F~140°F)

SD series

Gigabit PoE Surge Protector



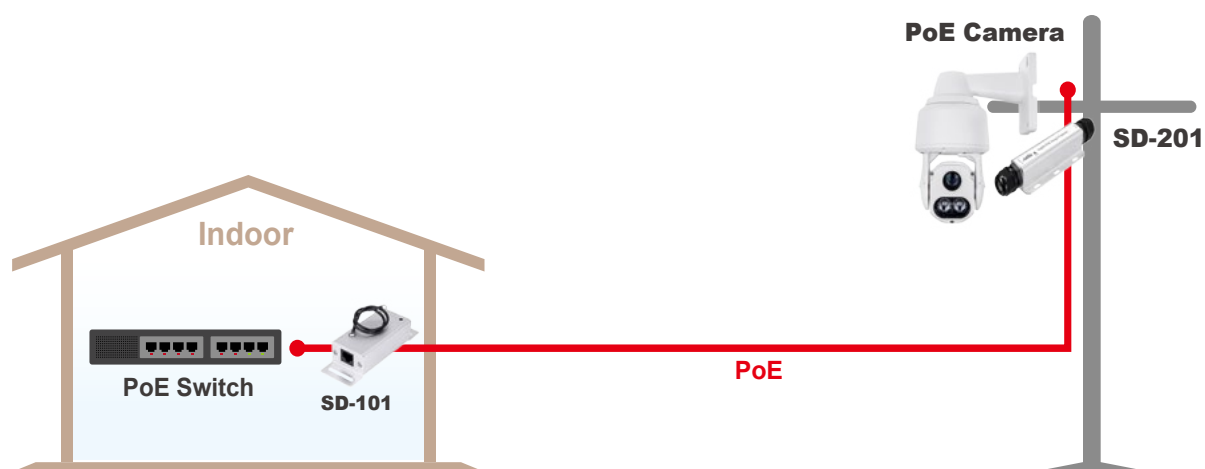
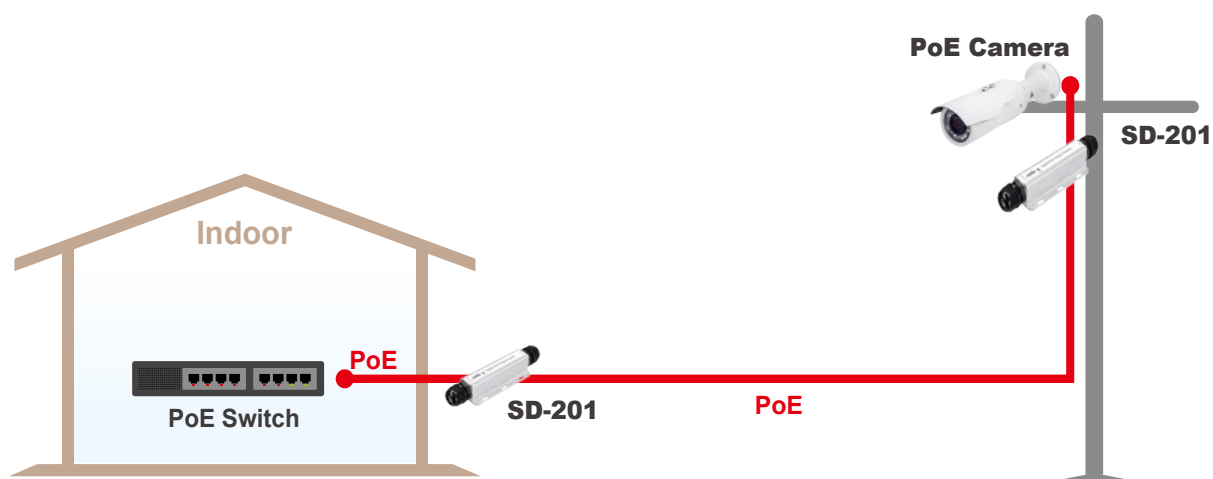
SD-101



SD-201

SD-101 : PoE Surge Protector

SD-201 : Outdoor PoE Surge Protector



PoE Surge Protector Matrix Table

	SD-101	SD-201
Pass through Ethernet	10/100/1000 Mbps	10/100/1000 Mbps
MAX Discharge Current	8kA,16KV	8kA,16KV
MAX Operation DC	60VDC/1A@2pair, 2A@4pair, 95W	60VDC/1A@2pair, 2A@4pair, 95W
Common mode protection	20KV	20KV
Differential mode protection	4KV	4KV
Clamping Voltage(line to GND)	600V	600V
Clamping Voltage(line to line)	20V	20V
IP67 / IK10	-	v
Operating Temperature	-40°C~85°C(-40°F~185°F)	-40°C~85°C(-40°F~185°F)

