AETEK

Product Brochure

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

About Us

AETEK, founded in March, 2015, New Taipei City, Taiwan, is a professional developer and manufacturer for IP surveillance technology, formulating a variety of PoE product lines and adaptive peripherals to function with various brands of IP cameras in the same network environment.

We provide cutting-edge camera housings for box cameras, even equipped with long-ranged varifocal 8-80 mm lens. Besides 24VAC models, AETEK's 95W PoE models can be operational over one Ethernet cable (CAT.5), powering the camera, supporting the function of demisting, cold start, blower, illuminator and wiper at the same time. The additional water tank with pump is also available by project requirement.

Besides the common 8/16/24 ports unmanaged PoE switches, AETEK develops an unique group of L2 Smart & L2+ managed switches with Devices Management Software (DMS). This DMS program can greatly simplify the installation and management thru GUI, making PoE switches to easily control the ONVIF-S-complying IP cameras. Additionally, rugged outdoor 5/8 ports with 30W PoE & 60W UPoE switches with surge protectors are the exceptional options for the projects under the extreme environment.

For bettering the installation efficiency, AETEK also has the innovative 1-1 & 1-2 indoor/ outdoor PoE extenders, which is the epoch-making 95W/60W/30W PoE PSE extenders, prolonging the operation range of high-power-consuming PDs, such as Speed Dome cameras or PVM (Public View Monitor).

Our Vision and Value

It is our goal to simplify your installation efforts, our mission to integrate your devices and our commission to support your business.

Index

A10/A50
P20/P50/P60

Easy Installation
All-in-One Design

Camera Housing

A10 series

Affordable Side-Opening 24VAC/DC Cast Aluminum Camera Housing

AETEK, a professional camera housing manufacturer, introduces a new series of robust outdoor surveillance housings which are compatible with most of today's box/fixed cameras, including wide-angle lenses or long-distance lenses. The camera housings are constructed from cast aluminum to meet IP66/68 and IK10 standards with most of box/fixed cameras nowadays.

The A10 series of affordable models are powerd by 24VAC/DC input and all are equipped with window heater and blower to demist and deice for window. Additionally, the A1020 is designed with a built-in IR illuminator.

Features

- IP68 standard (A1000)
- IP66 standard (A1020)
- IK10 impact rated cast aluminum housing
- 6KV power surge protection
- Window heater & blower enable demisting and deicing
- Accommodating box cameras equipped with wide-angle lens & long-distance remote focus lens (8-80 mm)
- Powerd by 24VAC/DC power input
- Built-in IR LEDs viewing up to 50m (A1020 only)

AETEK A1020 housing + BK-101 wall mount bracket concealing cable

AXIS Q1635 + 8 – 80mm varifocal lens

A10 Series Matrix Table

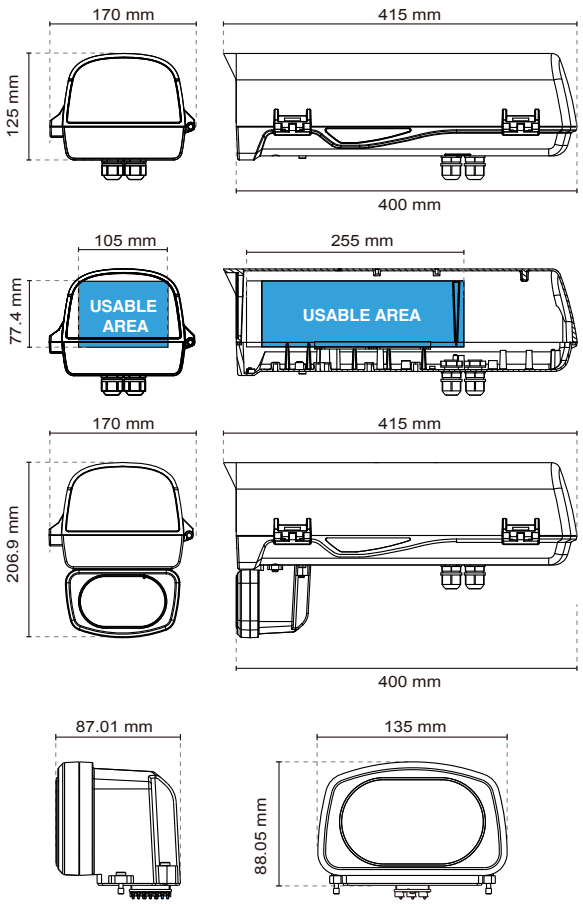
	24VAC/DC In	PoE 30W In	PoE 30/60/95W In	Window Heater	Camera Heater	Adjustable Sunshield	Blower	Built-in 6W Fixed IR	ITB for Optional 6W/24W/48W VAIR LEDs	Side-Opening Alarm	Wiper	IP66	IP68
A1000	v	-	-	v	-	-	v	-	-	-	-	-	v
A1020	v	-	-	v	-	-	v	v	-	-	-	v	-

Specifications

	A1000	A1020
Electrical Specifications		
Input Voltage	24VAC / DC	24VAC / DC
12VDC Output Power Budget	30W	30W
24VAC/DC Output Power Budget	48W	48W
IR LEDs Range	-	Up to 50m
Power Consumption	Window Heater: 10W Blower: 2W Camera: 6 ~ 8W	Window Heater: 10W Blower: 2W Camera: 6 ~ 8W IR LEDs: 6W
Environmental Specifications		
Operating Temperature*	-20°C ~ 65°C (-4°F ~ 149°F)	-20°C ~ 50°C (-4°F ~ 122°F)
Window Heater ON / OFF	≤ 30°C (86°F) ON ≥ 35°C (95°F) OFF	≤ 30°C (86°F) ON ≥ 35°C (95°F) OFF
Blower ON / OFF	≥ 40°C (104°F) ON ≤ 35°C (95°F) OFF	≥ 40°C (104°F) ON ≤ 35°C (95°F) OFF
Weather Rating	IP68	IP66
Vandal Proof	IK10 Impact Rated on Cast Aluminum Housing	IK10 Impact Rated on Cast Aluminum Housing
Mechanical Specifications		
Body Material	Cast Aluminum	Cast Aluminum
Body Weight	2.2 kg (4.85 lb)	2.48 kg (5.46 lb)
Cable Grants	M16 x 4	M16 x 4
IR LEDs Dimensions	-	135 x 88 x 87 mm
IR LEDs Weight	-	0.34 kg (0.75 lb)

* Inside camera specification must be within housing's operating temperature.

Dimensions



Accessories

Brackets

Wall Mount		Ceiling Mount		Standing Mount
				
BK-100 Wall Mount Bracket	BK-101 Wall Mount Bracket Concealing Cable	BK-200 J-type Ceiling Mount Bracket	BK-201 Flexible J-type Ceiling Mount Bracket	BK-300 Standing Mount Bracket

Adapters

Pole Mount		Corner Mount	Fit
			 BK-100  BK-101
AT-100 Pole Mount Adapter	AT-101 Pole Mount Adapter	AT-200 Corner Mount Adapter	

Junction Box

Wall Mount	Fit
	 BK-100  BK-101  AT-100  AT-101  AT-200
JB-100 Junction Box	

Power Boxes

Outdoor Wall Mount		Outdoor Wall Mount		Fit
	PB-024-1AC Outdoor Power Box • IP67/IK10 • 115VAC / 230VAC In • 24VAC/6A Out • -40°C ~ 60°C		PB-024 –2AC Outdoor Power/Junction Box • IP67/IK10 • 115VAC / 230VAC In • 24VAC/6A Out • -40°C ~ 60°C	 BK-100  BK-101  AT-100  AT-101  AT-200

P2000-I /P2000-AI

P2000-IW /P2000-AIW

P20 series

Professional Side-Opening 24VAC Cast Aluminum Camera Housing

AETEK, a professional camera housing manufacturer, provides a series of rugged outdoor surveillance housings which are compatible with most of today's IP and analog box cameras. The camera housings are constructed from cast aluminum to meet IP66/68 and IK10 standards. The housing can even support camera equipped with wide-angle lenses or long-distance remote focus lenses.

The P20 series supported thru 24VAC power input are professional models, all of which are equipped with window heater & blower. Additionally, more features such as a side-opening alarm switch, an adjustable sunshield, and an ITB (Illuminator Touch Board) concealing the wiring for optional vari-IR illuminator let the P20 applied onto long-ranged IP surveillance day & night.

Some models also offer a built-in wiper or -40°C cold start.

Features

- IP66 standard (P2000-IW, P2000-AIW)
- IP68 standard (P2000-I, P2000-AI)
- IK10 impact rated cast aluminum housing
- 6KV power surge protection
- Window heater & blower enable demisting and deicing
- Adjustable sunshield
- Side-opening alarm switch
- ITB (Illuminator Touch Board) snaps IR LEDs directly to the housing & conceals the wiring
- Accommodating box cameras equipped with wide-angle lenses & long-distance remote focus lenses (8-80 mm)
- Built-in wiper (P2000-IW, P2000-AIW)
- Camera heater supports cold start at -40°C (P2000-AI, P2000-AIW)

P2000 Camera housing + VR-480 VAIR LEDs + BK-101 Wall mount bracket concealing cable

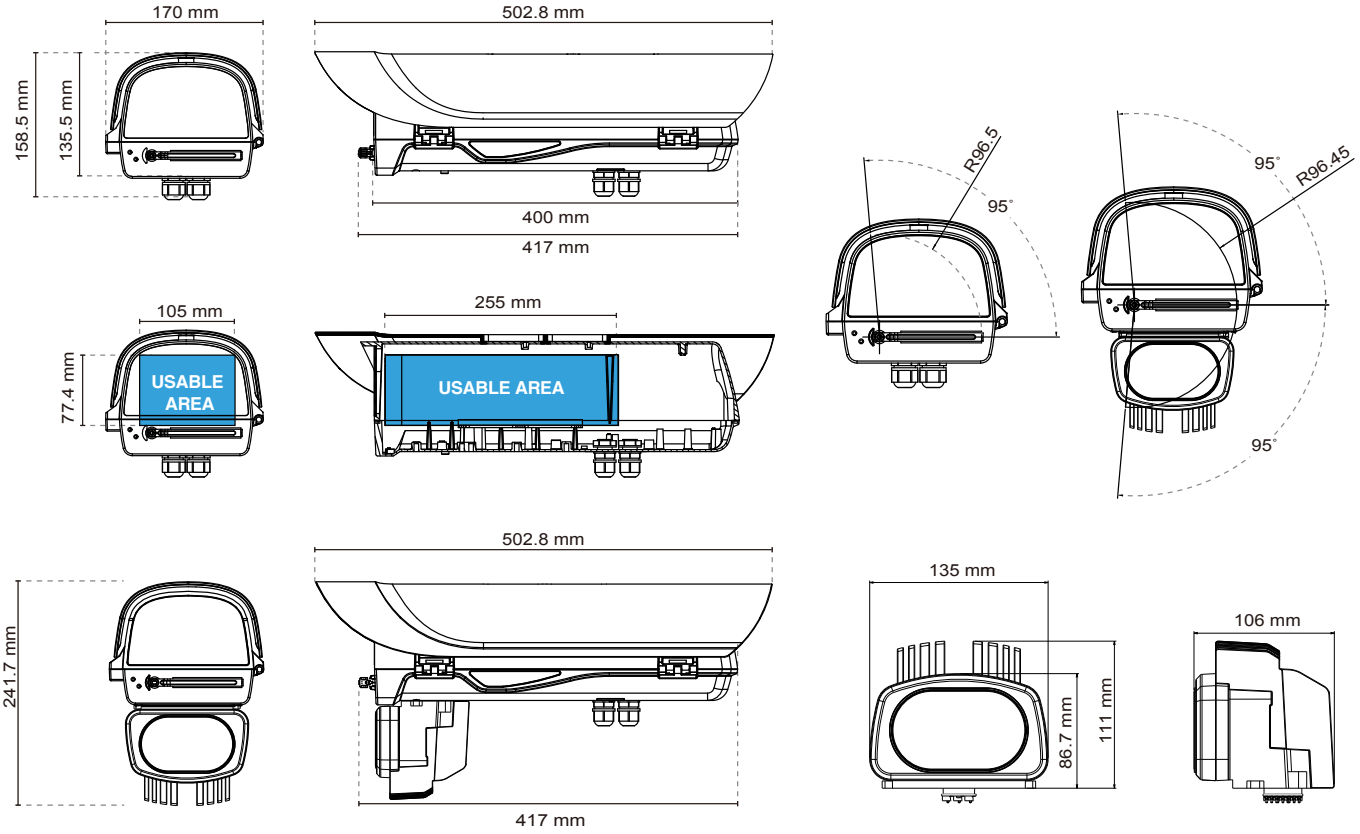
AXIS Q1635+ 8 – 80mm varifocal lens

Specifications

	P2000-I	P2000-AI	P2000-IW	P2000-AIW
Electrical Specifications				
Input Voltage	24VAC	24VAC	24VAC	24VAC
12VDC Output Power Budget	30W	30W	30W	30W
24VAC Output Power Budget	80W	80W	80W	80W
Power Consumption	Window Heater: 10W Blower: 2W Camera: 6 ~ 8W	Window Heater: 10W Cold Start Heater: 30W Blower: 2W Camera: 6 ~ 8W	Window Heater: 10W Blower: 6W Camera: 6 ~ 8W Wiper: 6 W	Window Heater: 10W Cold Start Heater: 30W Blower: 2W Camera: 6 ~ 8W Wiper: 6W
Optional VAIR LEDs Power Consumption	VR-060: 6W VR-240: 24W VR-480: 48W	VR-060: 6W VR-240: 24W VR-480: 48W	VR-060: 6W VR-240: 24W VR-480: 48W	VR-060: 6W VR-240: 24W VR-480: 48W
Optional 10L Water Tank & Pump for P2000-IW & P2000-AIW	-	-	TP-100: 12W	TP-100: 12W
Mechanical Specifications				
Body Construction	Cast Aluminum	Cast Aluminum	Cast Aluminum	Cast Aluminum
Body & Sunshield Weight	2.8 kg (6.17 lb)	2.8 kg (6.17 lb)	2.9 kg (6.39 lb)	2.9 kg (6.39 lb)
Cable Grants	M16 x 4	M16 x 4	M16 x 4	M16 x 4
Environmental Specifications				
Operating Temperature*	Working: -20°C ~ 65°C (-4°F ~ 149°F) -20°C ~ 50°C (w/IR LEDs)	Working: -50°C ~ 65°C (-58°F ~ 149°F) -50°C ~ 50°C (w/IR LEDs) Cold Startup: -40°C (-40°F)	Working: -20°C ~ 65°C (-4°F ~ 149°F) -20°C ~ 50°C (w/IR LEDs)	Working: -50°C ~ 65°C (-58°F ~ 149°F) -50°C ~ 50°C (w/IR LEDs) Cold Startup: -40°C (-40°F)
Window Heater ON / OFF	≤ 20°C (68°F) ON ≥ 30°C (86°F) OFF	≤ 20°C (68°F) ON ≥ 30°C (86°F) OFF	≤ 20°C (68°F) ON ≥ 30°C (86°F) OFF	≤ 20°C (68°F) ON ≥ 30°C (86°F) OFF
Cold Start Heater ON/OFF	-	≤ 0°C (32°F) ON ≥ 5°C (41°F) OFF	-	≤ 0°C (32°F) ON ≥ 5°C (41°F) OFF
Blower ON / OFF	≥ 35°C (95°F) ON ≤ 25°C (77°F) OFF	≥ 35°C (95°F) ON ≤ 25°C (77°F) OFF	≥ 35°C (95°F) ON ≤ 25°C (77°F) OFF	≥ 35°C (95°F) ON ≤ 25°C (77°F) OFF
Weather Rating	IP68	IP68	IP66	IP66
Vandal Proof	IK10 Impact Rated on Cast Aluminum Housing	IK10 Impact Rated on Cast Aluminum Housing	IK10 Impact Rated on Cast Aluminum Housing	IK10 Impact Rated on Cast Aluminum Housing

* Inside camera specification must be within housing's operating temperature.

Dimensions



P20 series Matrix Table

	24VAC in	PoE 30W in	PoE 30/60/95W in	Window Heater	Cold Start Heater (at -40°C)	Adjustable Sunshield	Blower	ITB for Optional 6W/24W/48W VAIR LEDs	Side-Opening Alarm	Wiper	IP66	IP68
P2000-I	v	-	-	v	-	v	v	v	v	-	-	v
P2000-AI	v	-	-	v	v	v	v	v	v	-	-	v
P2000-IW	v	-	-	v	-	v	v	v	v	v	v	-
P2000-AIW	v	-	-	v	v	v	v	v	v	v	v	-

Accessories

Brackets

Wall Mount Bracket

BK-100
Wall Mount Bracket

BK-101
Wall Mount Bracket
Concealing Cable

Ceiling Mount Bracket

BK-200
J-type
Ceiling Mount Bracket

BK-201
Flexible J-type
Ceiling Mount Bracket

Standing Mount Bracket

BK-300
Standing Mount Bracket

Adapters

Pole Mount

AT-100
Pole Mount Adapter

AT-101
Pole Mount Adapter

Corner Mount

AT-200
Corner Mount Adapter

Fit

BK-100

BK-101

Junction Box

Wall Mount

JB-100
Junction Box

Fit

BK-100

BK-101

AT-100

AT-101

AT-200

Power Boxes

Outdoor Wall Mount

PB-024-1AC
Outdoor Power Box
- IP67/IK10
- 115VAC / 230VAC In
- 24VAC/6A Out
- -40°C ~ 60°C

Outdoor Wall Mount

PB-024 –2AC
Outdoor Power/Junction Box
- IP67/IK10
- 115VAC / 230VAC In
- 24VAC/6A Out
- -40°C ~ 60°C

Fit

BK-100

BK-101

AT-100

AT-101

AT-200

VAIR IR LEDs

VAIR IR LEDs

VR-060
- Snap Vair 10~40° IR LED, 6W

VR-240
- Snap Vair 10~30° IR LED, 24W

VR-480
- Snap Vair 10~30° IR LED, 48W

Water Tank & Pump

Water Tank & Pump

TP-100
- 10L Water Tank & Pump

A50 series

Affordable Side-Opening 30W PoE Cast Aluminum Camera Housing

AETEK, a professional camera housing manufacturer, provides a series of robust outdoor surveillance housings which are compatible with most of today's IP and analog box cameras. The camera housings are constructed from cast aluminum to meet IP66/IP68 and IK10 standards. The housings can even support camera equipped with wide-angle lenses or long-distance remote focus lenses.

The A50 series, affordable models, are powered by PoE at 30W input and all are equipped with window heater and blower to demist and deice for window. A5020, designed with add-on illuminator, is a real plug and play over a single network cable to work with camera.

Features

- IP66 standard (A5020)
- IP68 standard (A5000)
- IK10 impact rated cast aluminum housing
- 4KV PoE surge protection
- Window heater & blower enable demisting and deicing
- Accommodating box camera equipped with wide-angle lens & long-distance lens (8-80 mm)
- Supported PoE at 30W power input
- Built-in IR LEDs viewing up to 50m (A5020 only)
- Plug-and-play over a single network cable

AETEK A5020 housing + BK-101 Wall mount bracket concealed cable

AXIS Q1635 + 8 – 80mm varifocus lens

A50 Series Matrix Table

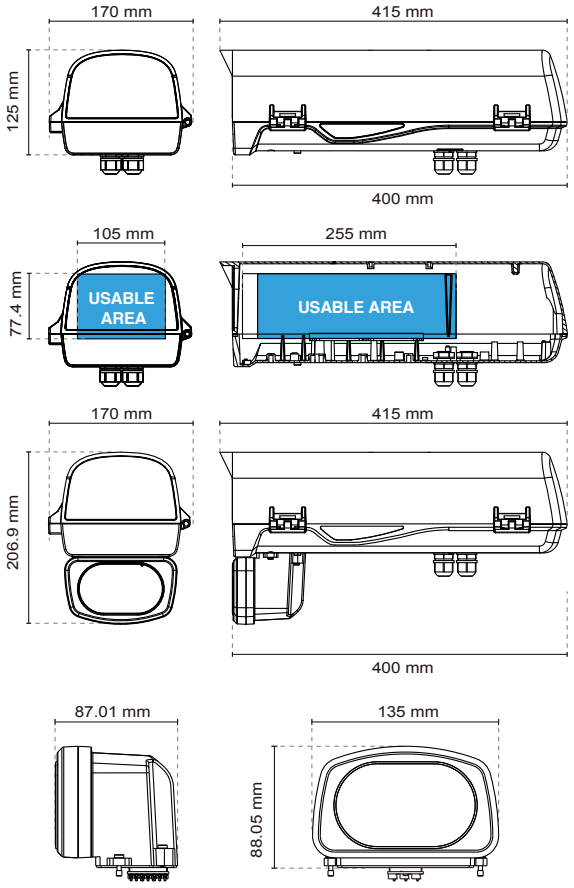
	24VAC In	PoE 30W In	PoE 30/60/95W In	Window Heater	Camera Heater (-50°C ~50°C)	Adjustable Sunshield	Blower	Built-in 6W Fixed IR	ITB for Optional 6W/24W/48W VAIR LEDs	Side-Opening Alarm	Wiper	IP66	IP68
A5000	-	v	-	v	-	-	v	-	-	-	-	-	v
A5020	-	v	-	v	-	-	v	v	-	-	-	v	-

Specifications

	A5000	A5020
Electrical Specifications		
Input Voltage	PoE at 50~57VDC	PoE at 50~57VDC
Max Output Power Budget	25 W thru 30W PoE PSE	25 W thru 30W PoE PSE
12VDC Output Power Budget	12W	12W
Camera Power Input	Passive PoE	Passive PoE
IR LEDs Range	-	Up to 50m
Power Consumption	Window Heater: 10W Blower: 2W Camera: 6 ~ 8W	Window Heater: 10W Blower: 2W Camera: 6 ~ 8W IR LEDs: 6W
Environmental Specifications		
Operating Temperature*	-20°C ~ 65°C (-4°F ~ 149°F)	-20°C ~ 50°C (-4°F ~ 122°F)
Window Heater ON / OFF	≤ 30°C (86°F) ON ≥ 35°C (95°F) OFF	≤ 30°C (86°F) ON ≥ 35°C (95°F) OFF
Blower ON / OFF	≥ 40°C (104°F) ON ≤ 35°C (95°F) OFF	≥ 40°C (104°F) ON ≤ 35°C (95°F) OFF
Weather Rating	IP68	IP66
Vandal Proof	IK10 Impact Rated on Cast Aluminum Housing	IK10 Impact Rated on Cast Aluminum Housing
Mechanical Specifications		
Body Material	Cast Aluminum	Cast Aluminum
Body Weight	2.2 kg (4.84 lb)	2.48 kg (5.46 lb)
Cable Grants	M16 x 4	M16 x 4
IR LEDs Dimension	-	135 x 88 x 87 mm
IR LEDs Weight	-	0.34 kg (0.75 lb)

* Inside camera specification must be within housing's operating temperature.

Dimensions



Accessories

Brackets

Wall Mount		Ceiling Mount		Standing Mount
				
BK-100 Wall Mount Bracket	BK-101 Wall Mount Bracket Concealing Cable	BK-200 J-type Ceiling Mount Bracket	BK-201 Flexible J-type Ceiling Mount Bracket	BK-300 Standing Mount Bracket

Adapters

Pole Mount		Corner Mount	Fit	
				BK-100
AT-100 Pole Mount Adapter	AT-101 Pole Mount Adapter	AT-200 Corner Mount Adapter		BK-101

Junction Box

Wall Mount	Fit
	 BK-100
	 BK-101
	 AT-100
	 AT-101
JB-100 Junction Box	AT-200

PoE Switches

Outdoor Unmanaged PoE Switch		Outdoor PoECam L2 Plus Managed Switch	
	H40-044-30-150 • 4xGbE PoE (30W) + 2xGbE SFP + 2xGbE RJ45 • 100~240VAC, 150W Power Budget		H80-044-30-150 • 4xGbE PoE (30W) + 2xGbE SFP + 2xGbE RJ45 • 100~240VAC, 150W Power Budget
	H40-084-30-250 • 8xGbE PoE (30W) + 4xGbE SFP • 100~240VAC, 250W Power Budget		H80-084-30-250 • 8xGbE PoE (30W) + 4xGbE SFP • 100~240VAC, 250W Power Budget

P5000-I / P6000-I

P50/P60 series

Professional Side-Opening 30W/60W/95W PoE Cast Aluminum Camera Housing

P6000-IW

AETEK, a professional camera housing manufacturer, provides a series of rugged outdoor surveillance housings which are compatible with most of today's IP and analog box cameras. The camera housings are constructed from cast aluminum to meet IP66/68 and IK10 standards. The housing can even support camera equipped with wide-angle lenses or long-distance remote focus lenses.

The P50/P60 series supported PoE input are professional models equipped with window heater and blower to demist and deice for window. Additionally, more features such as a side-opening alarm switch, an adjustable sunshield, and an ITB (Illuminator Touch Board) concealing the wiring for optional vari-IR illuminator let the P50/P60 applied onto long-ranged IP surveillance day & night.

A built-in wiper is optional.

Features

- IP66 standard (P6000-IW)
- IP68 stndard (P5000-I, P6000-I)
- IK10 impact rated cast aluminum housing
- 4KV PoE surge protection (P5000-I)
- 6KV PoE surge protection (P6000-I, P6000-IW)
- Window heater & blower enable demisting and deicing
- Adjustable sunshield
- Side-opening alarm switch
- ITB (Illuminator Touch Board) snaps IR LEDs directly to the housing & conceals wiring
- Accommodating box camera equipped with wide-angle lenses & long-distance lenses (8-80 mm)
- Built-in wiper (P6000-IW)
- Supported 30W / 60W / 95W PoE power input
- Plug-and-play over a single network cable

P6000 Camera housing + VR-480 VAIR LEDs + BK-101 Wall mount bracket concealing cable

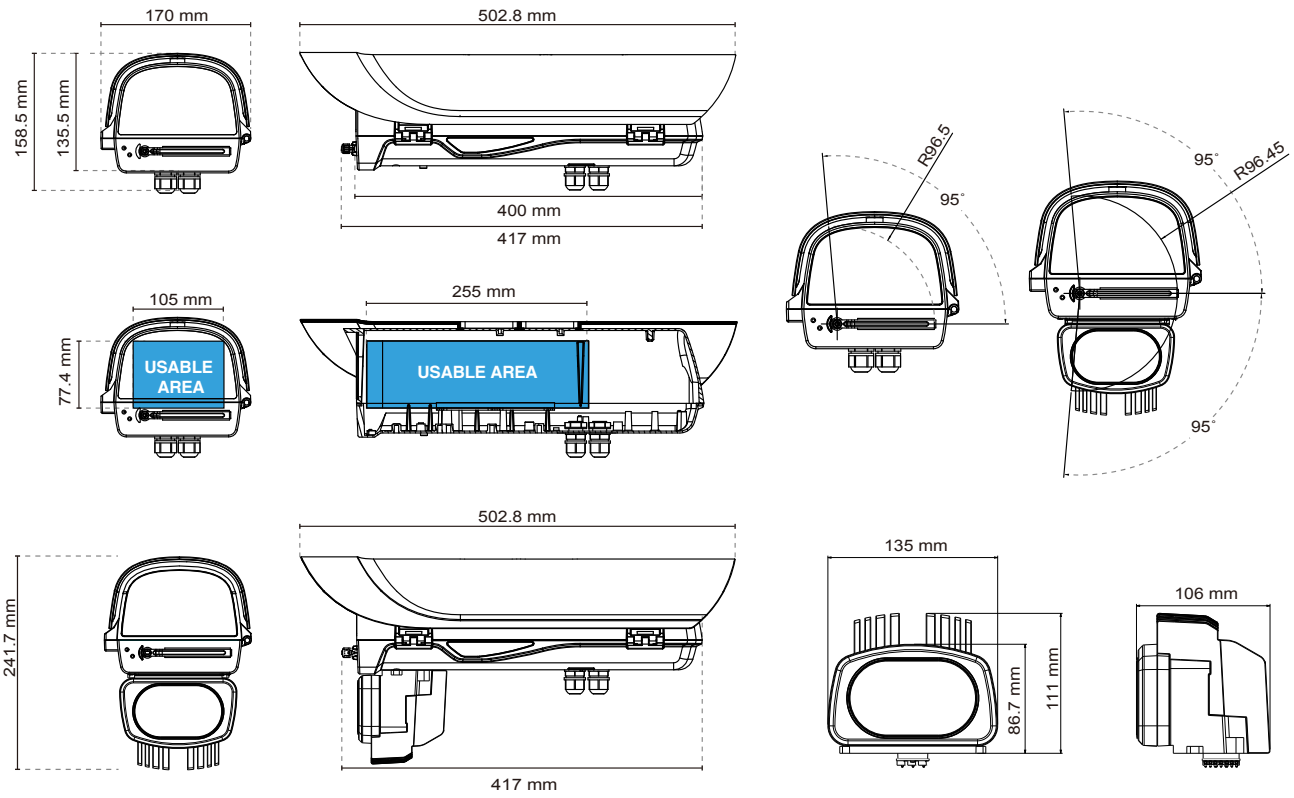
AXIS Q1635 + 8 – 80mm varifocus lens

Specifications

	P5000-I	P6000-I	P6000-IW
Electrical Specifications			
Input Voltage	PoE 30W, 50~57VDC	PoE 30W/60W/95W, 50~57VDC	PoE 30W/60W/95W, 50~57VDC
Max Output Power Budget	25 W thru 30W PoE PSE	25 W thru 30W PoE PSE 48 W thru 60W UPoE PSE 72 W thru 95W UPoE PSE	25 W thru 30W PoE PSE 48 W thru 60W UPoE PSE 72 W thru 95W UPoE PSE
Camera Power Input	Passive PoE	Passive PoE	Passive PoE
Output Voltage	12VDC/12W	24VDC/48W	24VDC/48W
Power Consumption	Window Heater: 10W Blower: 2W Camera: 6 ~ 8W	Window Heater: 10W Blower: 2W Camera: 6 ~ 8W	Window Heater: 10W Blower: 2W Camera: 6 ~ 8W Wiper: 6 W
Optional VAIR LEDs Power Consumption	VR-060: 6W	VR-060: 6W VR-240: 24W VR-480: 48W	VR-060: 6W VR-240: 24W VR-480: 48W
Optional 10L Water Tank & Pump for P6000-IW / P6000-AIW	–	–	TP-100: 12 W
Mechanical Specifications			
Body Construction	Cast Aluminum	Cast Aluminum	Cast Aluminum
Body & Sunshield Weight	2.8 kg (6.17 lb)	2.8 kg (6.17 lb)	2.9 kg (6.39 lb)
Cable Grants	M16 x 4	M16 x 4	M16 x 4
Environmental Specifications			
Operating Temperature*	Working: -20°C ~ 65°C (-4°F ~ 149°F) -20°C ~ 50°C (w/IR LEDs)	Working: -20°C ~ 65°C (-4°F ~ 149°F) -20°C ~ 50°C (w/IR LEDs)	Working: -20°C ~ 65°C (-4°F ~ 149°F) -20°C ~ 50°C (w/IR LEDs)
Window Heater ON / OFF	≤ 20°C (68°F) ON ≥ 30°C (86°F) OFF	≤ 20°C (68°F) ON ≥ 30°C (86°F) OFF	≤ 20°C (68°F) ON ≥ 30°C (86°F) OFF
Blower ON / OFF	≥ 35°C (95°F) ON ≤ 25°C (77°F) OFF	≥ 35°C (95°F) ON ≤ 25°C (77°F) OFF	≥ 35°C (95°F) ON ≤ 25°C (77°F) OFF
Weather Rating	IP68	IP68	IP66
Vandal Proof	IK10 Impact Rated on Cast Aluminum Housing	IK10 Impact Rated on Cast Aluminum Housing	IK10 Impact Rated on Cast Aluminum Housing

* Inside camera specification must be within housing's operating temperature.

Dimensions



P50/P60 Series Matrix Table

	PoE 30W in	PoE 30/60/95W in	Window Heater	Camera Heater (-50°C ~ 50°C)	Adjustable Sunshield	Blower	ITB for Optional 6W/24W/48W VAIR LEDs	Side-Opening Alarm	Wiper	IP66	IP68
P5000-I	v	-	v	-	v	v	v	v	-	-	v
P6000-I	-	v	v	-	v	v	v	v	-	-	v
P6000-IW	-	v	v	-	v	v	v	v	v	v	-

Accessories

Brackets

Wall Mount Bracket

BK-100
Wall Mount Bracket

BK-101
Wall Mount Bracket
Concealing Cable

Ceiling Mount Bracket

BK-200
J-type
Ceiling Mount Bracket

BK-201
Flexible J-type
Ceiling Mount Bracket

Standing Mount Bracket

BK-300
Standing Mount Bracket

Adapters

Pole Mount

AT-100
Pole Mount Adapter

AT-101
Pole Mount Adapter

Corner Mount

AT-200
Corner Mount Adapter

Fit

BK-100

BK-101

Junction Box

Wall Mount

JB-100
Junction Box

Fit

BK-100

BK-101

AT-100

AT-101

AT-200

VAIR IR LEDs

VAIR IR LEDs

VR-060
- Snap Vair 10~40° IR LED, 6W

VR-240
- Snap Vair 10~30° IR LED, 24W

VR-480
- Snap Vair 10~30° IR LED, 48W

Water Tank & Pump

Water Tank & Pump

TP-100
- 10L Water Tank & Pump

PoE Switches

Outdoor Unmanaged PoE Switch

H40-044-30-150
- 4xGbE PoE (30W) + 2xGbE SFP + 2xGbE RJ45
- 100~240VAC, 150W Power Budget

H40-084-30-250
- 8xGbE PoE (30W) + 4xGbE SFP
- 100~240VAC, 250W Power Budget

H40-044-60-250
- 4xGbE PoE (60W) + 2xGbE SFP + 2xGbE RJ45
- 100~240VAC, 250W Power Budget

Outdoor PoECam L2 Plus Managed Switch

H80-044-30-150
- 4xGbE PoE (30W) + 2xGbE SFP + 2xGbE RJ45
- 100~240VAC, 150W Power Budget

H80-084-30-250
- 8xGbE PoE (30W) + 4xGbE SFP
- 100~240VAC, 250W Power Budget

H80-044-60-250
- 4xGbE PoE (60W) + 2xGbE SFP + 2xGbE RJ45
- 100~240VAC, 250W Power Budget

PoE Injectors

Outdoor PoE Injector

I46-100
- 1xGbE UPoE (60W)
- 100~240VAC, 75W Power Budget

I49-100
- 1xGbE UPoE (95W)
- 100~240VAC, 100W Power Budget

Outdoor PoE Injector / Junction Box

I46-101
- 1xGbE UPoE (60W)
- 100~240VAC, 75W Power Budget

I49-101
- 1xGbE UPoE (95W)
- 100~240VAC, 100W Power Budget

C10 Series

PoE Switch

C50 Series

Smart PoE Switch

C70 Series

Managed Switch

802.1Q VLAN | RING | DHCP Server | Network Topology | Onvif | 30W PoE

C10 series

PoE Switches

C10-080-30-120

PoE Range @200m | 10/100M | 30W PoE | 802.3at End-span 802.3af | Plug & Play | Wall Mountable | Fanless

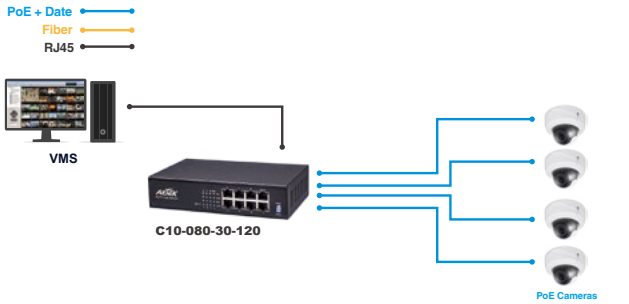
The C10 series from AETEK offers a broad range of **PoE Switches**, equipped with multi-port Fast Ethernet PoE (10M/100M) and Combo SFP Gigabit for flexible link on speific models. The C10 series has six sub-models including 8 ports, 16 ports, and 24 ports complying with IEEE 802.3af/at standards with sufficient PoE power budget for any application.

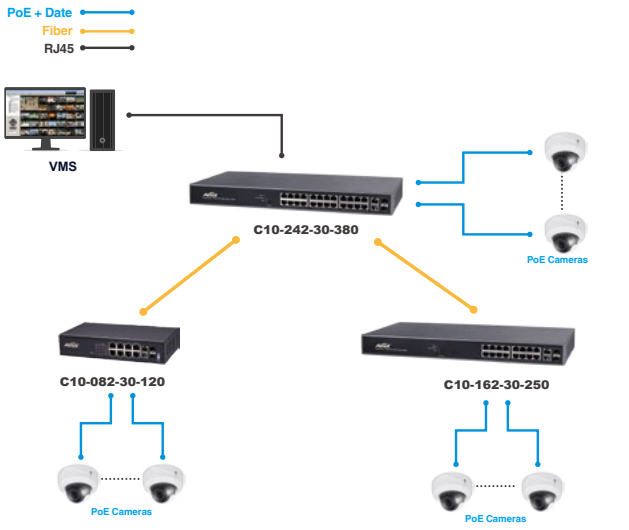
When the Extend mode enable, its data transmission and power supply distance can be up to 200 meters.

Features

- 15W/30W per port IEEE802.3at/af compliant
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- PoE Port support 10/100Mbps data rates
- Extend Mode support 200m range @10Mbps
- Combo SFP ports for Gigabit uplink (C10-082-30-120, C10-162-30-250, C10-242-30-380)
- Full/half-duplex, auto-negotiation, auto-MDI/MDIX
- IEEE 802.3x Flow Control protects against lost packets for reliable data transmission

Applications





Technical Specifications-Hardware

	C10-080-30-120	C10-082-30-120
Network Specifications		
Total Fast Ethernet Ports	8	8
Total Gigabit Ports	-	2
Fast Ethernat PoE Ports (10M/100M)	8 x 30W PoE	8 x 30W PoE
Gigabit RJ45/SFP Combo ports	-	2
Extend 200m ports	7 ports	8 ports
Mac Table	2k	4k
Jumbo Frames	1,536 Bytes	1,536 Bytes
Switching Capacity	1.6 Gbps	5.6 Gbps
Power Specifications		
Input Voltage	100VAC ~ 240VAC	100VAC ~ 240VAC
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
Power Budget	120W	120W
Mechanical Specifications		
Dimensions (WxHxD)	195 x 120 x 44 mm	226 x 130 x 44 mm
Weight	1 kg (2.04 lb)	1.2 kg (2.64 lb)
Environmental Specifications		
Operating Temperature	0°C ~ 50°C (32°F ~ 122°F)	0°C ~ 50°C (32°F ~ 122°F)
Storage Temperature	-20°C ~ 70°C (-4°F ~ 158°F)	-20°C ~ 70°C (-4°F ~ 158°F)
Operating Humidity	10% to 90% non-condensing	10% to 90% non-condensing
Certifications		
EMC	CE, FCC, VCCI, C-Tick Class A	CE, FCC, VCCI, C-Tick Class A
Safety	EN60950-1, IEC60950-1	EN60950-1, IEC60950-1

	C10-162-30-250	C10-242-30-380
Network Specifications		
Total Fast Ethernet Ports	16	24
Total Gigabit Ports	2	2
Fast Ethernat PoE Ports (10M/100M)	16 x 30W PoE	24 x 30W PoE
Gigabit RJ45/SFP Combo ports	2	2
Extend 200m ports	8 ports	8 ports
Mac Table	16k	16k
Jumbo Frames	1,536 Bytes	1,536 Bytes
Switching Capacity	7.2 Gbps	8.8 Gbps
Power Specifications		
Input Voltage	100VAC ~ 240VAC	100VAC ~ 240VAC
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
Power Budget	250W	380W
Mechanical Specifications		
Dimensions (WxHxD)	440 x 230 x 44 mm	440 x 230 x 44 mm
Weight	3.6 kg (7.93 lb)	3.8 kg (8.37 lb)
Environmental Specifications		
Operating Temperature	0°C ~ 50°C (32°F ~ 122°F)	0°C ~ 50°C (32°F ~ 122°F)
Storage Temperature	-20°C ~ 70°C (-4°F ~ 158°F)	-20°C ~ 70°C (-4°F ~ 158°F)
Operating Humidity	10% to 90% non-condensing	10% to 90% non-condensing
Certifications		
EMC	CE, FCC, VCCI, C-Tick Class A	CE, FCC, VCCI, C-Tick Class A
Safety	EN60950-1, IEC60950-1	EN60950-1, IEC60950-1

Ordering Information

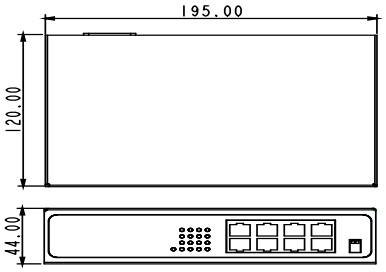
Unmanaged PoE Switches			
	**C10-080-30-120** • 8xFE PoE • 100~240VAC, 120W power budget		**C10-082-30-120** • 8xFE PoE + 2xCombo SFP GbE • 100~240VAC, 120W power budget
	**C10-162-30-250** • 16xFE PoE + 2xCombo SFP GbE • 100~240VAC, 250W power budget		**C10-242-30-380** • 24xFE PoE + 2xCombo SFP GbE • 100~240VAC, 380W power budget

Optional Accessories

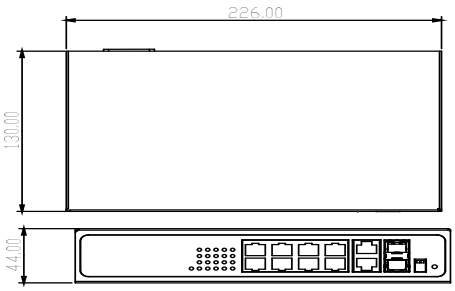
SFP Modules			
			
SFP-SX-X5 Gigabit SFP Transceiver • MMF • 0.5 km • 0°C ~70°C	**SFP-SX-02** Gigabit SFP Transceiver • MMF • 2 km • 0°C ~70°C	**SFP-LX-10** Gigabit SFP Transceiver • SMF • 10 km • 0°C ~70°C	**SFP-LX-40** Gigabit SFP Transceiver • SMF • 40 km • 0°C ~70°C

Dimensions

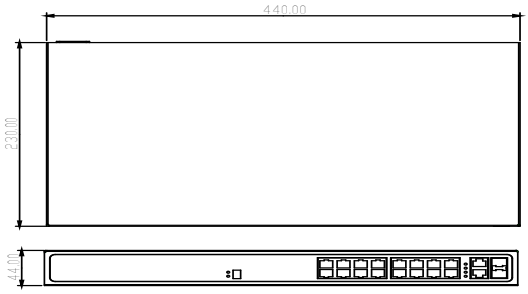
C10-080-30-120:



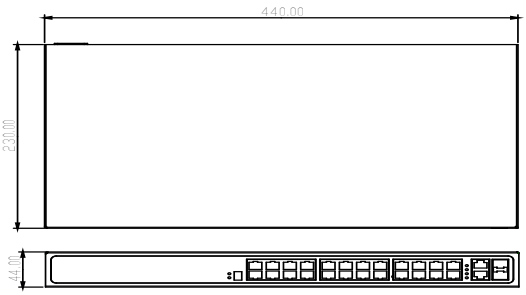
C10-082-30-120:



C10-162-30-250:



C10-242-30-380:



C50 series

Smart ONVIF PoE Switches

Ethernet Surge Protection | RING | DHCP Server | Network Topology | ONVIF | Full Ports Gigabit | Fiber-Optical | 30W PoE

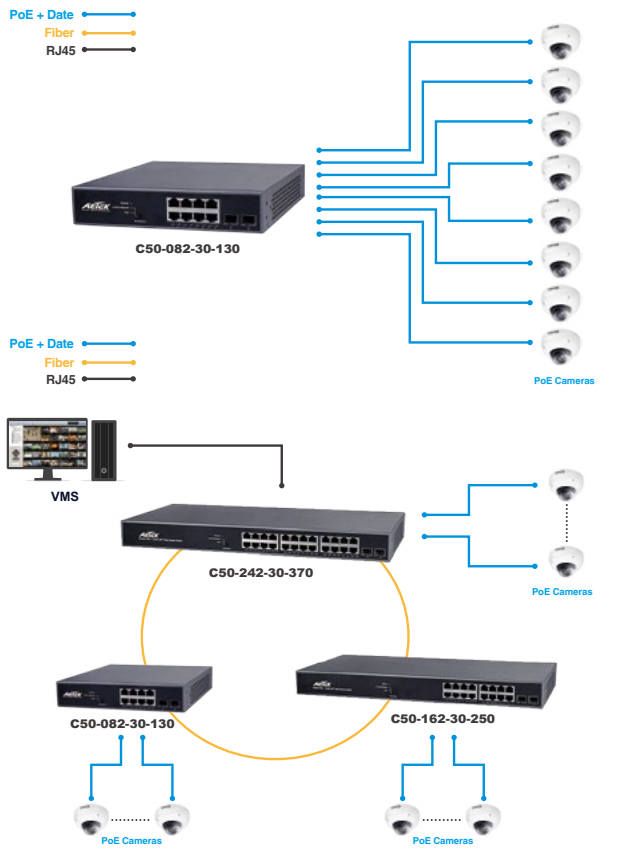
The C50 series from AETEK offers a broad range of basic Layer 2 **Smart PoE Switches**, equipped with multi-port Gigabit PoE (10M/100M/1G) and SFP transceiver (100M/1G) slots for flexible link. The C50 series has three sub-models including 8 ports, 16 ports, and 24 ports complying with IEEE 802.3af/at standards with sufficient PoE power budget for any application.

Besides a basic Layer 2 Smart PoE switch, C50 series is also an IP camera controller specially designed for easy overview & management of IP cameras complying with ONVIF, even if installers is not familiar with advanced software of Layer 2 Smart PoE switch. A centralized GUI (Graphic User Interface) makes it easy to find cameras and generate topology automatically once ONVIF IP cameras are connected to C50 series. Meanwhile, installers can easily catch comprehensive individual camera information including camera list, IP/MAC address, topology, power consumption, and traffic monitoring thru web browser. Furthermore an intuitive web GUI leads installer to group VLAN over graphic topology.

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
- IP Surveillance Controller
  - Automatic discovery for ONVIF camera
  - Generates camera topology map automatically
  - Cable diagnostic & reboot camera remotely
  - Graphic grouping VLAN
  - PoE management
  - Topology view / Floor view / Google map
  - Monitor / Configure / Manage ONVIF camera thru web
- Flexible SFP transceiver ports for uplink
- 15W/30W per port IEEE802.3af/at compliant
- Supports 10/100/1000Mbps data rates
- 6KV PoE surge protection
- IEEE 802.3az Energy Efficient Ethernet standard for green power

Applications



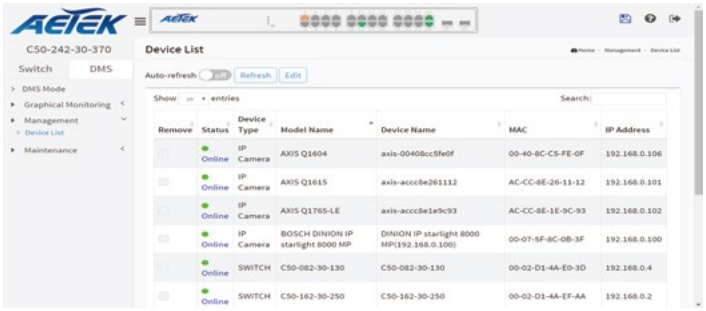
PoE Features

- IEEE802.3at (PoE+ 30W)
- Max. allowed 30W per port
- Port status table

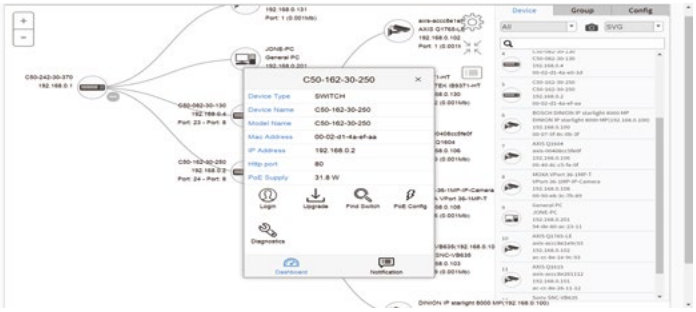
Local Port	PD Class	Power Allocated	Power Used	Current Used	Priority	Port Status
1	3	30 [W]	4 [W]	76 [mA]	Low	PoE turned ON
2	-	0 [W]	0 [W]	0 [mA]	Low	No PD detected
3	3	30 [W]	3.2 [W]	58 [mA]	Low	PoE turned ON
4	-	0 [W]	0 [W]	0 [mA]	Low	No PD detected
5	-	0 [W]	0 [W]	0 [mA]	Low	No PD detected

IP Camera Controller Features

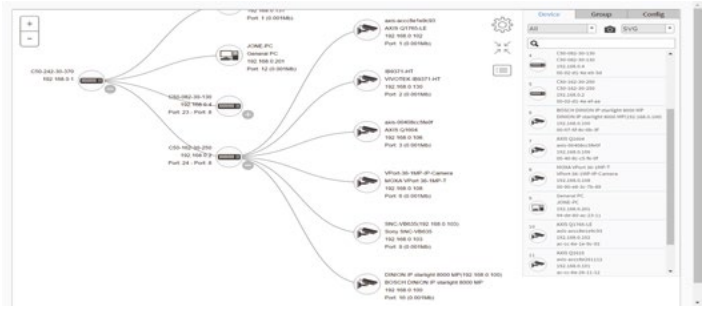
Device List



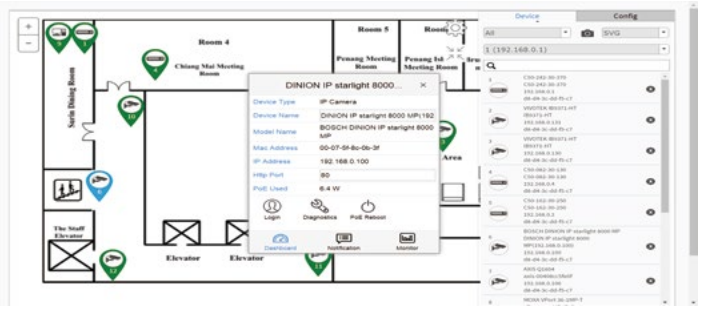
Dashboard



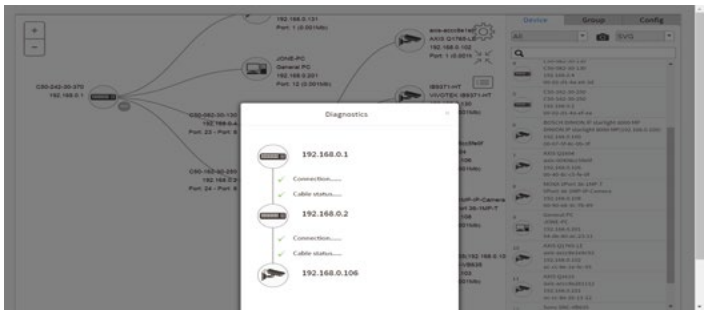
Topology View



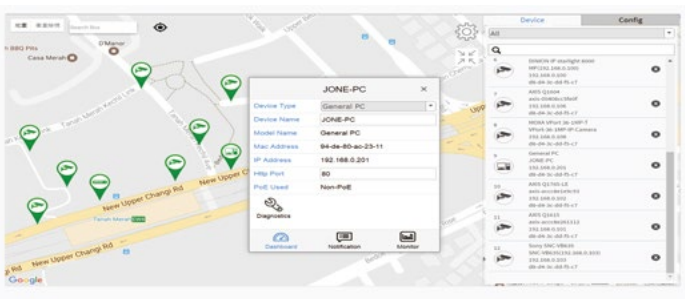
Floor Map View



Cable Diagnostics

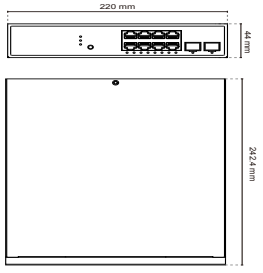


Google Map View

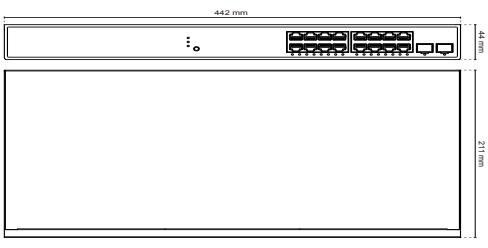


Dimensions

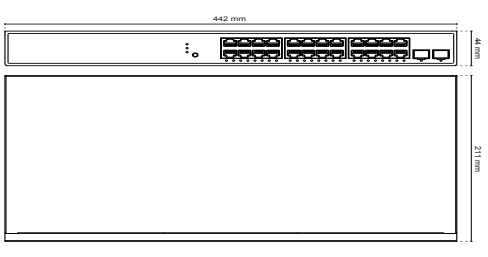
C50-082-30-130:



C50-162-30-250:



C50-242-30-370:



Technical Specifications - Software

IP Surveillance Graphical User Interface Specifications	
Auto Discovery	Discover IP cameras complying ONVIF automatically
Topology View	Generate Topology maps to manage IP cameras
Traffic Monitor	Comprehensive chart to show traffic status
Cable Diagnostic	Real time to verify the cable status
VLAN Grouping	Easy grouping IP cameras thru topology map
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 (STP)	Standard Spanning Tree 802.1d, Rapid Spanning Tree (RSTP) 802.1w, Multiple Spanning Tree (MSTP) 802.1s
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, Protocol based VLAN, IP subnet-based VLAN, Private VLAN Edge (PVE), MAC-based VLAN, Q-in-Q (double tag) VLAN, Voice VLAN, GARP VLAN Registration Protocol (GVRP)
DHCP Relay	Relay of DHCP traffic to DHCP server in different VLAN, Works with DHCP Option 82
IGMP v1/v2 Snooping	IGMP limits bandwidth-intensive multicast traffic to only the requesters. Supports 512 multicast groups
IGMP Querier	IGMP querier is used to support a Layer 2 multicast domain of snooping switches in the absence of a multicast router
IGMP Proxy	IGMP snooping with proxy reporting or report suppression actively filters IGMP packets in order to reduce load on the multicast router
MLD v1/v2 Snooping	Delivers IPv6 multicast packets only to the required receivers
Multicast VLAN Registration (MVR)	It uses a dedicated manually configured VLAN, called the multicast VLAN, to forward multicast traffic over Layer 2 network in conjunction with IGMP snooping.
Layer 3 Switching Specifications	
DHCP Server	Assign IP to DHCP clients
Security	
Secure Sockets Layer (SSL)	SSL encrypts the http traffic, allowing advanced secure access to the browser-based management GUI in the switch
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
Layer 2 Isolation Private VLAN Edge	PVE (also known as protected ports) provides L2 isolation between clients in the same VLAN. Supports multiple uplinks
Port Security	Locks MAC addresses to ports, and limits the number of learned MAC address
IP Source Guard	Prevents illegal IP address from accessing to specific port in the switch
RADIUS/ TACACS+	Supports RADIUS and TACACS+ authentication. Switch as a client
Storm Control	Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port
DHCP Snooping	A feature acts as a firewall between untrusted hosts and trusted DHCP servers
Loop Protection	To prevent unknown unicast, broadcast and multicast loops in Layer 2 switching configurations.
QoS	
Hardware Queue	8 hardware queues
Scheduling	Strict priority and weighted round-robin (WRR), Queue assignment based on DSCP and class of service
Classification	Port based, 802.1p VLAN priority based, IPv4/IPv6 precedence / DSCP based, Differentiated Services (DiffServ), Classification and re-marking ACLs
Rate Limiting	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
Dual Image	Independent primary and secondary images for backup while upgrading
UPnP	The Universal Plug and Play Forum, an industry group of companies working to enable device-to-device interoperability by promoting Universal Plug and Play
Remote Monitoring (RMON)	Embedded RMON agent supports RMON groups 1,2,3,9 (history, statistics, alarms, and events) for enhanced traffic management, monitoring and analysis
SNMP	SNMP version1, 2c and 3 with support for traps, and SNMP version 3 user-based security model (USM)
s-Flow	The industry 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/ HTTPs) and TFTP
NTP	Network Time Protocol (NTP) is a networking protocol for clock synchronization between computer systems over packet-switched
Other Management	HTTP/HTTPs, DHCP Client, Cable Diagnostics, Syslog, IPv6 Management

Technical Specifications-Hardware

	C50-082-30-130	C50-162-30-250	C50-242-30-370
Network Specifications			
Total Gigabit Ports	10	18	26
Gigabit PoE Ports (10M/100M/1G)	8 x 30W PoE	16 x 30W PoE	24 x 30W PoE
SFP Slots (100M/1G)	2	2	2
Forwarding Capacity	14.88Mpps	26.784Mbps	38.688Mpps
Mac Table	8 k	8 k	8k
Jumbo Frames	9,216 Bytes	9,216 Bytes	9,216 Bytes
Switching Capacity	20 Gbps	36 Gbps	52 Gbps
Power Specifications			
Input Voltage	100VAC ~ 240VAC	100VAC ~ 240VAC	100VAC ~ 240VAC
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	54 VDC PoE IEEE 802.3af (Max. 15.4W) output PoE+ IEEE802.3at (Max. 30W) output
Power Budget	150W	270W	400W
Surge Protection /each PoE Port	6KV	6KV	6kV
Mechanical Specifications			
Dimensions (WxHxD)	220 x 44 x 242.4 mm	442 x 44 x 211 mm	442 x 44 x 211
Weight	1.95 kg (4.3 lb)	3 kg (6.61 lb)	3.1 kg (6.83 lb)
Environmental Specifications			
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)
Storage Temperature	-20°C ~ 70°C (-4°F ~ 158°F)	-20°C ~ 70°C (-4°F ~ 158°F)	-20°C ~ 70°C (-4°F ~ 158°F)
Operating Humidity	10% to 90% non-condensing	10% to 90% non-condensing	10% to 90% 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
Safety	EN60950-1, IEC60950-1	EN60950-1, IEC60950-1	EN60950-1, IEC60950-1
Surge	IEC-61000-4-5	IEC-61000-4-5	IEC-61000-4-5

Ordering Information

Smart ONVIF Gigabit Ethernet PoE Switches

C50-082-30-130
- Indoor 8xGbE PoE +2xGbE SFP
- 100~240VAC, 130W power budget

C50-162-30-250
- Indoor 16xGbE PoE +2xGbE SFP
- 100~240VAC, 250W power budget

C50-242-30-370
- Indoor 24xGbE PoE +2xGbE SFP
- 100~240VAC, 370W power budget

Optional Accessories

SFP Modules

SFP-SX-X5
Gigabit SFP Transceiver
- MMF
- 0.5 km
- 0°C ~70°C

SFP-SX-02
Gigabit SFP Transceiver
- MMF
- 2 km
- 0°C ~70°C

SFP-LX-10
Gigabit SFP Transceiver
- SMF
- 10 km
- 0°C ~70°C

SFP-LX-40
Gigabit SFP Transceiver
- SMF
- 40 km
- 0°C ~70°C

C70 series

Master PoECam L2 Plus Managed Switches

C70-00A-01

C70-00E-01

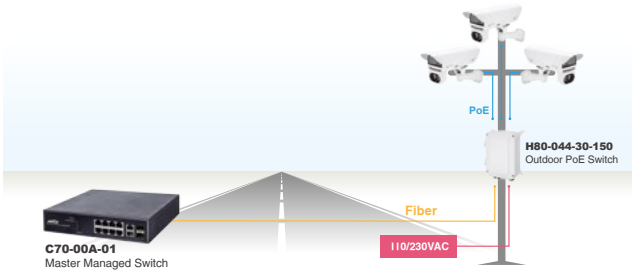
802.1Q VLAN | RING | DHCP Server | Network Topology | L3 Static Routing | IPv6 Management | Fiber-Optical | Full Ports Gigabit

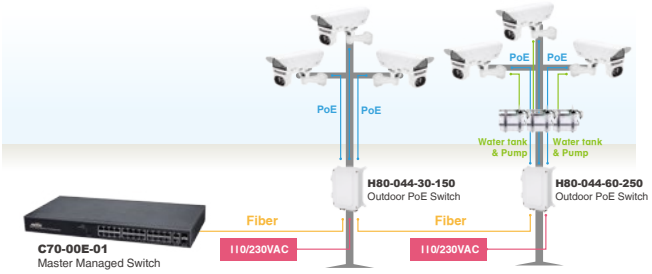
The C70 series of **Master PoECam L2 Plus Managed Switch**, designed as a root switche to manage outdoor H80 series or indoor C50 series PoE Switch and enable them to the IP surveillance network. The C70 series provides multi-port Gigabit (10M/100M/1G) and SFP transceiver slots for flexible link. There are two sub models, including 10-port & 26-port gigabit. The C70 series keeps L2 plus & basic L3 switch functions such as static route, QoS, security, spanning tree, cable length measurement, and SNMP v1/v2c/v3 like the H80 series.

Features

- Layer 2 Switch
  - IPV4 and IPV6 protocol
  - IPV4 static route
  - 802.1d (STP), 802.1w (RSTP), 802.1s (MSTP)
  - SNMP v1/v2c/v3
  - Ethernet cable length measurement
  - DHCP Server
- IP Surveillance Controller
  - Automatically discovery for ONVIF camera
  - Generate camera topology automatically
  - Graphic grouping VLAN
  - Cable diagnostic
  - Topology view/Floor view/Google map
  - Monitor/Configure/Manage ONVIF camera remotely
- Flexible SFP transceiver ports for uplink
- Supporting 10/100/1000Mbps data rates
- IEEE 802.3az Energy Efficient Ethernet standard for green power

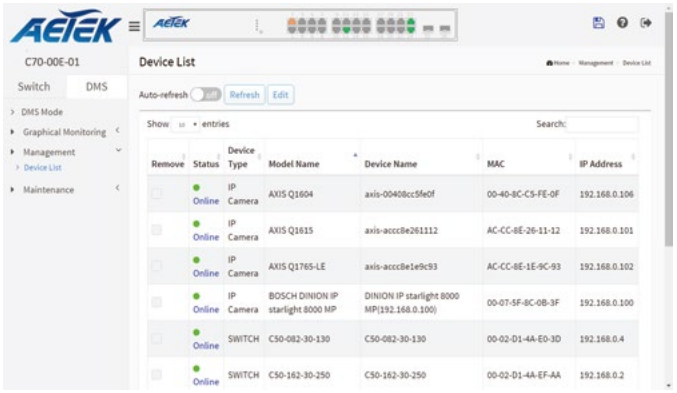
Applications



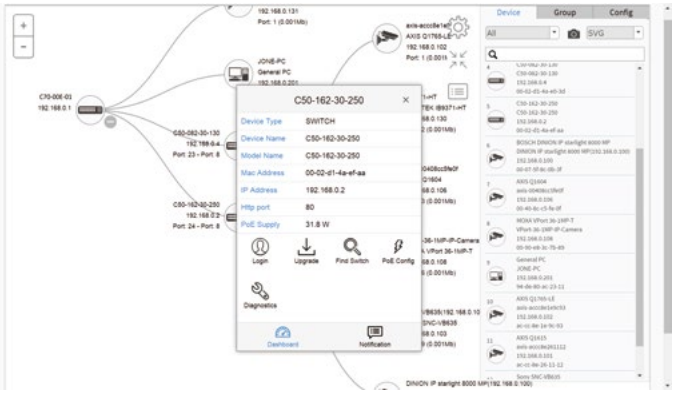


IP Camera Controller Features

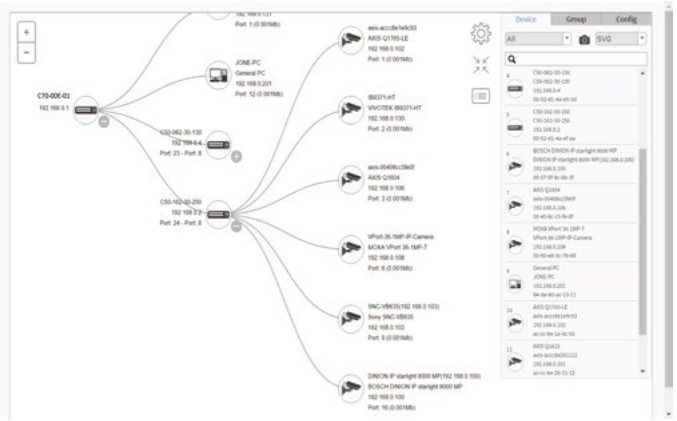
Device List



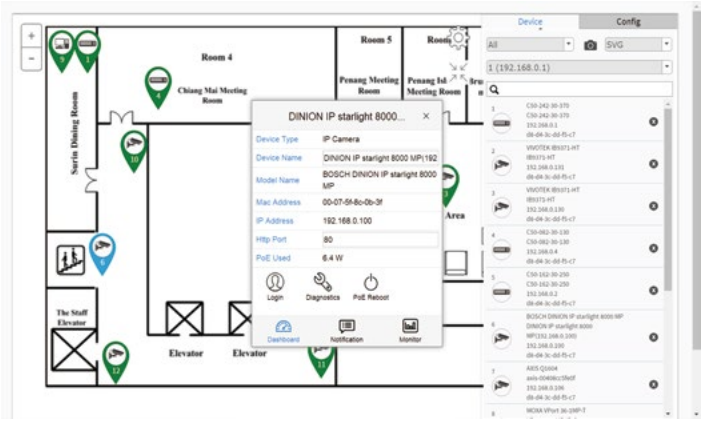
Dashboard



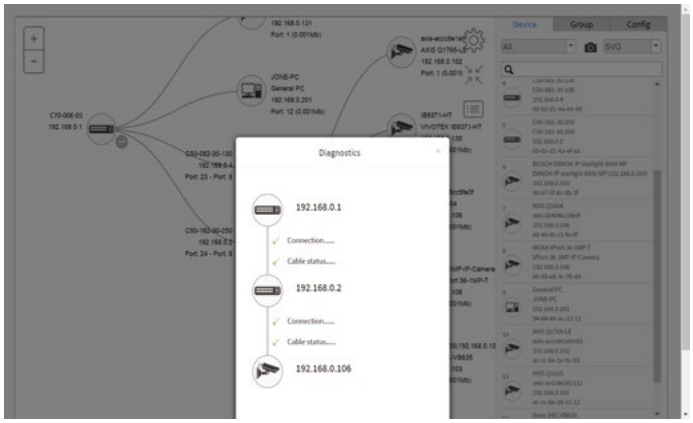
Topology View



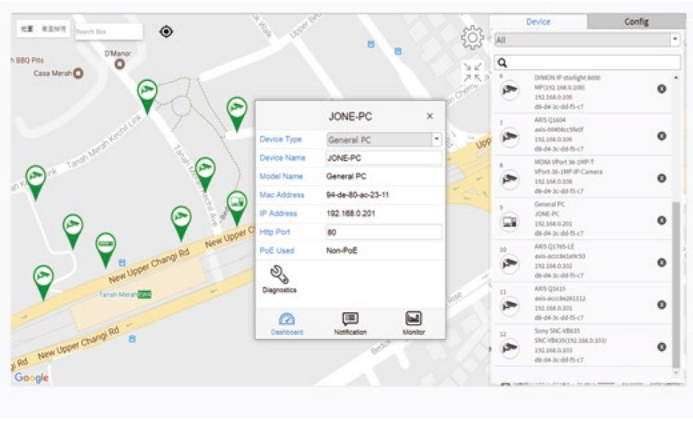
Floor Map View



Cable Diagnostics



Google Map View



Technical Specifications - Software

IP Surveillance Graphical User Interface Specifications	
Auto Discovery	Discover C50/H80 series PoE Switches and IP cameras complying ONVIF automatically
Topology View	Generate Topology map to manage C50/H80 series PoE Switches & IP cameras complying ONVIF
Traffic Monitor	Comprehensive chart to show traffic status
Cable Diagnostic	Real time to verify the cable status
VLAN Grouping	Easy grouping IP cameras thru topology map
Layer 2 Switching Specifications	
Spanning Tree Protocol (STP)	Standard Spanning Tree 802.1d, Rapid Spanning Tree (RSTP) 802.1w, Multiple Spanning Tree (MSTP) 802.1s
Trunking	Link Aggregation Control Protocol (LACP) IEEE 802.3ad up to 6 groups and up to 4 ports per group
VLAN	Port-based VLAN, 802.1Q tag-based VLAN, MAC-based VLAN, Management VLAN, Private VLAN Edge (PVE), Q-in-Q (double tag) VLAN, Voice VLAN, GARP VLAN Registration, Protocol (GVRP)
DHCP Relay	Relay of DHCP traffic to DHCP server in different VLAN, Works with DHCP Option 82
IGMP v1/v2/v3 Snooping	IGMP limits bandwidth-intensive multicast traffic to only the requesters, Supports 1024 multicast groups
IGMP Querier	Support a Layer 2 multicast domain of snooping, switches in the absence of a multicast router
IGMP Proxy	IGMP snooping with proxy reporting or report suppression actively filters IGMP packets in order to reduce load on the multicast router
MLD v1/v2 Snooping	Delivers IPv6 multicast packets only to the required receivers
Multicast VLAN Registration	Manually configured VLAN, called the multicast VLAN, to forward multicast traffic over Layer 2 network in conjunction with IGMP snooping
Layer 3 Switching Specifications	
IPv4 Static Routing	IPv4 Unicast: Static routing
IPv6 Static Routing	IPv6 Unicast: Static routing
DHCP Server	Assign IP to DHCP clients
Security	
Secure Shell (SSH)	Secures Telnet traffic in or out of the switch, SSH v1 and v2 are supported
Secure Sockets Layer (SSL)	SSL encrypts the http traffic, allowing advanced secure access to the browser-based management GUI in the switch
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
Layer 2 Isolation Private VLAN Edge	PVE (also known as protected ports) provides L2 isolation between clients in the same VLAN. Supports multiple uplinks
Port Security	Locks MAC addresses to ports, and limits the number of learned MAC address
IP Source Guard	Prevents illegal IP address from accessing to specific port in the switch
RADIUS/ TACACS+	Supports RADIUS and TACACS+ authentication. Switch as a client
Storm Control	Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port
DHCP Snooping	A firewall between untrusted hosts and trusted DHCP servers
ACLs	Supports up to 256 entries. Drop or rate limitation based on • Source and destination MAC, VLAN ID or IP address, protocol, port, • Differentiated services code point (DSCP) / IP precedence • TCP/ UDP source and destination ports • 802.1p priority • Ethernet type • Internet Control Message Protocol (ICMP) packets • TCP flag
Loop Protection	Prevent unknown unicast, broadcast and multicast loops in Layer 2 switching configurations
QoS	
Hardware Queue	8 hardware queues
Scheduling	Strict priority and weighted round-robin (WRR), Queue assignment based on DSCP and class of service
Classification	Port based, 802.1p VLAN priority based, IPv4/IPv6 precedence / DSCP based, Differentiated Services (DiffServ), Classification and re-marking ACLs
Rate Limiting	Ingress policer, Egress shaping and rate control, Per port
Management software	
Dying Gasp	Support Dying Gasp notification on loss of Power
HW Monitoring	Temperature Detection and Alarm
HW Watchdog	Resume operation from CPU hang up
IEEE 1588v2 PTP	Precision Time Protocol
iPush	The real time alarm notification could lower technical support cost Works with iOS and Android devices to make quick work of even the most demanding tasks
Remote Monitoring (RMON)	RMON groups 1,2,3,9 (history, statistics, alarms, and events) for enhanced traffic management, monitoring and analysis
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.
UPnP	The Universal Plug and Play Forum, an industry group of companies working to enable device-to-device interoperability by promoting Universal Plug and Play
s-Flow	The industry 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
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
CLI	configure/manage switches in command line modes
Dual Image	Independent primary and secondary images for backup while upgrading
SNMP	SNMP v1, v2c and v3 supporting traps, and SNMP v3 user-based security model (USM)
Firmware Upgrade	Web browser upgrade (HTTP/ HTTPs) and TFTP
Network Time Protocol (NTP)	A networking protocol for clock synchronization between computer systems over packet-switched
Others	HTTP/HTTPs, SSH, DHCP Client/ DHCPv6 Client, Cable Diagnostic, Ping, Syslog, IPv6 Management

Technical Specifications - Hardware

	C70-00A-01	C70-00E-01
Network Specifications		
Gigabit Ports (RJ45)	8	24
Gigabit RJ45/SFP Combo Ports	2	2
Total Gigabit Ports	10	26
Forwarding Capacity	14.9Mpps	38.7Mpps
Mac Table	8 k	8 k
Jumbo Frames	9,216 Bytes	9,216 Bytes
Switching Capacity	20 Gbps	52 Gbps
Power Specifications		
Input Voltage	100VAC ~ 240VAC	100VAC ~ 240VAC
Mechanical Specifications		
Dimensions (WxHxD)	220 x 134 x 44 mm	442 x 211 x 44 mm
Weight	1 kg (2.20 lb)	2.6 kg (5.73 lb)
Connectors	RJ45x10, SFP Slot x2	RJ45x26, SFP Slot x2
Environmental Specifications		
Operating Temperature	0°C ~ 50°C (32°F ~ 122°F)	0°C ~ 50°C (32°F ~ 122°F)
Storage Temperature	-20°C ~ 70°C (-4°F ~ 158°F)	-20°C ~ 70°C (-4°F ~ 158°F)
Operating Humidity	10% ~ 90% non-condensing	10% ~ 90% non-condensing
Certifications		
EMC	CE, FCC, C-Tick Class A	CE, FCC, C-Tick Class A
Safety	EN60950-1, IEC60950-1	EN60950-1, IEC60950-1

Ordering Information

Master PoECam L2 Plus managed Gigabit Ethernet Switches

C70-00A-01
- Indoor 8xGbE + 2xCombo GbE (SFP & RJ45)
- 100~240VAC

C70-00E-01
- Indoor 24xGbE + 2xCombo GbE (SFP & RJ45)
- 100~240VAC

Optional Accessories

SFP Modules

SFP-SX-X5
Gigabit SFP Transceiver
- MMF
- 0.5 km
- 0°C ~70°C

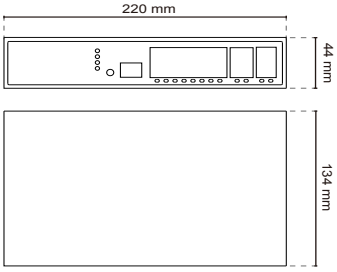
SFP-SX-02
Gigabit SFP Transceiver
- MMF
- 2 km
- 0°C ~70°C

SFP-LX-10
Gigabit SFP Transceiver
- SMF
- 10 km
- 0°C ~70°C

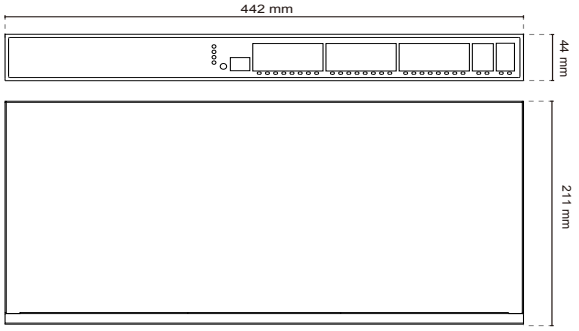
SFP-LX-40
Gigabit SFP Transceiver
- SMF
- 40 km
- 0°C ~70°C

Dimensions

C70-00A-01:



C70-00E-01:



H20/H40 Series

IP67 PoE Switch

H80 Series

PoECam PoE Switch

H20 series

Harden-Graded IP67/IK10

Unmanaged Fast Ethernet PoE Switches

H20-041-30-075

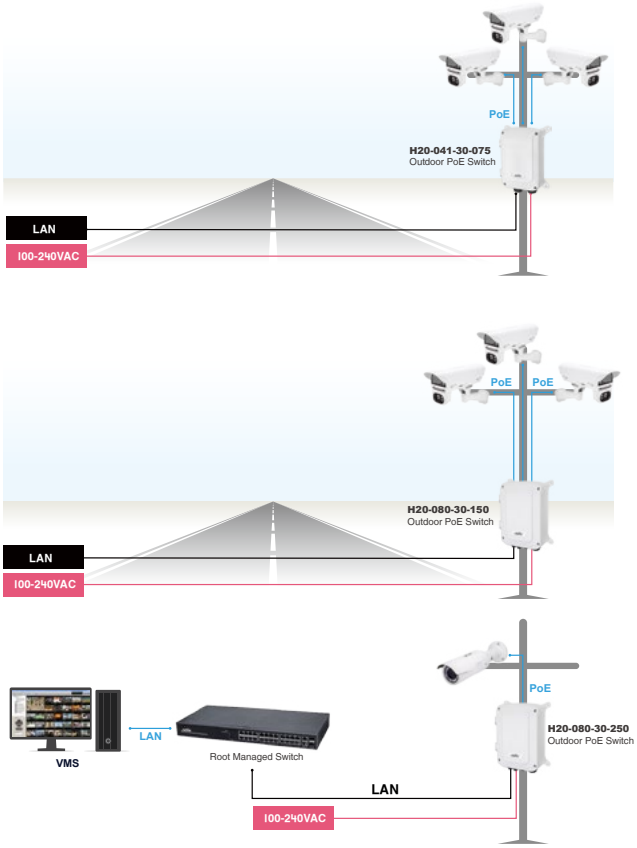
H20-080-30-150
H20-080-30-250

The H20 series are the **Harden-Graded Industrial Unmanaged Fast Ethernet PoE Switches**. With bulit-in IP67, 6KV surge protection for each PoE Ethernet port and AC power surge protection. H20 series can operate under harsh weather conditions from -40°C up to 60°C. H20 series can allow the outdoor connections with PoE PDs, such as outdoor IP cameras and wireless APs, making the commercial and industrial applications easy and possible. The H20 series provide multi-port Fast Ethernet PoE (10M/100M) to deliver data and power to PoE PDs over a single network cable. 3 sub-models of the H20 series are now available and classified as easy-to-install power source equipment (PSE), and able to provide power up to 30W per port.

Features

- IP67 standard
- IK10 impact rated cast aluminum housing
- Operating temperature between -40°C and 60°C
- 30W per port IEEE802.3at compliant
- Extend Mode support 200m range @10Mbps
- 6KV PoE surge protection
- 10KV power surge protection (H20-041-30-075)
- 40KV power surge protection (H20-080-30-150, H20-080-30-250)

Applications

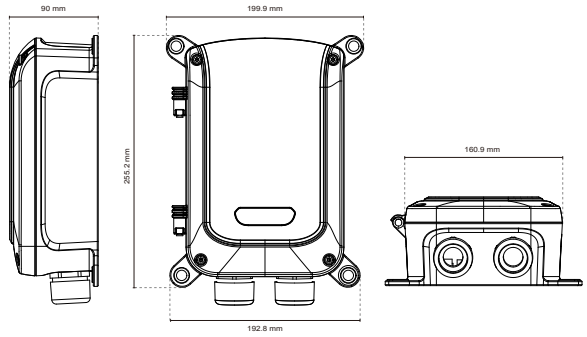


Specifications

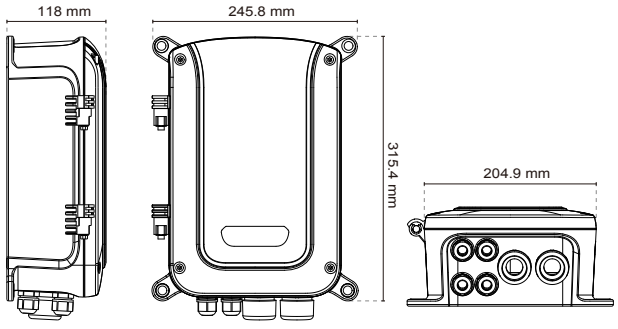
	H20-041-30-075	H20-080-30-150	H20-080-30-250
Networking Specifications			
Total Fast Ethernet Ports	5	8	8
Fast Ethernet PoE Ports (10M/100M)	4 x 30W PoE	8 x 30W PoE	8 x 30W PoE
Fast Ethernet Ports (RJ45)	1	-	-
Extend 200m ports	4 ports	7 ports	7 ports
Mac Table	2 k	2 k	2 k
Buffer Memory	96 KB	96 KB	96 KB
Switching Capacity	1 Gbps	1.6 Gbps	1.6 Gbps
Power Specifications			
Input Voltage	100VAC ~ 240VAC	100VAC ~ 240VAC	100VAC ~ 240VAC
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	54 VDC PoE IEEE 802.3af (Max. 15.4W) output PoE+ IEEE802.3at (Max. 30W) output
Power Budget	75W	150W	250W
Surge Protection /each PoE Port	6KV	6KV	6KV
Surge Protection for AC power	10 KV	40KV	40KV
Mechanical Specifications			
Dimensions (WxHxD)	255.2 x 199.9 x 130 mm	315.4 x 245.8 x 118mm	315.4 x 245.8 x 118mm
Weight	3.2 kg (7.05 lb)	4.3 kg (9.48 lb)	4.37 kg (9.63 lb)
Connectors	M25 x 2	M16 x 4, M25 x 2	M16 x 4, M25 x 2
Environmental Specifications			
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)
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)
Operating Humidity	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
Safety	EN60950-1, IEC60950-1	EN60950-1, IEC60950-1	EN60950-1, IEC60950-1
Vibration	IEC 60068-2-6	IEC 60068-2-6	IEC 60068-2-6
Shock	IEC 60068-2-27	IEC 60068-2-27	IEC 60068-2-27
Freefall	IEC 60068-2-32	IEC 60068-2-32	IEC 60068-2-32
Surge	ITU-T K.21 IEC-61643-11	ITU-T K.21 IEC-61643-11	ITU-T K.21 IEC-61643-11

Dimensions

H20-041-30-075



H20-080-30-150/250



Ordering Information

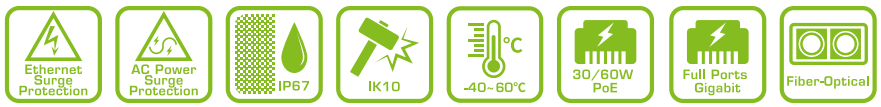
Outdoor Fast Ethernet PoE Switches					
	**H20-041-30-075** • 4xFE PoE (30W) + 1xFE RJ45 • 100~240VAC,75W power budget		**H20-080-30-150** • 8xFE PoE (30W) • 100~240VAC, 150W power budget		**H20-080-30-250** • 8xFE PoE (30W) • 100~240VAC, 250W power budget

Optional Accessories

Pole Mount Brackets		Corner Mount Bracket
		
AT-100 Pole Mount Adapter	**AT-101** Pole Mount Adapter	**AT-200** Corner Mount Adapter

H40 series

Harden-Graded Industrial Unmanaged Gigabit Ethernet PoE Switches



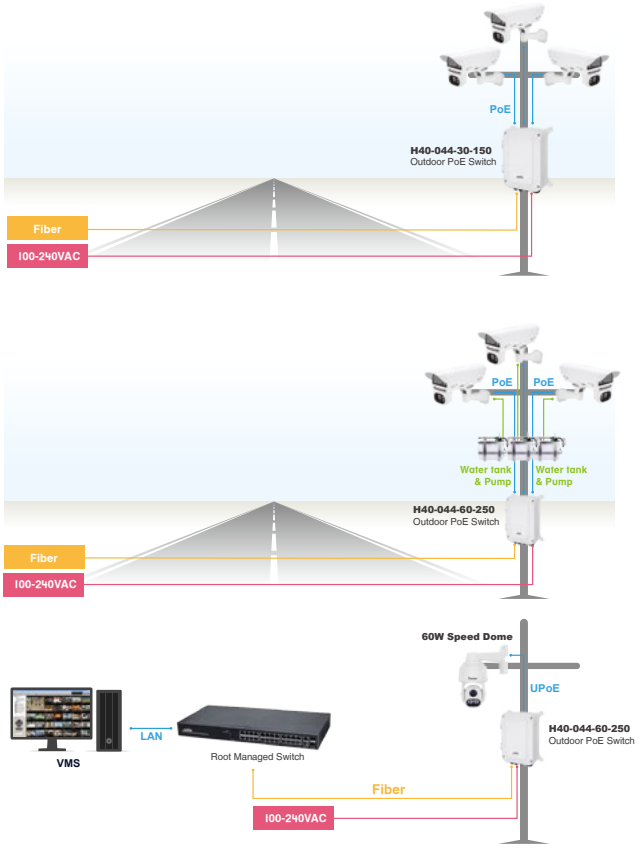
The H40 series of **Harden-Graded Industrial Unmanaged Gigabit Ethernet PoE Switches** are designed with IP67, 6KV PoE Ethernet port surge protection, 40KV surge protection in AC power, and operation temperature between -40°C and 60°C under harsh weather conditions. They enable outdoor connections of PoE PDs to the network such as outdoor IP cameras, wireless APs, and other industrial applications. The H40 series provide multi-port Gigabit PoE (10M/100M/1G) delivering data and power to PoE PDs over a single network cable as well as additional SFP transceiver slots for flexible uplink. The H40 series has three sub-models classified as easy-to-install power source equipment (PSE) and provide power up to 30W or 60W per port.

Features

- Flexible SFP transceiver ports for uplink
- IP67 standard
- IK10 impact rated cast aluminum housing
- Operating temperature between -40°C and 60°C
- 30W per port IEEE802.3at compliant

  (H40-044-30-150, H40-084-30-250)
- 60W per port UPoE (H40-044-60-250)
- Supporting 10/100/1000Mbps data rates
- 6KV PoE surge protection
- 40KV power surge protection
- IEEE 802.3az Energy Efficient Ethernet standard for green power

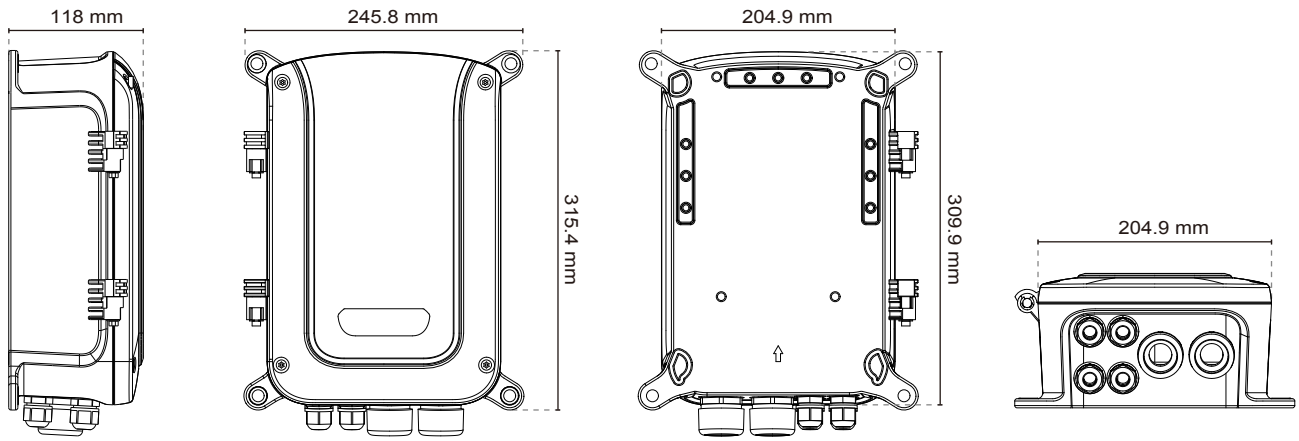
Applications



Specifications

	H40-044-30-150	H40-044-60-250	H40-084-30-250
Networking Specifications			
Total Gigabit Ports	8	8	12
Gigabit PoE Ports (10M/100M/1G)	4 x 30W PoE	4 x 60W UPoE	8 x 30W PoE
SFP Slots (100M/1G)	2	2	4
Gigabit Ports (RJ45)	2	2	-
Forwarding Capacity	11.904Mpps	11.904Mpps	17.856Mbps
Mac Table	8 k	8 k	8k
Jumbo Frames	9,216 Bytes	9,216 Bytes	9,216 Bytes
Switching Capacity	16 Gbps	16 Gbps	24 Gbps
Power Specifications			
Input Voltage	100VAC ~ 240VAC	100VAC ~ 240VAC	100VAC ~ 240VAC
Backup Power Input Voltage	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 UPoE (Max. 60W) output	54 VDC PoE IEEE 802.3af (Max. 15.4W) output PoE+ IEEE802.3at (Max. 30W) output
Power Budget	150W	250W	250W
Surge Protection /each PoE Port	6KV	6KV	6KV
Surge Protection for AC power	40 KV	40KV	40KV
Mechanical Specifications			
Dimensions (WxHxD)	245.8 x 315.4 x 118mm	245.8 x 315.4 x 118mm	245.8 x 315.4 x 118mm
Weight	4.2 kg (9.26 lb)	4.3 kg (9.48 lb)	4.37 kg (9.63 lb)
Connectors	M16 x 4, M25 x 2	M16 x 4, M25 x 2	M16 x 4, M25 x 2
Environmental Specifications			
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)
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)
Operating Humidity	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
Safety	EN60950-1, IEC60950-1	EN60950-1, IEC60950-1	EN60950-1, IEC60950-1
Vibration	IEC 60068-2-6	IEC 60068-2-6	IEC 60068-2-6
Shock	IEC 60068-2-27	IEC 60068-2-27	IEC 60068-2-27
Freefall	IEC 60068-2-32	IEC 60068-2-32	IEC 60068-2-32
Surge	ITU-T K.21 IEC-61643-11	ITU-T K.21 IEC-61643-11	ITU-T K.21 IEC-61643-11

Dimensions



Ordering Information

Outdoor Gigabit Ethernet PoE Switches					
	**H40-044-30-150** • 4xGbE PoE (30W) + 2xGbE SFP + 2xGbE RJ45 • 100~240VAC,150W power budget		**H40-044-60-250** • 4xGbE UPoE (60W) + 2xGbE SFP + 2xGbE RJ45 • 100~240VAC, 250W power budget		**H40-084-30-250** • 8xGbE PoE (30W) + 4xGbE SFP • 100~240VAC, 250W 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		Corner Mount Bracket
		
AT-100 Pole Mount Adapter	**AT-101** Pole Mount Adapter	**AT-200** Corner Mount Adapter

H80 series

PoECam L2 Plus Managed Gigabit Ethernet PoE Switches

Ethernet Surge Protection | AC Power Surge Protection | IP67 | IK10 | -40~75°C | 30/60W PoE | Full Ports Gigabit | ONVIF | Fiber-Optical | L3 Static Routing | IPv6 Management | 802.1Q VLAN | RING | DHCP Server | Network Topology

The H80 series of **PoECam L2 Plus Managed PoE Switches** are designed with IP67, 6KV Ethernet port surge protection, 40KV surge protection in power supply , and harden-graded standard to operate between -40°C and 60 °C under 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 H80 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 H80 series has three sub models classified as power source equipment (PSE) and provide PoE budget up to 30W or 60W per port.

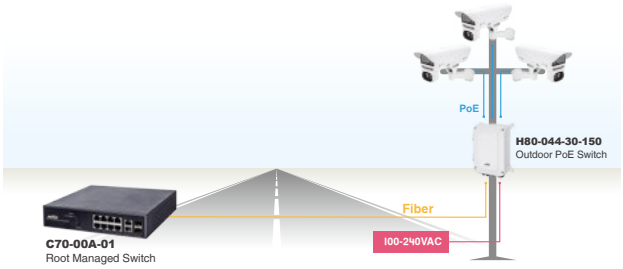
Besides general functions of L2 plus & basic L3 switch such as static route, QoS, security, spanning tree, cable length measurement, and SNMP v1/v2c/v3, a dedicated web graphic user interface of IP surveillance is easy to configure and manage ONVIF cameras. It automatically generates camera topology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

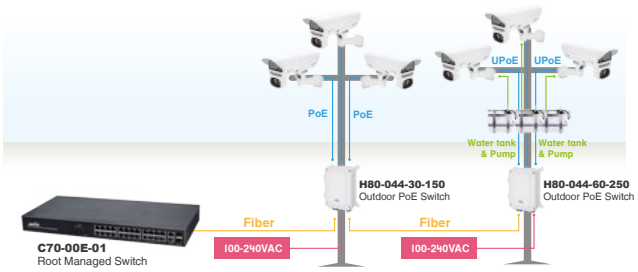
The C70 series of Master PoECam L2 plus managed switches can be installed as indoor control centers as a root switch in order to optimize comprehensive H80 features.

Features

- Layer 2 Plus Switch
  - IPV4 and IPV6 protocol
  - IPV4 static route
  - 802.1d (STP), 802.1w (RSTP), 802.1s (MSTP)
  - SNMP v1/v2c/v3
  - Ethernet cable length measurement
  - DHCP Server
- IP Surveillance Controller
  - Automatically discovering for ONVIF camera
  - Generating 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
- Flexible SFP transceiver ports for uplink
- IP67 standard
- IK10 impact rated cast aluminum housing
- Operating temperature between -40°C and 60 °C
- Compliant IEEE802.3at 30W per port (H80-044-30-150, H80-084-30-250)
- 60W UPoE per port (H80-044-60-250)
- Supporting 10/100/1000Mbps data rates
- 6KV PoE surge protection
- 40KV power surge protection
- IEEE 802.3az Energy Efficient Ethernet standard for green power

Applications





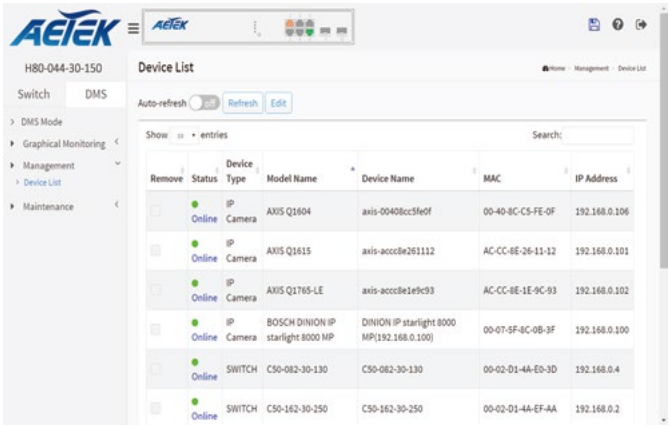
PoE Features

- IEEE802.3at (PoE+ 30W),UPoE 60W
- Max. allowed 30W / 60W per port
- Port status table

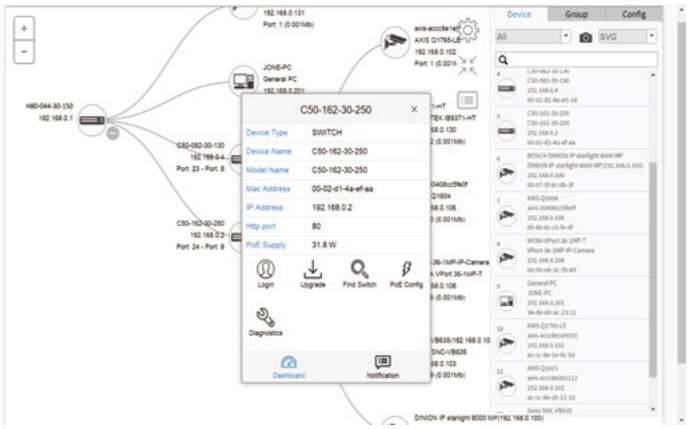
Local Port	PD Class	Power Allocated	Power Used	Current Used	Priority	Port Status
1	3	30 [W]	4 [W]	76 [mA]	Low	PoE turned ON
2	-	0 [W]	0 [W]	0 [mA]	Low	No PD detected
3	3	30 [W]	3.2 [W]	58 [mA]	Low	PoE turned ON
4	-	0 [W]	0 [W]	0 [mA]	Low	No PD detected
5	-	0 [W]	0 [W]	0 [mA]	Low	No PD detected

IP Camera Controller Features

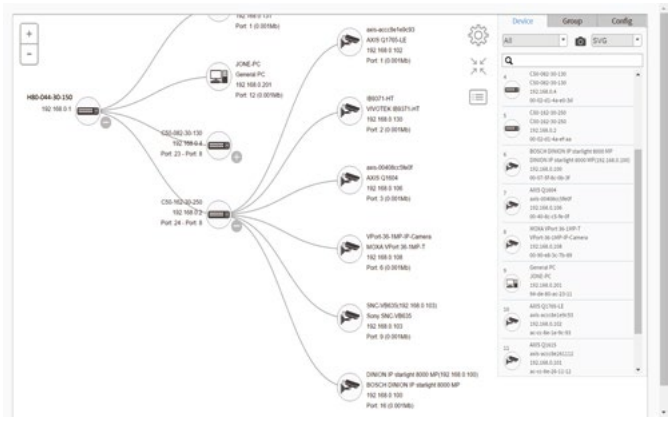
Device List



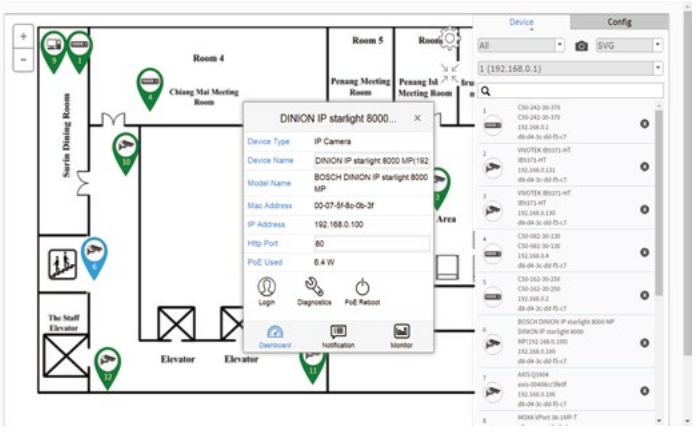
Dashboard



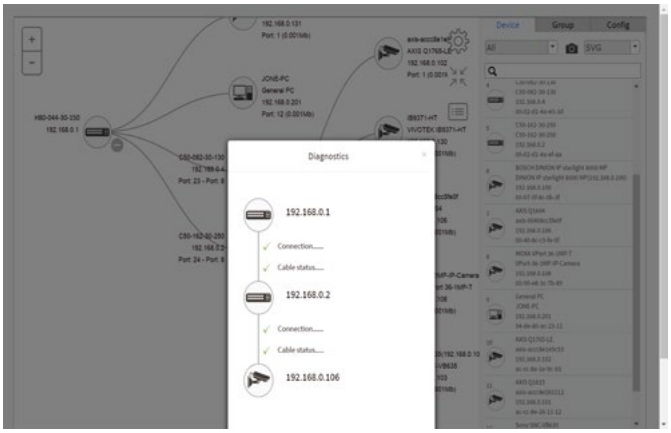
Topology View



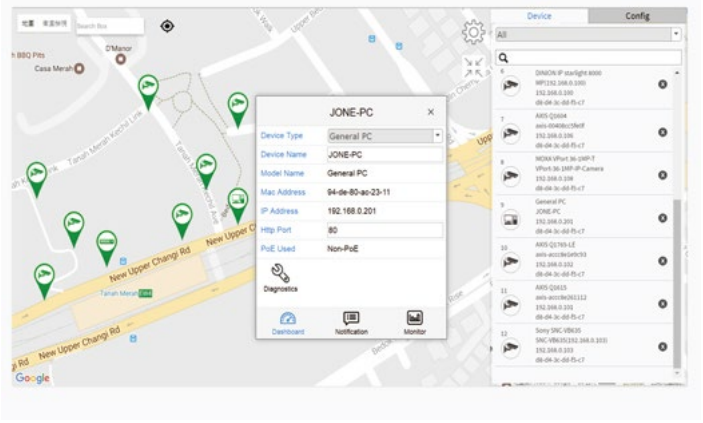
Floor Map View



Cable Diagnostics



Google Map View



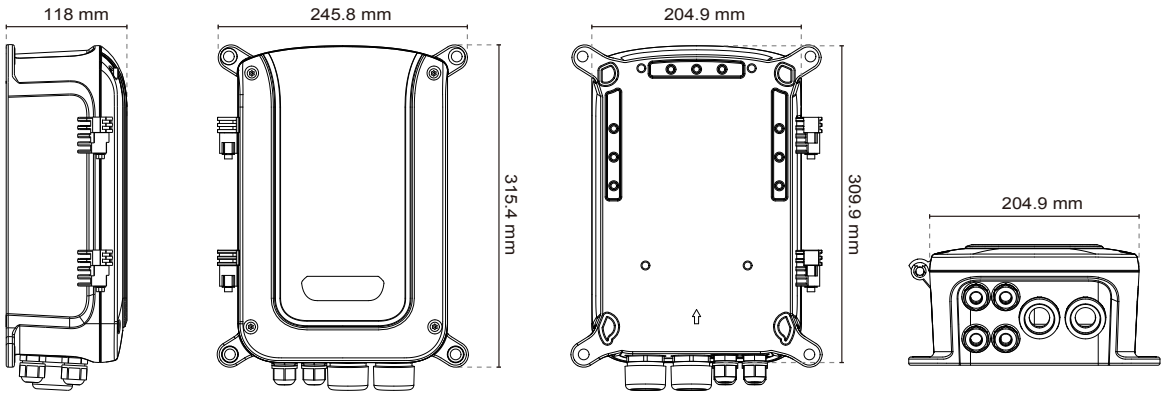
Technical Specifications - Software

IP Surveillance Graphical User Interface Specifications	
Auto Discovery	Discover IP cameras complying ONVIF automatically
Topology View	Generate Topology maps to manage IP cameras
Traffic Monitor	Comprehensive chart to show traffic status
Cable Diagnostic	Real time to verify the cable status
VLAN Grouping	Easy grouping IP cameras thru topology map
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 (STP)	Standard Spanning Tree 802.1d, Rapid Spanning Tree (RSTP) 802.1w, Multiple Spanning Tree (MSTP) 802.1s
Trunking	Link Aggregation Control Protocol (LACP) IEEE 802.3ad up to 6 groups and up to 4 ports per group
VLAN	Port-based VLAN, 802.1Q tag-based VLAN, MAC-based VLAN, Management VLAN, Private VLAN Edge (PVE), Q-in-Q (double tag) VLAN, Voice VLAN, GARP VLAN Registration, Protocol (GVRP)
DHCP Relay	Relay of DHCP traffic to DHCP server in different VLAN, Works with DHCP Option 82
IGMP v1/v2/v3 Snooping	IGMP limits bandwidth-intensive multicast traffic to only the requesters, Supports 1024 multicast groups
IGMP Querier	Support a Layer 2 multicast domain of snooping, switches in the absence of a multicast router
IGMP Proxy	IGMP snooping with proxy reporting or report suppression actively filters IGMP packets in order to reduce load on the multicast router
MLD v1/v2 Snooping	Delivers IPv6 multicast packets only to the required receivers
Multicast VLAN Registration	manually configured VLAN, called the multicast VLAN, to forward multicast traffic over Layer 2 network in conjunction with IGMP snooping
Layer 3 Switching Specifications	
IPv4 Static Routing	IPv4 Unicast: Static routing
IPv6 Static Routing	IPv6 Unicast: Static routing
DHCP Server	Assign IP to DHCP clients
Security	
Secure Shell (SSH)	secures Telnet traffic in or out of the switch, SSH v1 and v2 are supported
Secure Sockets Layer (SSL)	SSL encrypts the http traffic, allowing advanced secure access to the browser-based management GUI in the switch
IEEE 802.1X	IEEE802.1X: RADIUS authentication, authorization and accounting, MD5 hash, guest VLAN, single/multiple host mode and single/multiple sessions Supports IGMPRADIUS based 802.1X, Dynamic VLAN assignment
Layer 2 Isolation Private VLAN Edge	PVE (also known as protected ports) provides L2 isolation between clients in the same VLAN. Supports multiple uplinks
Port Security	Locks MAC addresses to ports, and limits the number of learned MAC address
IP Source Guard	Prevents illegal IP address from accessing to specific port in the switch
RADIUS/ TACACS+	Supports RADIUS and TACACS+ authentication. Switch as a client
Storm Control	Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port
DHCP Snooping	A firewall between untrusted hosts and trusted DHCP servers
ACLs	Supports up to 256 entries. Drop or rate limitation based on • Supports up to 256 entries. Drop or rate limitation based on • Source and destination MAC, VLAN ID or IP address, protocol, port, • Differentiated services code point (DSCP) / IP precedence • TCP/ UDP source and destination ports • 802.1p priority • Ethernet type • Internet Control Message Protocol (ICMP) packets • TCP flag
Loop Protection	Prevent unknown unicast, broadcast and multicast loops in Layer 2 switching configurations
QoS	
Hardware Queue	8 hardware queues
Scheduling	Strict priority and weighted round-robin (WRR), Queue assignment based on DSCP and class of service
Classification	Port based, 802.1p VLAN priority based, IPv4/IPv6 precedence / DSCP based, Differentiated Services (DiffServ), Classification and re-marking ACLs
Rate Limiting	Ingress policer, Egress shaping and rate control, Per port
Management software	
Dying Gasp	Support Dying Gasp notification on loss of Power
HW Monitoring	Temperature Detection and Alarm
HW Watchdog	resume operation from CPU hang up
IEEE 1588v2 PTP	Precision Time Protocol
iPush	The real time alarm notification could lower technical support cost Works with iOS and Android devices to make quick work of even the most demanding tasks
Remote Monitoring (RMON)	RMON groups 1,2,3,9 (history, statistics, alarms, and events) for enhanced traffic management, monitoring and analysis
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.
UPnP	The Universal Plug and Play Forum, an industry group of companies working to enable device-to-device interoperability by promoting Universal Plug and Play
s-Flow	The industry 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
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
CLI	configure/manage switches in command line modes
Dual Image	Independent primary and secondary images for backup while upgrading
SNMP	SNMP v1, v2c and v3 supporting traps, and SNMP v3 user-based security model (USM)
Firmware Upgrade	Web browser upgrade (HTTP/ HTTPs) and TFTP
Network Time Protocol (NTP)	A networking protocol for clock synchronization between computer systems over packet-switched
Others	HTTP/HTTPs, SSH, DHCP Client/ DHCPv6 Client, Cable Diagnostic, Ping, Syslog, IPv6 Management

Specifications

	H80-044-30-150	H80-044-60-250	H80-084-30-250
Networking Specifications			
Total Gigabit Ports	8	8	12
Gigabit PoE Ports (10M/100M/1G)	4 x 30W PoE	4 x 60W UPoE	8 x 30W PoE
SFP Slots (100M/1G)	2	2	4
Gigabit Ports (RJ45)	2	2	-
Forwarding Capacity	11.904Mpps	11.904Mpps	17.856Mbps
Mac Table	8 k	8 k	8k
Jumbo Frames	9,216 Bytes	9,216 Bytes	9,216 Bytes
Switching Capacity	12 Gbps	12 Gbps	24 Gbps
Power Specifications			
Input Voltage	100VAC ~ 240VAC	100VAC ~ 240VAC	100VAC ~ 240VAC
Backup Power Input Voltage	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 UPoE (Max. 60W) output	54 VDC PoE IEEE 802.3af (Max. 15.4W) output PoE+ IEEE802.3at (Max. 30W) output
Power Budget	150W	250W	250W
Surge Protection /each PoE Port	6KV	6KV	6kV
Surge Protection for AC Power	40KV	40KV	40KV
Mechanical Specifications			
Dimensions (WxHxD)	245.8 x 315.4 x 118mm	245.8 x 315.4 x 118mm	245.8 x 315.4 x 118mm
Weight	4.2 kg (9.26 lb)	4.3 kg (9.48 lb)	4.37 kg (9.63 lb)
Connectors	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
Console	RJ45	RJ45	RJ45
Reset Button	Yes	Yes	Yes
Environmental Specifications			
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)
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)
Operating Humidity	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
Safety	EN60950-1,IEC60950-1	EN60950-1,IEC60950-1	EN60950-1,IEC60950-1
Vibration	IEC 60068-2-6	IEC 60068-2-6	IEC 60068-2-6
Shock	IEC 60068-2-27	IEC 60068-2-27	IEC 60068-2-27
Freefall	IEC 60068-2-32	IEC 60068-2-32	IEC 60068-2-32
Surge	ITU-T K.21 IEC-61643-11	ITU-T K.21 IEC-61643-11	ITU-T K.21 IEC-61643-11

Dimensions



Ordering Information

Outdoor PoECam L2 Plus Managed Gigabit Ethernet PoE Switches					
	**H80-044-30-150** • 4xGbE PoE (30W) + 2xGbESFP + 2xGbE RJ45 • 100~240VAC,150W power budget		**H80-044-60-250** • 4xGbE UPoE (60W) + 2xGbE SFP + 2xGbE RJ45 • 100~240VAC, 250W power budget		**H80-084-30-250** • 8xGbE PoE (30W) + 4xGbE SFP • 100~240VAC, 250W 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		Corner Mount Bracket
		
AT-100 Pole Mount Adapter	**AT-101** Pole Mount Adapter	**AT-200** Corner Mount Adapter

I36/I39 Series

UPoE Injector

I46/I49 Series

Outdoor UPoE Injector

UPoE Injector series

I46-100/I49-100

I46-101/I49-101

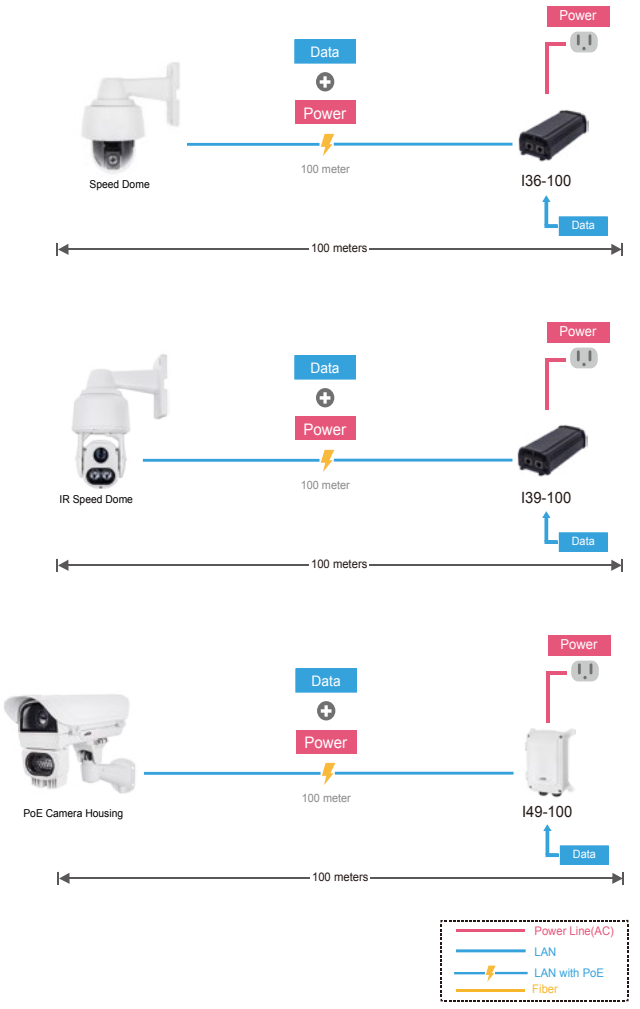
I36-100/I39-100

AETEK provides a full range of UPoE injectors to power variety of PDs and pass data over network cables remotely. Indoor/ outdoor UPoE 60W / 95W middle-span PoE injector are available for specific PDs requiring high power consumption, such as IP speed dome cameras, PoE cameras or PoE camera housing equipped with blower, heater, illuminator and wiper.

Features

- Provide 60W of PoE Power Feeding on 4-pairs (I36-100, I39-100)
- Provide 95W of PoE Power Feeding on 4-pairs (I46-100/101, I49-100/101)
- 6KV PoE surge protection
- 10KV power surge protection (I46-100/101, I49-100/101)
- Remote power feeding up to 100m
- IEEE 802.3 at compliant
- Automatic detection and protection of non–standard Ethernet terminals
- Supports 10/100/1000Base-T LAN environment
- Safe and reliable power to PoE cameras or WLAN access points
- Plug-and-Play installation

Applications

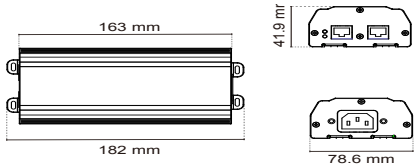


Technical Specifications - Hardware

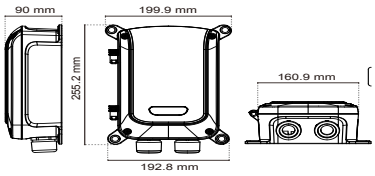
	I36-100	I39-100	I46-100 / I46-101	I49-100 / I49-101
Networking Specifications				
Gigabit Ethernet 10/100/1000Mbps (RJ45)	1	1	1	1
IEEE 802.3at Power over Ethernet	Support	Support	Support	Support
60W Ultra Power over Ethernet	Support	Support	Support	Support
95W Ultra Power over Ethernet	-	Support	-	Support
Power Specifications				
Input Voltage	100VAC ~ 240VAC	100VAC ~ 240VAC	100VAC ~ 240VAC	100VAC ~ 240VAC
Output Power	54VDC, max. 60W	54VDC, max. 95W	54VDC, max. 60W	54VDC, max. 95W
Power Pin Assignment	1/2 (+), 3/6 (-); 4/5 (+), 7/8 (-)	1/2 (+), 3/6 (-); 4/5 (+), 7/8 (-)	1/2 (+), 3/6 (-); 4/5 (+), 7/8 (-)	1/2 (+), 3/6 (-); 4/5 (+), 7/8 (-)
Surge Protection Data / PoE Port	6KV	6KV	6KV	6KV
Surge Protection for AC Power	4KV	4KV	10KV	10KV
Mechanical Specifications				
Dimensions (WxHxD)	182 x 78.6 x 41.9 mm	182 x 78.6 x 41.9 mm	255.2 x 199.9 x 90 mm	255.2 x 199.9 x 90 mm
LED Indicators	Power, PoE	Power, PoE	Power, PoE	Power, PoE
Weight	0.58 kg (1.28 lb)	0.58 kg (1.28 lb)	3 kg (6.61 lb)	3.35. kg (7.38 lb)
Environmental Specifications				
Weather Rating	-	-	IP67	IP67
Vandal Proof	-	-	IK10	IK10
Operating Temperature	-10°C ~ 50°C (14°F ~ 122°F)	-20°C ~ 30°C (-4°F ~ 86°F) @ 95W -20°C ~ 40°C (-4°F ~ 104°F) @ 80W -20°C ~ 50°C (-4°F ~ 122°F) @ 70W	-40°C ~ 60°C (-40°F ~ 140°F)	-40°C ~ 60°C (-40°F ~ 140°F)
Storage Temperature	-20°C ~ 70°C (-4°F ~ 158°F)	-20°C ~ 70°C (-4°F ~ 158°F)	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)
Operating Humidity	10% to 90% non-condensing	10% to 90% non-condensing	10% to 90% non-condensing	10% to 90% non-condensing
Certifications				
EMC	CE, FCC, VCCI, C-Tick	CE, FCC, VCCI, C-Tick	CE, FCC, VCCI, C-Tick	CE, FCC, VCCI, C-Tick
Safety	EN60950-1, IEC60950-1	EN60950-1, IEC60950-1	EN60950-1, IEC60950-1	EN60950-1, IEC60950-1

Dimensions

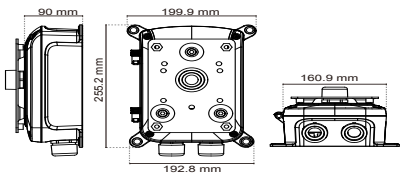
I36-100 / I39-100 :



I46-100 / I49-100:



I46-101 / I49-101:



Ordering Information

UPoE Injectors			
	**I36-100** • Indoor GbE 60W PoE Injector • 100~240VAC Input		**I39-100** • Indoor GbE 95W PoE Injector • 100~240VAC Input
	**I46-100/I49-100** • Outdoor GbE 60W/95W PoE Injector • 100~240VAC Input		**I46-101/I49-101** • Outdoor GbE 60W/95W PoE Injector • 100~240VAC Input

Optional Accessories

Pole Mount Brackets		Corner Mount Bracket
		
AT-100 Pole Mount Adapter	**AT-101** Pole Mount Adapter	**AT-200** Corner Mount Adapter

E19/E29 Series

Simple to Install

Support 30/60/95W PSE

PoE Extender

30/60/95W PoE | IP67 | Plug & Play | Ethernet Surge Protection | Wall Mountable | Auto MDI/MDI-X

E19 series

Indoor 30/60/95W PoE Extender

802.3at End-span Mid-span 802.3af

30/60/95W PoE

Plug & Play

Wall Mountable

Auto MDI/ MDI-X

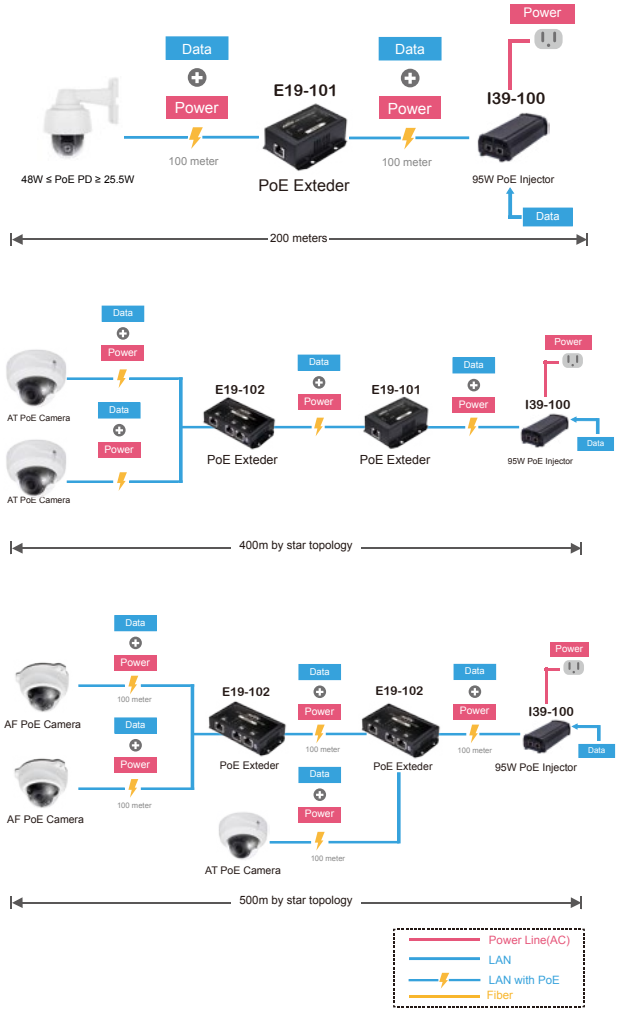
The E19 series, a small form factor, is an ideal for indoor environments where two units of E19 series can be daisy-chain to prolong range of PoE devices such as PoE cameras, wireless APs reaching up to 300m from end to end or up to 500m by star topology.

No power is required for E19 since it is powered by PoE injector, middle-span Hub, or PoE switch over one networking cable extending Ethernet range depending on PD's power consumptions and PSE's power budget per port.

Features

- Small form factor with RJ45 connectors
- Saving costs of re-wiring and add-on Ethernet switches
- Plug-and-Play installation
- Reaching beyond restricted 100m Ethernet distance
- Supporting PSEs providing 95W/60W/30W PoE
- Daisy-chain 2 units of E19-101 reaching 300m from end to end
- Daisy-chain 2 units of E19-102 reaching 500m by star topology
- Complete unit does not require power
- Extending range up to 200m for speed dome requiring 48W

Applications



Technical Specifications -Hardware

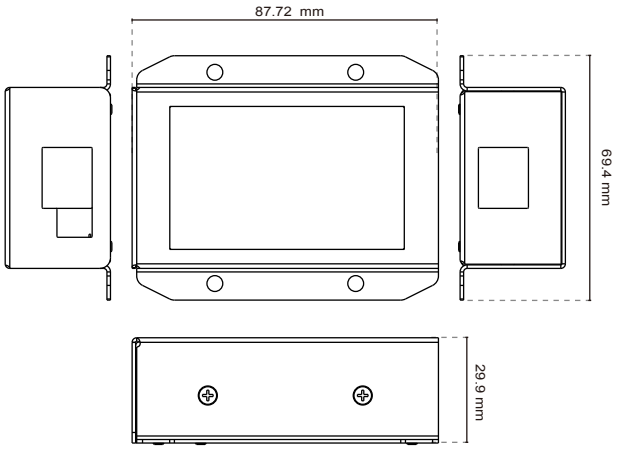
	E19-101	E19-102
Networking Specifications		
Total Fast Ethernet Ports	2	3
Mac Table	2 k	2 k
Bandwidth	Max. 100 Mbps	Max. 100 Mbps
Switching Capacity	1 Gbps	1 Gbps
Auto-MDI/MDI-X, Auto-Negotiation	Supported	Supported
Power Specifications		
Extension Distance	2 Units, Daisy-chain Installation Up to 300M Extension (No Local Power Required)	2 Units, Daisy-chain Installation Up to 500M Extension (No Local Power Required)
PD Input Power	50~57VDC , max. 72W	50~57VDC , max. 72W
PSE Output Power	48~55VDC, max. 70W	48~55VDC, max. 70W
PD Power Pin Assignment	1/2 (+), 3/6 (-); 4/5 (+), 7/8 (-)	1/2 (+), 3/6 (-); 4/5 (+), 7/8 (-)
PSE Power Pin Assignment	1/2 (+), 3/6 (-); 4/5 (+), 7/8 (-)	1/2 (+), 3/6 (-); 4/5 (+), 7/8 (-)
PD Fast Ethernet (RJ45)	1	1
PSE Fast Ethernet (RJ45)	1	2
PSE Power On/Off Dip Switch	Support	Support
Mechanical Specifications		
Dimensions (WxHxD)	87.72 x 69.4 x 29.9 mm	108 x 58 x 22 mm
LED Indicators	Power, LAN, PoE	Power, LAN, PoE
Weight	0.21 kg (0.46 lb)	0.19 kg (0.42 lb)
Environmental Specifications		
Operating Temperature	0°C ~ 50°C (32°F ~ 122°F)	0°C ~ 50°C (32°F ~ 122°F)
Storage Temperature	-20°C ~ 70°C (-4°F ~ 158°F)	-20°C ~ 70°C (-4°F ~ 158°F)
Operating Humidity	10% to 90% non-condensing	10% to 90% non-condensing
Certifications		
EMC	CE, FCC, VCCI, C-Tick	CE, FCC, VCCI, C-Tick

Ordering Information

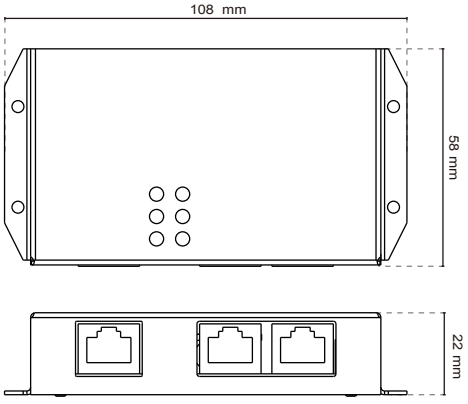
Indoor PoE Extenders			
	**E19-101** • Indoor 1-Port PoE Extender		**E19-102** • Indoor 2-Port PoE Extender

Dimensions

E19-101:



E19-102:



E29 series

Outdoor 30/60/95W PoE Extender

802.3at End-span Mid-span 802.3af | 30/60/95W PoE | Plug & Play | Wall Mountable | Auto MDI/MDI-X | Ethernet Surge Protection | IP67 | IK10 | -40~60°C

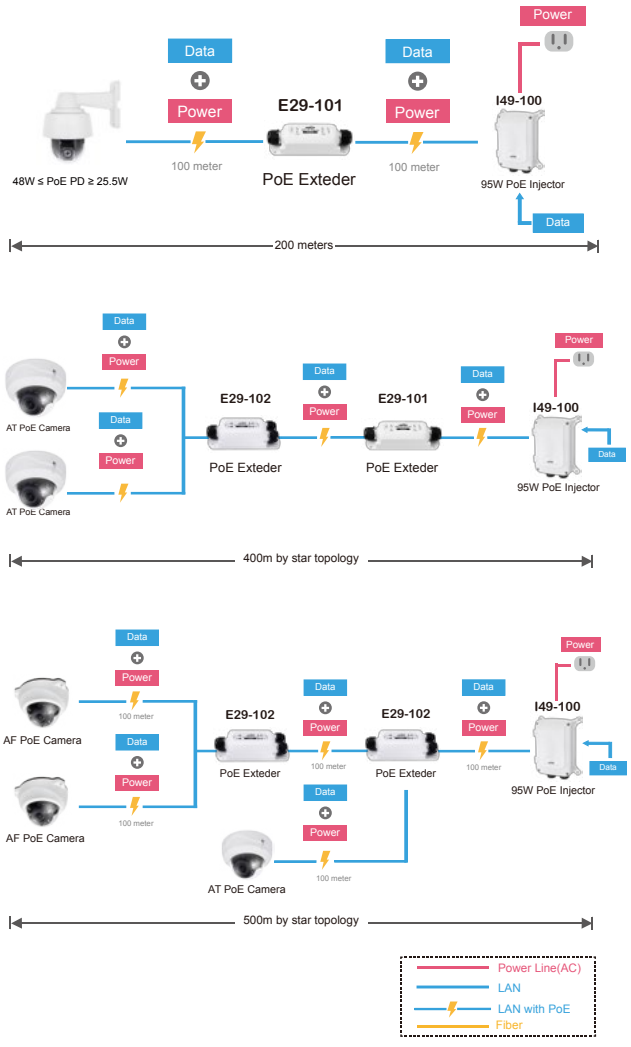
The E29 series is IP67-rated & harden-graded PoE Extender, operating temperature from -40°C ~60°C. It's ideal for harsh outdoor environment where two units of E29 can be daisy-chain to prolong range of PoE devices such as PoE cameras, wireless APs reaching up to 300m from end to end or up to 500m by star topology.

No power adapter is required for E29 PoE Extender since it is powered by PoE Injector, Middle-Span Hub, or PoE switch over one networking cable extending Ethernet range depending on PD's power consumptions and PSE's power budget per port.

Features

- Saving costs of re-wiring and add-on Ethernet switches
- Plug-and-Play installation
- 6KV PoE surge protection
- Reaching beyond restricted 100m Ethernet distance
- Supporting PSEs providing 95W/60W/30W
- Daisy-chain 2 units of E29-101 reaching 300m from end to end
- Daisy-chain 2 units of E29-102 reaching 500m by star topology
- Complete unit does not require power adapter
- Extending range up to 200m for outdoor speed dome requiring 48W
- IP67 / IK10

Applications



Technical Specifications -Hardware

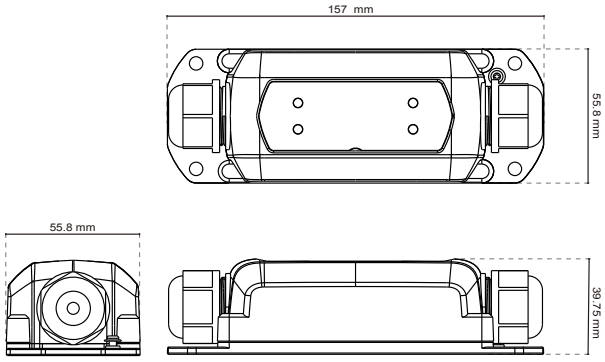
	E29-101	E29-102
Networking Specifications		
Total Fast Ethernet Ports	2	3
Mac Table	2 k	2 k
Bandwidth	Max. 100 Mbps	Max. 100 Mbps
Switching Capacity	1 Gbps	1 Gbps
Auto-MDI/MDI-X, Auto-Negotiation	Supported	Supported
Power Specifications		
Extension Distance	2 Units, Daisy-chain Installation Up to 300M Extension (No Local Power Required)	2 Units, Daisy-chain Installation Up to 500M Extension (No Local Power Required)
PD Input Power	50~57VDC, max. 72W	50~57VDC, max. 72W
PSE Output Power	44~55VDC, max. 70W	44~55VDC, max. 70W
PD Power Pin Assignment	1/2 (+), 3/6 (-); 4/5 (+), 7/8 (-)	1/2 (+), 3/6 (-); 4/5 (+), 7/8 (-)
PSE Power Pin Assignment	1/2 (+), 3/6 (-); 4/5 (+), 7/8 (-)	1/2 (+), 3/6 (-); 4/5 (+), 7/8 (-)
PD Fast Ethernet (RJ45)	1	1
PSE Fast Ethernet (RJ45)	1	2
PSE Power On/Off Dip Switch	Support	Support
Surge Protection /each PoE Port	6KV	6KV
Mechanical Specifications		
Dimensions (WxHxD)	157 x 55.8 x 39.75 mm	167.5 x 72.8 x 39.8 mm
LED Indicators	Power, LAN, PoE	Power, LAN, PoE
Weight	0.3 kg (0.66 lb)	0.36 kg (0.79)
Environmental Specifications		
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)
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)
Operating Humidity	10% to 90% non-condensing	10% to 90% non-condensing
Certifications		
EMC	CE, FCC, VCCI, C-Tick	CE, FCC, VCCI, C-Tick
Surge	IEC-61000-4-5	IEC-61000-4-5

Ordering Information

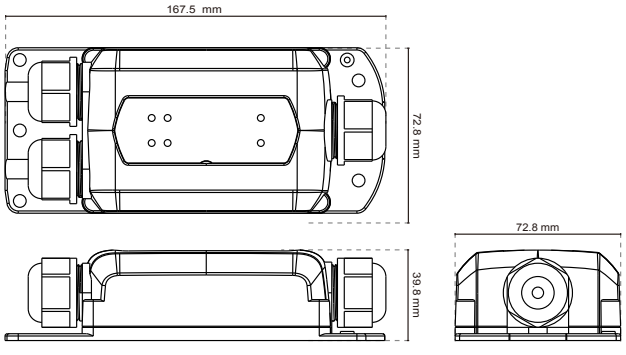
Outdoor PoE Extenders			
	**E29-101** • Outdoor 1-Port PoE Extender		**E29-102** • Outdoor 2-Port PoE Extender

Dimensions

E29-101:



E29-102:



SD-101/SD-201

Support 30/60/95W PoE

PoE Surge Protector

SD series

PoE Surge Protectors

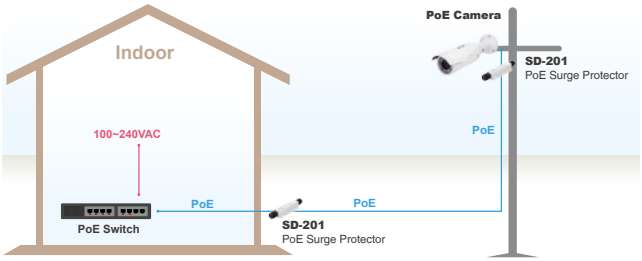
Ethernet Surge Protection | IP67 | -40~85°C | 30/60/95W PoE | 10M/100M 1000M | Plug & Play

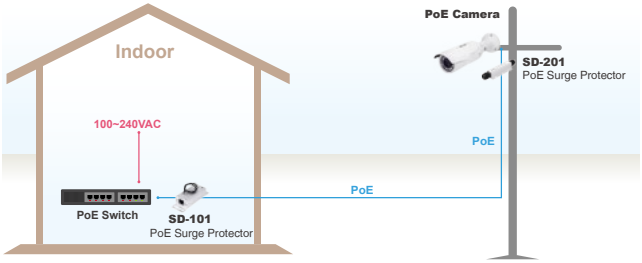
The SD series is a surge protector keeping PoE switches, PoE PDs, and any IP device safe from lightning & other forms of electrical interference such as power surges and spikes over networking cables. There are two sub-models classified as harden-graded surge protectors operating between -40°C and 85°C under harsh weather conditions & plug-and-play surge protectors defending the surge up to 16KV. The SD-101 is deployed beside PoE switches, inside junction boxes or power boxes. Besides general specifications of SD-101, the SD-201 has IP67/ IK10 rated metal enclosure to protect outdoor IP devices such as IP cameras and wireless APs.

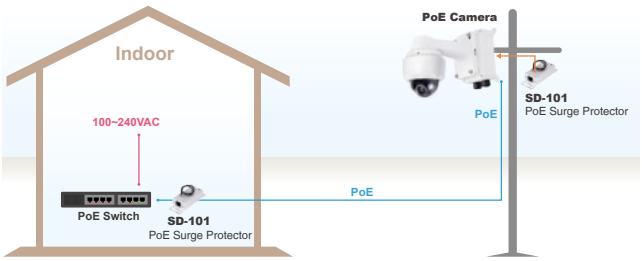
Features

- Supporting PoE IP devices equipped with GbE/FE PoE (802.3af / 802.3at / 60W UPoE / 95W UPoE)
- Protecting eight wires of networking cable including PoE
- Up to 16KV protection
- Failure Indicator
- IP67- rated metal enclosure (SD-201 only)
- Operating temperature from -40°C to 85 °C
- Wall and pole-mounted options

Applications





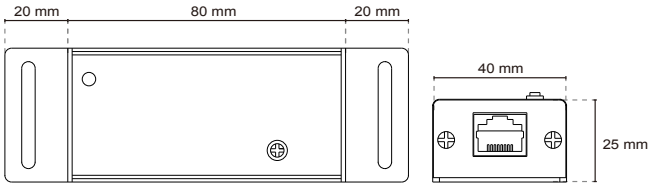


Specifications

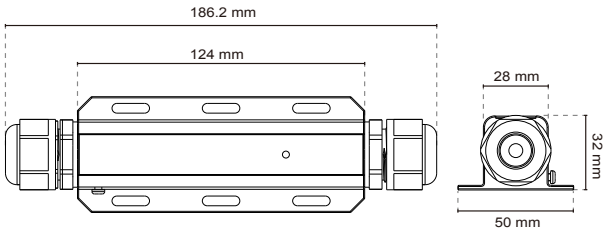
	SD-101	SD-201
Specifications		
Number of Ports	1	1
Pass Through Data Rates	10/100/1000 Mbps	10/100/1000 Mbps
Max Discharge Current (8/20us, 1KA per Line)	8KA,16KV	8KA,16KV
Maximum Operation DC Voltage	60VDC	60VDC
Maximum Operation DC Current	1A for 2 pair, 2A for 4 pair, 95W maximum	1A for 2 pair, 2A for 4 pair, 95W maximum
Common Mode Protection Level (10/700us)	20KV	20KV
Differential Mode Protection Level (10/700us)	4KV	4KV
Clamping Voltage (Line to GND)	600V	600V
Clamping Voltage (Line to Line)	20V	20V
Insertion Loss @ 10MHz/100MHz	1db	1db
Return Loss @ 10MHz/100MHz	-20db	-20db
Response Time	5ns	5ns
Mechanical Specifications		
Dimension (WxHxD)	80 x 40 x 25 mm	186.2 x 50 x 32 mm
Weight	0.18KG	0.27KG
Connectors	RJ45 x 2	PG16 (RJ45) x 2
Environmental Specifications		
Weather Rating	-	IP67
Operating Temperature	-40°C~ 85°C (-40°F~ 185°F)	-40°C~ 85°C (-40°F~ 185°F)
Storage Temperature	-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
Certifications		
EMC	CE, FCC, VCCI, C-Tick Class A	CE, FCC, VCCI, C-Tick Class A
Safety	EN60950-1, IEC60950-1	EN60950-1, IEC60950-1
Surge	ITU-T K.21 IEC-61643-21 IEC-61000-4-5 TIA-968-A (FCC Part68)	ITU-T K.21 IEC-61643-21 IEC-61000-4-5 TIA-968-A (FCC Part68)

Dimensions

SD-101:



SD-201:



Ordering Information

Surge Protectors			
	**SD-101** • Indoor 1 Port • 10/100/1000Mbps, 16KV Surge Protector		**SD-201** • Outdoor 1 Port • 10/100/1000Mbps, 16KV Surge Protector

Accessories Series

PB-024 Series

Outdoor 24VAC Power

I46/I49 Series

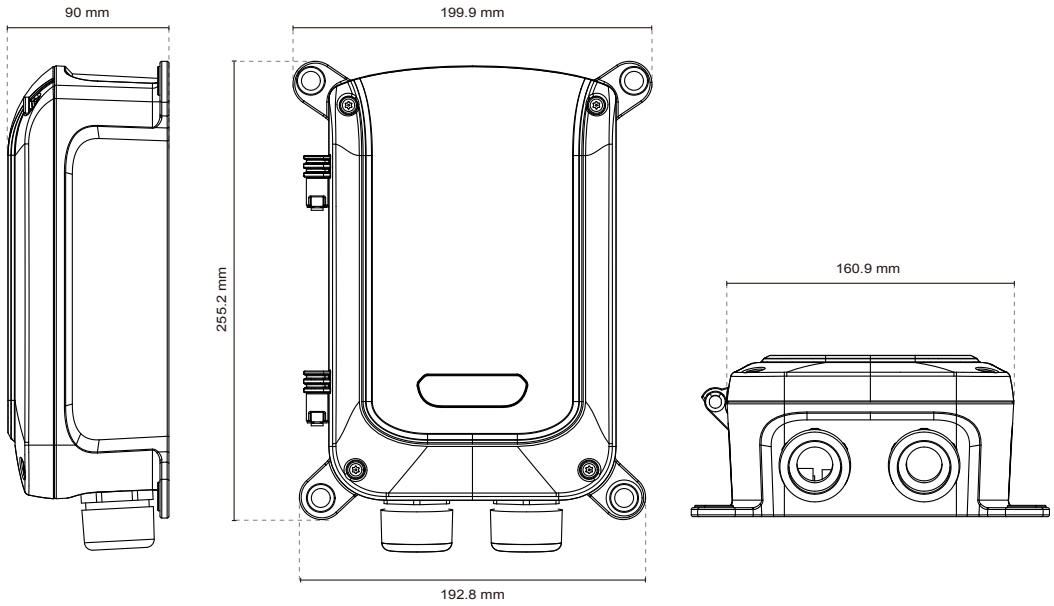
Outdoor UPoE Injector

PB-024-1AC

Outdoor 24VAC Power Box

Technical Specifications

Model	PB-024-1AC
Construction	Aluminum
Dimensions	255.2 x 199.9 x 90 mm
Input Power	115/230VAC
Output Power	24VAC/6A (144watts)
Weather Rating	IP67
Vandal Proof	IK10
Color	White
Weight	3. kg (6.61 lb)
Connectors	M25x2
Operating Temperature	-40°C ~ 60°C (-40°F ~ 140°F)
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)
Operating Humidity	10% to 90% non-condensing
Certification	CE, FCC, LVD
Supported Models	Camera Housing: A10/P20 Series Pole Mount: AT-100, AT-101 Corner Mount: AT-200 Surge: SD-101

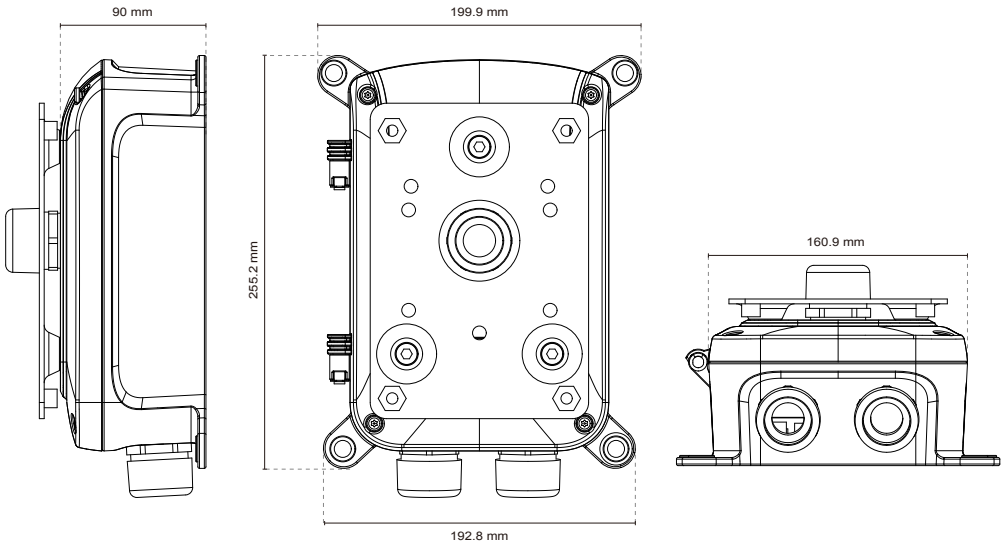


PB-024-2AC

Outdoor 24VAC Power/Junction Box

Technical Specifications

Model	PB-024-2AC
Construction	Aluminum
Dimensions	255.2 x 199.9 x 90 mm
Input Power	115/230VAC
Output Power	24VAC/6A (144watts)
Weather Rating	IP67
Vandal Proof	IK10
Color	White
Weight	3.35 kg (7.38 lb)
Connectors	PF 3/4"x1 + M25x2
Operating Temperature	-40°C ~ 60°C (-40°F ~ 140°F)
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)
Operating Humidity	10% to 90% non-condensing
Certification	CE, FCC, LVD
Supported Models	Camera Housing: A10/P20 Series Mount Bracket: BK-100, BK-101 Pole Mount: AT-100, AT-101 Corner Mount: AT-200 Surge: SD-101

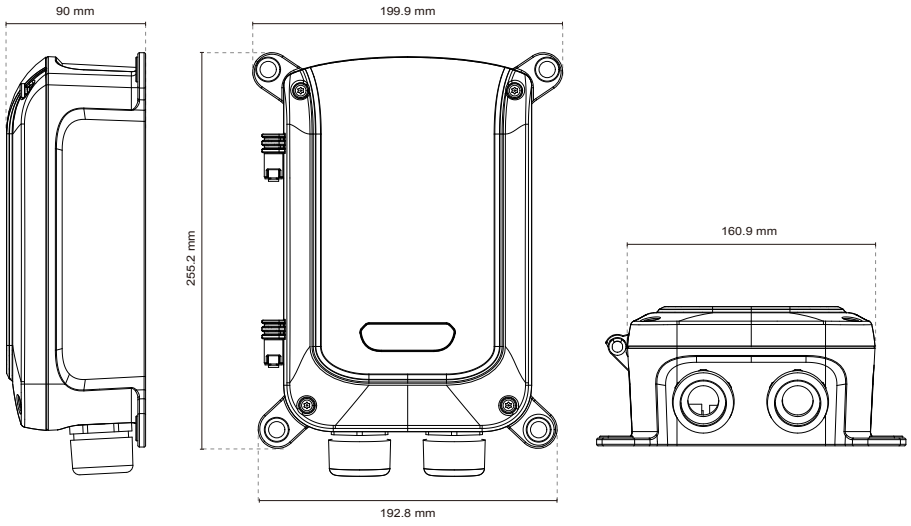


I46-100/I49-100

Outdoor 60W/95W UPoE Injector

Technical Specifications

Model	I46-100	I49-100
Construction	Aluminum	
Dimensions	255.2 x 199.9 x 90 mm	
Input Power	100VAC~240VAC	
Output Power	54VDC, max. 60W	54VDC, max. 95W
Data/PoE Surge Protection	6KV	
AC Power Surge Protection	10KV	
Weather Rating	IP67	
Vandal Proof	IK10	
Color	White	
Weight	3. kg (6.61 lb)	
Connectors	M25x2	
Operating Temperature	-40°C ~ 60°C (-40°F ~ 140°F)	
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)	
Operating Humidity	10% to 90% non-condensing	
Certification	CE, FCC,VCCI, C-Tick, LVD	
Supported Models	Camera Housing: A50/P50/P60 Series Pole Mount: AT-100, AT-101 Corner Mount: AT-200	

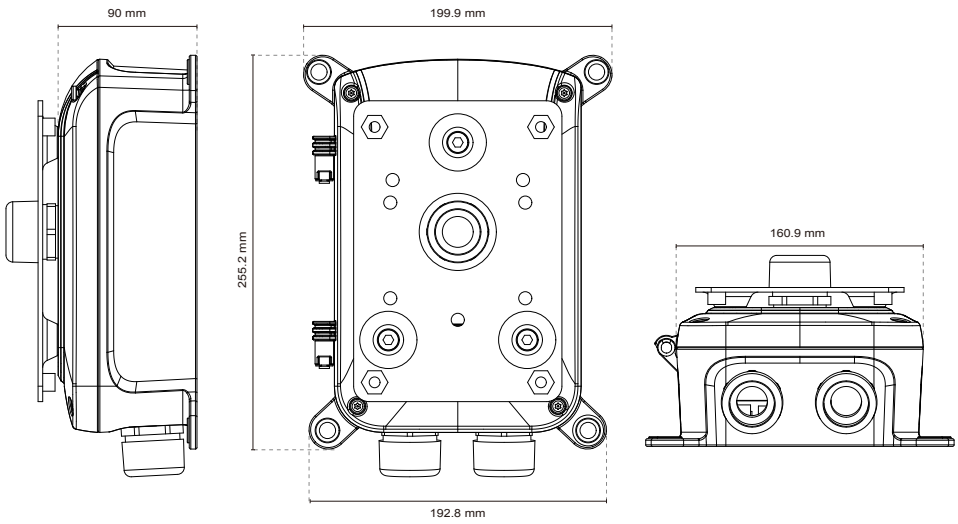


I46-101/I49-101

Outdoor 60W95W UPoE Injector/Junction Box

Technical Specifications

Model	I46-101	I49-101
Construction	Aluminum	
Dimensions	255.2 x 199.9 x 90 mm	
Input Power	100VAC~240VAC	
Output Power	54VDC, max. 60W	54VDC, max. 95W
Data/PoE Surge Protection	6KV	
AC Power Surge Protection	10KV	
Weather Rating	IP67	
Vandal Proof	IK10	
Color	White	
Weight	3.35. kg (7.38 lb)	
Connectors	PF 3/4"x1 + M25x2	
Operating Temperature	-40°C ~ 60°C (-40°F ~ 140°F)	
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)	
Operating Humidity	10% to 90% non-condensing	
Certification	CE, FCC,VCCI, C-Tick, LVD	
Supported Models	Camera Housing: A50/P50/P60 Series Mount Bracket: BK-100, BK-101 Pole Mount: AT-100, AT-101 Corner Mount: AT-200	



3F, No.192, Lien-Cheng Rd., Chung-Ho, New Taipei City, 235, Taiwan, R.O.C. T: +886-2-82452822 E:sales@aetektec.com W: www.aetektec.com