



# PoE Brochure

- PoE Network Products
- Long Range PoE Solution
- Industrial PoE Products







# A Leading IP Surveillance Solution Provider

VIVOTEK Inc. (TAIEX: 3454) was founded in Taiwan in 2000. The Company markets VIVOTEK solutions worldwide, and has become a leading brand in the global IP surveillance industry. Its comprehensive solutions include network cameras, video servers, network video recorders, PoE solutions, and video management software. Through the growing proliferation of IoT, VIVOTEK aspires to become the Eye in IoT by drawing on its expansive technological capabilities in image and audio.

The Company has established offices and subsidiaries in the United States

(California), Europe (Netherlands), India (Delhi), Middle East (Dubai), Latin America (Mexico), and Japan in 2008, 2013, 2014, 2015, 2016, and 2017, respectively. To create a sound industrial ecosystem, VIVOTEK has expanded strategic alliances with leading international software and hardware partners and works with over 183 authorized distributors across 116 countries.





CONVERGENCE of

 Video

 VOice

 COrmunication

 TEKnology



## Environmental Commitment

With the increasing environmental challenges of our time, VIVOTEK is deeply aware of the importance of coexisting with the environment for sustainable development. VIVOTEK has implemented a comprehensive, eco-friendly manufacturing policy applied to the product design, component selection, production, quality

testing, packaging and shipping processes, effectively minimizing our carbon footprint on the environment. Together, we can be responsible stewards of a vibrant and sustainable future.

## Green Design Guidelines

- Eliminating the use of hazardous substances (HSF)
- Easy disassembly and recycling (WEEE)
- Eco-design (ErP)

# Index

<b>Commercial PoE Switch</b>	<b>7</b>
VivoCam L2+ Managed PoE Switch -----	7
VivoCam Web Smart Managed PoE Switch-----	10
10G L2+ Managed Fiber Switch -----	13
Unmanaged PoE Switch-----	15
<b>Outdoor Unmanaged PoE Switch</b>	<b>18</b>
<b>PoE Injector</b>	<b>21</b>
<b>Long Range PoE Solution</b>	<b>23</b>
PoE Extender-----	23
Hyper PoE Extender -----	25
EPoC Extender -----	27
<b>Industrial PoE Products</b>	<b>31</b>
Industrial VivoCam L2+ Managed PoE Switch-----	31
Industrial Unmanaged PoE Switch-----	34
Industrial PoE Injector-----	37
Industrial Media Converter-----	39
<b>Accessories</b>	<b>41</b>
Cabinet -----	41
Outdoor Enclosures -----	43
CaMate Illuminators -----	46
CaMate Accessories -----	50
Outdoor PoE Surge Protector-----	51
PoE Accessories -----	52

## Commercial PoE Switch

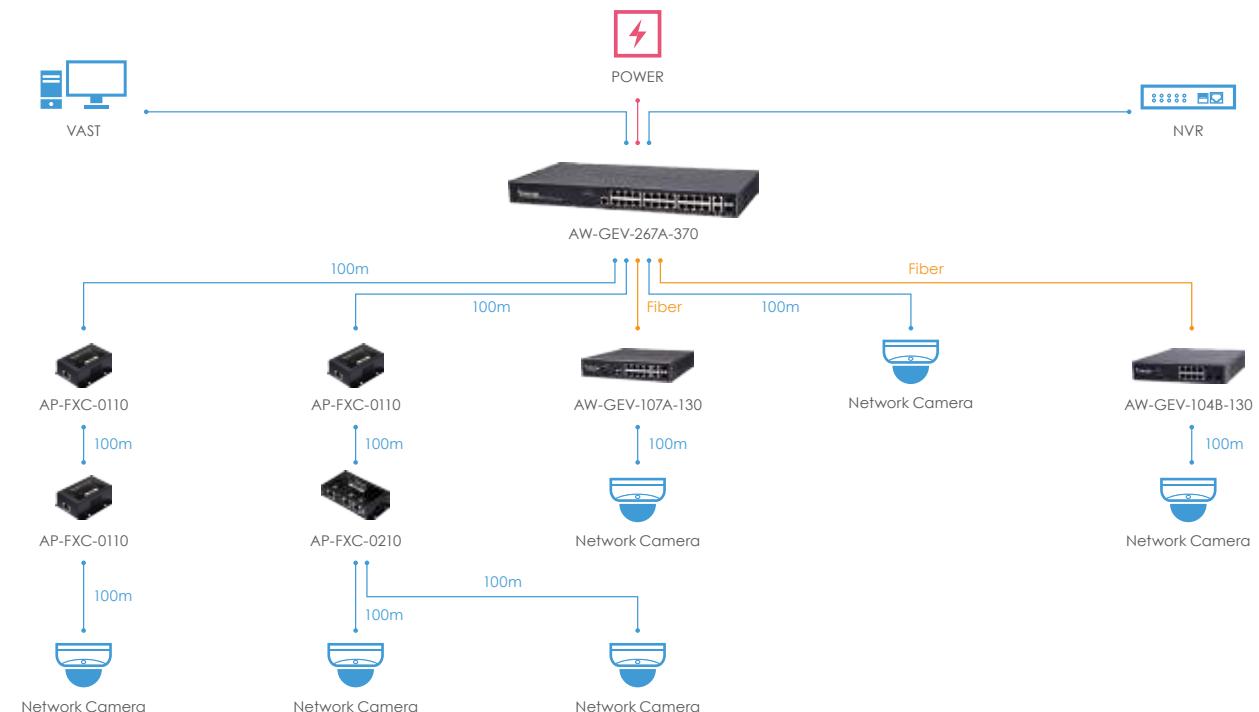
# VivoCam L2+ Managed PoE Switch



The VivoCam L2+ series is the Layer 2 Plus managed PoE switch with IP surveillance management functions. This switch is not only a standard Layer 2 Plus managed PoE switch, but also able to set up and configure VIVOTEK IP cameras, video servers and allows users to find all VIVOTEK devices and deploy a surveillance network system automatically.

Managing IP Surveillance	Managed Layer 2 Features
<ul style="list-style-type: none"><li>• Auto Discovery and Classification of Network Devices</li><li>• Batch Camera Configuration-File Import &amp; Export</li><li>• Batch Camera Network/Login Configuration</li><li>• Auto Generated Surveillance Topology View</li><li>• Easy Tag VLAN Configuration in Topology View</li><li>• Smart Device-Management In Topology View</li><li>• PoE On/Off Control in Topology View</li><li>• Display IP Camera Live Stream in Topology View, Floor View and Google Map View</li><li>• Support 3rd Party ONVIF IP Cameras</li></ul>	<ul style="list-style-type: none"><li>• DHCP Server</li><li>• IPv4/IPv6 L3 Static Route</li><li>• IEEE802.1Q VLAN (up to 4096), Double Tag (Q-in-Q)</li><li>• IEEE802.1v Protocol VLAN and MAC-based VLAN</li><li>• IEEE802.1d (STP), 802.1w (RSTP) and 802.1s (MSTP)</li><li>• IEEE802.3ad Link Aggregation Control Protocol (LACP)</li><li>• SNMP v1/v2c/v3 for Management</li><li>• HTTPS/SSL/SSHv1&amp;v2 for Secured Connection</li></ul>

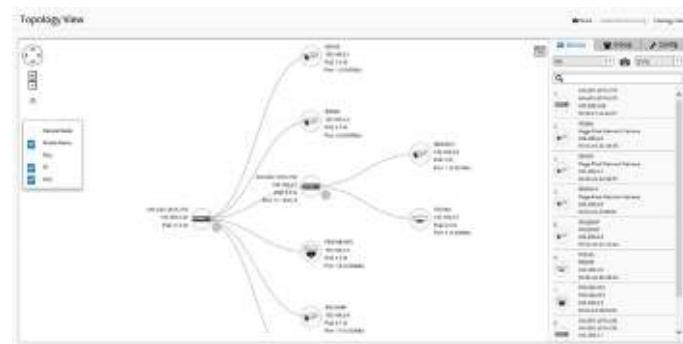
## Application



## • Feature Highlights - Managing IP Surveillance

## Auto Discovery

## Topology View



## Floor View



## Google Map



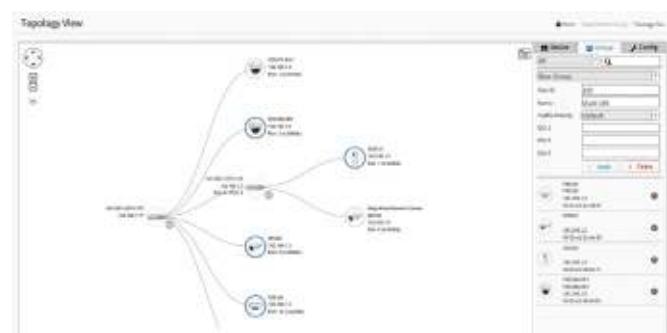
Device Management



## Device Status



## VLAN Setting



## Live Stream



## • Specifications

VivoCam L2+ Managed PoE Switch		
Model	AW-GEV-107A-130	AW-GEV-267A-370
		
Short Highlight	8xGE PoE + 2xGE Combo + 1xRJ45 Console	24xGE PoE + 2xGE Combo + 1xRJ45 Console
<b>Ethernet</b>		
10M/100M/1G RJ45 PoE Port	8/Per Port up to 30W	24/Per Port up to 30W
1G Combo Port (RJ45/SFP)	2	2
RJ45 Console Port	1	1
<b>PoE Function</b>		
Number of PoE Port	8	24
PoE Output Power	Per Port 54VDC, Max. 30W	Per Port 54VDC, Max. 30W
Total PoE Power Budget	130W	370W
Power Pin Assignment	1/2(+), 3/6(-)	1/2(+), 3/6(-)
PoE Management: PoE Config/Alive Checking/ Scheduling/Power Delay	Supported	Supported
IEEE 802.3at/af Power over Ethernet	Supported	Supported
<b>Ethernet Performance</b>		
Switch Capacity	20 Gbps	52 Gbps
MAC Address	8K	8K
Jumbo Frames	9600 Bytes	9600 Bytes
Auto-MDI/MDI-X, Auto-Negotiation	Supported	Supported
<b>Managing IP Surveillance Management</b>		
Auto Search VIVOTEK Device	Supported	Supported
Surveillance Management List	Supported	Supported
Easy Tag VLAN in Topology View	Supported	Supported
<b>Managing IP Surveillance E-MAP View</b>		
Topology View	Supported	Supported
Floor View	Supported	Supported
Google Map View	Supported	Supported
<b>Managing IP Surveillance Maintenance</b>		
VIVOTEK Camera Configuration File Export/Import	Supported	Supported
Traffic Monitoring	Supported	Supported
<b>L2 Switching Feature</b>		
IEEE 802.1p Quality of Service	Supported	Supported
IEEE 802.1q Tag based VLAN	Supported	Supported
IEEE 802.1d/w/S STP/RSTP/MSTP	Supported	Supported
IEEE 802.3ad Link Aggregation Control Protocol	Supported	Supported
IEEE 802.1X Authorization	Supported	Supported
<b>L3 Switching Feature</b>		
IP Host Table	Supported	Supported
Static Route (IPv4/IPv6)	Supported	Supported
Static ARP	Supported	Supported
DHCP Server	Supported	Supported
<b>General</b>		
Power Input	100~240V AC / 50~60Hz	100~240V AC / 50~60Hz
Surge Protection	Per port 6KV	Per port 6KV
Dimensions	220 (L) x 242.4 (W) x 44 (H) mm	442 (L) x 211 (W) x 44 (H) mm
Operating Temperature	0°C ~ 50°C (32°F ~ 122°F)	0°C ~ 50°C (32°F ~ 122°F)

## Commercial PoE Switch

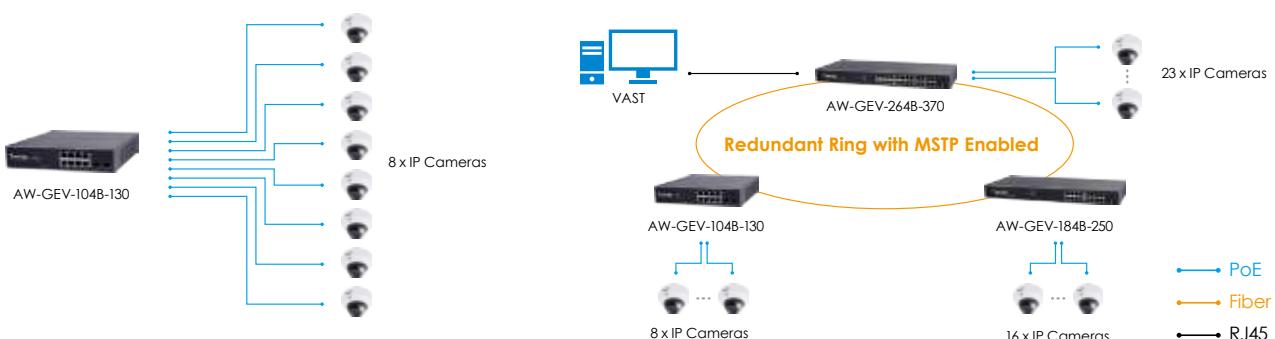
# VivoCam Web Smart Managed PoE Switch



The AW-GEV Web Smart series is a VivoCam web smart managed PoE switch, combining powerful web smart managed features with graphic view functions, providing better functionality and usability. With single AW-GEV Web Smart series allows users to find all network devices and deploy a network system automatically. The AW-GEV Web Smart series also provides high performance HW and environmental flexibility for SMBs and Enterprises. In addition, embedded Surveillance features Graphic Views, such as Topology View/Floor View/Map View for controlling and understanding network structure and device status, as well as Google Map integration to view system status for outdoor applications. The device status and traffic monitoring functions also help users clarify and troubleshoot any connection or device issues. The AW-GEV Web Smart series is ideal for delivering management simplicity, better user experience, and lowering total cost of ownership.

Managing IP Surveillance	Web Smart Managed Features
<ul style="list-style-type: none"><li>Auto Discovery and Classification of Network Devices</li><li>Batch Camera Configuration-File Import &amp; Export</li><li>Batch Camera Network/Login Configuration</li><li>Auto Generated Surveillance Topology View</li><li>Easy Tag VLAN Configuration in Topology View</li><li>Smart Device-Management in Topology View</li><li>PoE On/Off Control in Topology View</li><li>Display IP Camera Live Stream in Topology View, Floor View and Google Map View</li><li>Support 3rd Party ONVIF IP Cameras</li></ul>	<ul style="list-style-type: none"><li>DHCP Server</li><li>IEEE802.1Q VLAN (up to 4096), Double Tag (Q-in-Q)</li><li>IEEE802.1v Protocol VLAN and MAC-based VLAN</li><li>IEEE802.1d (STP), 802.1w (RSTP) and 802.1s (MSTP)</li><li>IEEE802.3ad Link Aggregation Control Protocol (LACP)</li><li>SNMP v1/v2c/v3 for Management</li><li>IEEE802.3az Energy-Efficient Ethernet</li></ul>

## Application



- Feature Highlights - Managing IP Surveillance

## Auto Discovery

## Topology View

The screenshot shows the Topology View interface of Cisco Network Assistant. The main area displays a network topology with several nodes, each represented by a different icon (routers, switches, hosts, and servers) and labeled with their names and IP addresses. Lines connect the nodes to show the physical or logical links between them. On the left, there is a legend for 'Network Elements' and a toolbar with icons for zooming and selecting. On the right, a tree-based navigation pane titled 'Network Structure' lists the network components, and a status bar at the bottom provides information about the selected node.

## Floor View

A screenshot of a floor plan interface. The main area shows a building layout with several rooms and hallways. Eight green location markers are placed on the floor plan, indicating specific points of interest. To the right of the floor plan is a sidebar containing a table with columns for 'Name', 'IP Address', 'MAC Address', and 'Status'. The table lists eight devices, each with a unique name like 'Rear Camera' and 'Front Camera', their IP addresses (e.g., 192.168.1.12), MAC addresses (e.g., 00:0C:29:00:00:12), and status indicators (e.g., 'Normal').

## Google Map

A map view showing the locations of 100+ sites across a city area. The map displays various landmarks and street names. A legend on the right side indicates different types of sites, such as 'High Priority Locations' (orange), 'Medium Priority Locations' (green), and 'Low Priority Locations' (grey). A sidebar on the right lists categories for the sites, including 'High Priority Locations', 'Medium Priority Locations', 'Low Priority Locations', 'All Locations', and 'All Locations by Category'. The map also includes a scale bar and a compass rose.

## Device Management

The screenshot shows the Zabbix Topology View interface. In the center, a detailed configuration window for a device named 'FE8180' is open. The device type is set to 'MikroTik IP Router'. The IP address is listed as '192.168.1.8'. Below the main window, several icons provide quick access to management functions like Logon, Diagnostics, Live Status, Management, Default, and Web Admin. To the right of the main window, a list of connected devices is displayed, including 'FE8190' (IP 192.168.1.9), 'FE8191' (IP 192.168.1.10), and 'FE8192' (IP 192.168.1.11). At the bottom, a summary bar indicates 'MikroTik Network Device' with an IP of '192.168.1.8'.

## Device Status

Available IP's						
Select	Status	Model Name	Device Name	MAC	IP Address	Version
<input checked="" type="checkbox"/>	Online	180388	Mega-Point Network Camera	00-03-01-20-45-ff	192.168.1.7	0100e

 192.168.1.7 : 00-03-01-20-45-ff
Connection: 
Folder location: 

 192.168.1.7 : 00-03-01-20-45-ff
---

## VLAN Setting

The screenshot shows a network topology with several nodes represented by icons and labels. The nodes include 'S1-1 (192.168.1.1)', 'S1-2 (192.168.1.2)', 'S1-3 (192.168.1.3)', 'S1-4 (192.168.1.4)', 'S1-5 (192.168.1.5)', 'S1-6 (192.168.1.6)', 'S1-7 (192.168.1.7)', and 'S1-8 (192.168.1.8)'. There are various connections between these nodes, such as 'S1-1 -> S1-2', 'S1-2 -> S1-3', 'S1-3 -> S1-4', 'S1-4 -> S1-5', 'S1-5 -> S1-6', 'S1-6 -> S1-7', 'S1-7 -> S1-8', and 'S1-8 -> S1-1'. A legend on the left indicates node types: Router (blue), Host (green), and Switch (yellow). On the right, there is a 'Selected' panel showing details for the selected node 'S1-1 (192.168.1.1)'.

## Live Stream

The screenshot shows a video player window. On the left is a thumbnail image of a bridge over water with a city skyline in the background. To the right of the thumbnail is a white box containing device information:

Device Name	SHENG-016
Model Name	S7000 (H)
Mac	00-00-00-00-00-00
IP Address	202.208.46.234
Port	8080

Below the video player, there is a message: "If you have any problems on this video viewing, please make sure you've installed QuickTime Player on your local computer."

## • Specifications

VivoCam Web Smart PoE Switch			
Model	AW-GEV-104B-130	AW-GEV-184B-250	AW-GEV-264B-370
			
Short Highlight	VivoCam Web Smart 8xGE PoE + 2xGE SFP Switch	VivoCam Web Smart 16xGE PoE + 2xGE SFP Switch	VivoCam Web Smart 24xGE PoE + 2xGE SFP Switch
<b>Ethernet</b>			
10M/100M/1G RJ45 PoE Port	8/Per Port up to 30W	16/Per Port up to 30W	24/Per Port up to 30W
1G SFP Slot	2	2	2
<b>PoE Function</b>			
Number of PoE Port	8	8	8
PoE Output Power	Per Port 54VDC, Max. 30W	Per Port 54VDC, Max. 30W	Per Port 54VDC, Max. 30W
Total PoE Power Budget	130 W	250 W	370W
Power Pin Assignment	1/2(+), 3/6(-)	1/2(+), 3/6(-)	1/2(+), 3/6(-)
PoE PD Auto Detection	Yes	Yes	Yes
PoE Management: PoE Config/ Alive Checking/Scheduling/ Power Delay	Supported	Supported	Supported
IEEE 802.3at/af Power over Ethernet	Supported	Supported	Supported
<b>Ethernet Performance</b>			
Switch Capacity	20 Gbps	36 Gbps	52 Gbps
MAC Address	8 K	8 K	8 K
Jumbo Frame	10000 Bytes	10000 Bytes	10000 Bytes
Auto-MDI/MDI-X, AutoNegotiation	Supported	Supported	Supported
<b>Managing IP Surveillance Management</b>			
Auto Search VIVOTEK Device	Supported	Supported	Supported
Surveillance Management List	Supported	Supported	Supported
Easy Tag VLAN in Topology View	Supported	Supported	Supported
<b>Managing IP Surveillance E-MAP View</b>			
Topology View	Supported	Supported	Supported
Floor View	Supported	Supported	Supported
Google Map View	Supported	Supported	Supported
<b>Managing IP Surveillance Maintenance</b>			
VIVOTEK Camera Configuration File Export/Import	Supported	Supported	Supported
Traffic Monitoring	Supported	Supported	Supported
<b>L2 Switching Feature</b>			
IEEE 802.1p Quality of Service	Supported	Supported	Supported
IEEE 802.1q Tag based VLAN	Supported	Supported	Supported
IEEE 802.1d/w/S STP/RSTP/MSTP	Supported	Supported	Supported
IEEE 802.3ad Link Aggregation Control Protocol	Supported	Supported	Supported
IEEE 802.1X Authorization	Supported	Supported	Supported
<b>L3 Switching Feature</b>			
DHCP Server	Supported	Supported	Supported
<b>General</b>			
Power Input	100~240V AC / 50~60Hz	100~240V AC / 50~60Hz	100~240V AC / 50~60Hz
Surge Protection	Per port 6KV	Per port 6KV	Per port 6KV
Dimensions	220 (W) x 44 (H) x 242 (D) mm	442 (W) x 44 (H) x 211(D) mm	442 (W) x 44 (H) x 211(D) mm
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)

## Commercial PoE Switch

# 10G L2+ Managed Fiber Switch

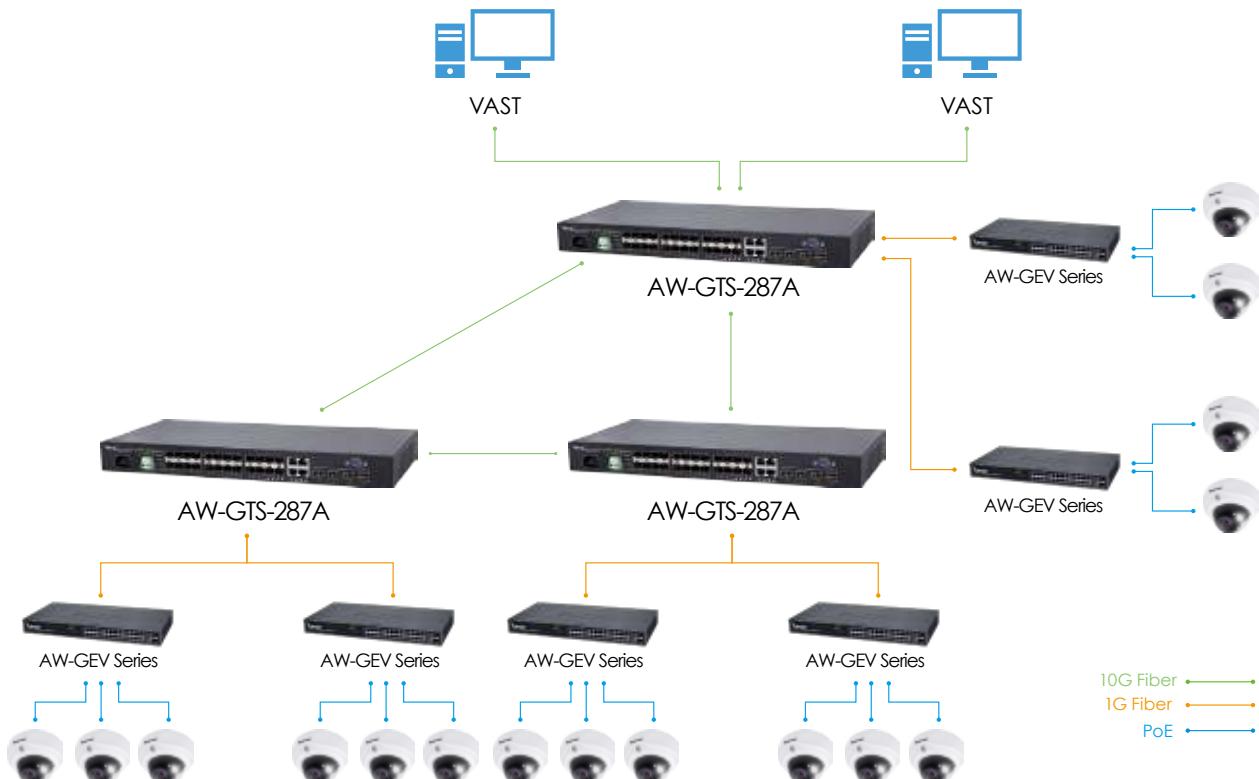


VIVOTEK's AW-GTS-287A L2+ Managed Switch is a next-generation Fiber Switch offering a full suite of L2+ features and additional 1G/10G SFP+ uplink connections. The AW-GTS-287A L2+ includes advanced L3 features such as Static Route that delivers a better cost-performance ratio and a lower total cost of ownership in both Enterprise networks and backbone via fiber or copper connections.

### Features

- 20xGE SFP + 4xCombo GE + 4x1G/10G SFP+ L2+ Managed Switch
- L2+ Managed Switch Provides Easier Manageability, Robust Security and QoS
- IPv4/IPv6 L3 Static Route and DHCP Server
- AC/DC Dual Power Supply for Redundant Design
- RS-232 Console, Telnet/Command Line Interface, SSH/SSL Secure Access, SNMP V1, V2c, V3, RMON, Web Browser, and TFTP Management

### Application



- **Specifications**

10G L2+ Managed Switch	
Model	AW-GTS-287A
Short Highlight	20xGE SFP + 4xCombo GE + 4x10G SFP+ L2+ Managed Switch
<b>Ethernet</b>	
1G SFP Slot	20
1G Combo Port (RJ45/SFP)	4
10G SFP Slot	4
RS232 Console Port	1
<b>Ethernet Performance</b>	
Switch Capacity	128 Gbps
MAC Address	32 K
Jumbo Frame	10056 Bytes
Auto-MDI/MDI-X, Auto-Negotiation	Supported
<b>L2 Switch Feature</b>	
IEEE 802.1p Quality of Service	Supported
IEEE 802.1d/w/S STP/RSTP/MSTP	Supported
IEEE 802.1q Virtual LANs	Supported
Q-in-Q (Double Tag) VLAN	Supported
IEEE 802.3ad Link Aggregation Control Protocol	Supported
IEEE 802.1X Authorization	Supported
GARP VLAN Registration Protocol (GVRP)	Supported
sFlow(sampled flow) protocol	Supported
<b>L3 Switching Feature</b>	
IP Host Table	Supported
Static Route (IPv4/IPv6)	Supported
Static ARP	Supported
DHCP Server	Supported
<b>Security</b>	
Port Security (MAC-based)	Supported
RADIUS / TACACS+ Authentication	Supported
HTTPs and SSL (Secured Web)	Supported
SSH v1.5/v2.0 (Secured Telnet Session)	Supported
<b>General</b>	
Power Input	Redundant 100V~240VAC / 50~60Hz, 24~72VDC(40W)
Dimensions	422 (L) x 211 (W) x 44 (H) mm
Operating Temperature	-20°C ~ 60°C (-4°F ~ 140°F)

## Commercial PoE Switch

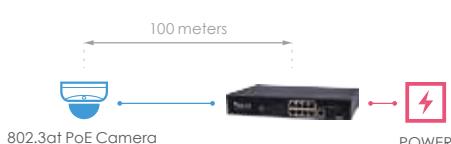
# Unmanaged PoE Switch



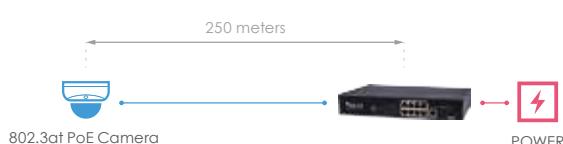
Fast Ethernet	Gigabit Ethernet
<p>VIVOTEK FE unmanaged PoE switches equipped with DIP switch provides ST "Standard" and EX "EXtend" operation modes. It's a specially designed for IP Surveillance application, besides standard 802.3af/at PoE functions on ST mode, the EX mode transmits data &amp; power on one single cable up to 250 meters at 10 Mbps via specific EX ports for long reach PoE IP cameras. Meanwhile, this series also features adding extra 10% range of input voltage tolerance, lightning surge protection of AC power &amp; PoE surge protection to prevent the damage caused by outside unstable AC power, lightning surge and power spike. These unique features reduce the costs to replace damaged fault unit.</p> <p>VIVOTEK FE unmanaged PoE switch has five sub models consisting of 6, 10, 10,18 and 26 port with a range of power budgets from 60W to 370W for IP surveillance applications.</p>	<p>VIVOTEK's Gigabit Ethernet Unmanaged Switch series is a cost-effective solution for IP surveillance of extending network. These unmanaged Ethernet switches come in a wide range of models including desktop and rackmount form factors, 4 to 8 PoE ports, and power output from IEEE802.3af (15.4W). These switches are energy efficient, built to last, and rigorously tested to provide the reliability businesses need.</p>

## Application

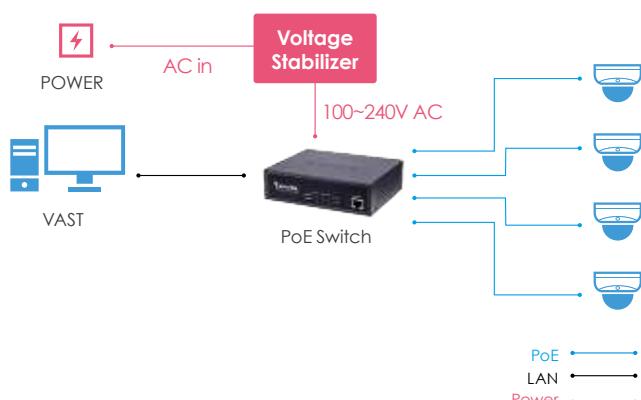
### • ST Mode



### • EX Mode



## Application



Range Guide	EX Port @ EX Mode	Any Port @ ST Mode
802.3at PoE IP Camera	250M @ 10Mbps	100M @ 100Mbps

## • Specifications

Unmanaged PoE Switch - Fast Ethernet					
Model	AW-FET-060C-065	AW-FET-100C-120	AW-FGT-100C-120	AW-FGT-180D-250	AW-FGT-260D-380
Short Highlight	Unmanaged 4xFE PoE + 2xFE UTP Switch	Unmanaged 8xFE PoE + 2xFE UTP Switch	Unmanaged 8xFE PoE + 1xGE UTP + 1xGE SFP Switch	Unmanaged 16xFE PoE + 2xGE Combo Switch	Unmanaged 24xFE PoE + 2xGE Combo Switch
Ethernet Port					
10M/100M RJ45 Port	6	10	8	16	24
10M/100M/1G RJ45 Port	-	-	1	-	-
1G SFP Slot	-	-	1	-	-
1G Combo Port (RJ45/SFP)	-	-	-	2	2
PoE Function					
Number of PoE Port	4	8	8	16	24
PoE Output Power	Per Port 56VDC, Max. 30W	Per Port 56VDC, Max. 30W	Per Port 56VDC, Max. 30W	Per Port 56VDC, Max. 30W	Per Port 56VDC, Max. 30W
PoE EX Mode	2 port up to 200M/10Mbps	2 port up to 200M/10Mbps	2 port up to 200M/10Mbps	8 port up to 250M/10Mbps	8 port up to 250M/10Mbps
Total PoE Power Budget	65 W	120W	120W	240 W	370 W
802.3at/af Standard Compatible	Yes	Yes	Yes	Yes	Yes
Power Pin Assignment	1/2(+), 3/6(-)	1/2(+), 3/6(-)	1/2(+), 3/6(-)	1/2(+), 3/6(-)	1/2(+), 3/6(-)
PoE PD Auto Detection	Yes	Yes	Yes	Yes	Yes
Ethernet Performance					
Switch Capacity	1.2 Gbps	2 Gbps	5.6 Gbps	7.2 Gbps	8.8 Gbps
MAC Address	2K	2K	4K	16K	16K
Packet Forwarding Rate	0.89Mpps	1.48Mpps	4.16Mpps	5.4Mpps	6.5Mpps
Auto-MDI/MDI-X, Auto-Negotiation	Supported	Supported	Supported	Supported	Supported
General					
Power Input	100~240V AC / 50~60Hz	100~240V AC / 50~60Hz	100V~240VAC / 50~60Hz	100~240V AC / 50~60Hz	100~240V AC / 50~60Hz
PoE Surge Protection	Per Port 4KV	Per Port 4KV	Per Port 4KV	Per Port 6KV	Per Port 6KV
AC Surge Protection	4KV	4KV	4KV	4KV	4KV
Dimensions	169 (L) x 94.1 (W) x 32 (H) mm	220 (L) x 140 (W) x 44 (H) mm	280 (L) x 180 (W) x 44 (H) mm	440 (L) x 207 (W) x 44 (H)	440 (L) x 207 (W) x 44 (H)
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)	0°C ~ 50°C (32°F ~ 122°F)	0°C ~ 50°C (32°F ~ 122°F)

## • Specifications

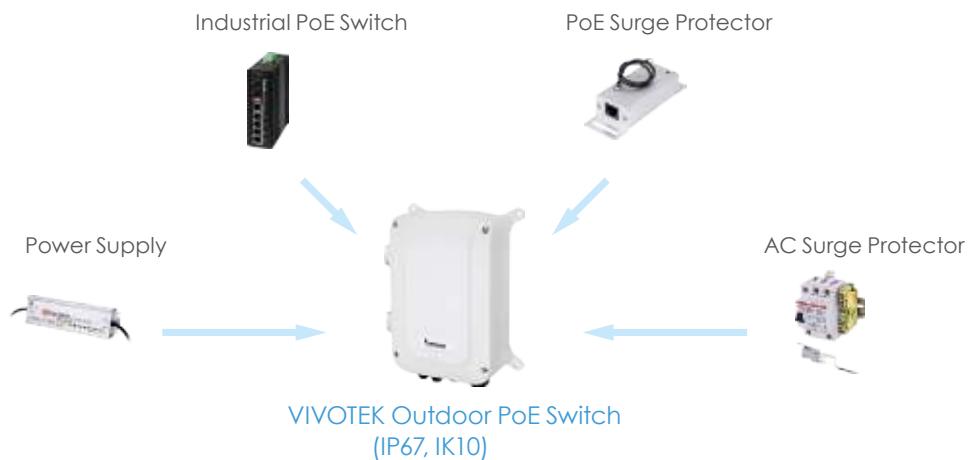
Unmanaged PoE Switch - Gigabit Ethernet		
Model	AW-GET-050A-065	AW-GET-100A-120
		
Short Highlight	Unmanaged 4xGE PoE + 1xGE UTP Switch	8xGE PoE + 2xGE SFP Switch
<b>Ethernet Port</b>		
10M/100M RJ45 Port	-	-
10M/100M/1G RJ45 Port	5	8
1G SFP Slot	-	2
1G Combo Port (RJ45/SFP)	-	-
<b>PoE Function</b>		
Number of PoE Port	4	8
PoE Output Power	Per Port 56VDC, Max. 30W	Per Port 56VDC, Max. 30W
PoE EX Mode	-	-
Total PoE Power Budget	60 W	115 W
802.3at/af Standard Compatible	Yes	Yes
Power Pin Assignment	1/2(+), 3/6(-)	1/2(+), 3/6(-)
PoE PD Auto Detection	Yes	Yes
<b>Ethernet Performance</b>		
Switch Capacity	10 Gbps	20 Gbps
MAC Address	8K	8K
Packet Forwarding Rate	14.88Mpps	29.76Mpps
Auto-MDI/MDI-X, Auto-Negotiation	Supported	Supported
<b>General</b>		
Power Input	100~240V AC / 50~60Hz	100~240V AC / 50~60Hz
PoE Surge Protection	-	-
AC Surge Protection	-	-
Dimensions	160 (L) x 123 (W) x 44 (H) mm	280 (L) x 214 (W) x 44 (H) mm
Operating Temperature	0°C ~ 50°C (32°F ~ 122°F)	0°C ~ 50°C (32°F ~ 122°F)

## Outdoor Unmanaged PoE Switch

# Outdoor Unmanaged PoE Switch



### Plug and Play Installation with All-in-One Device

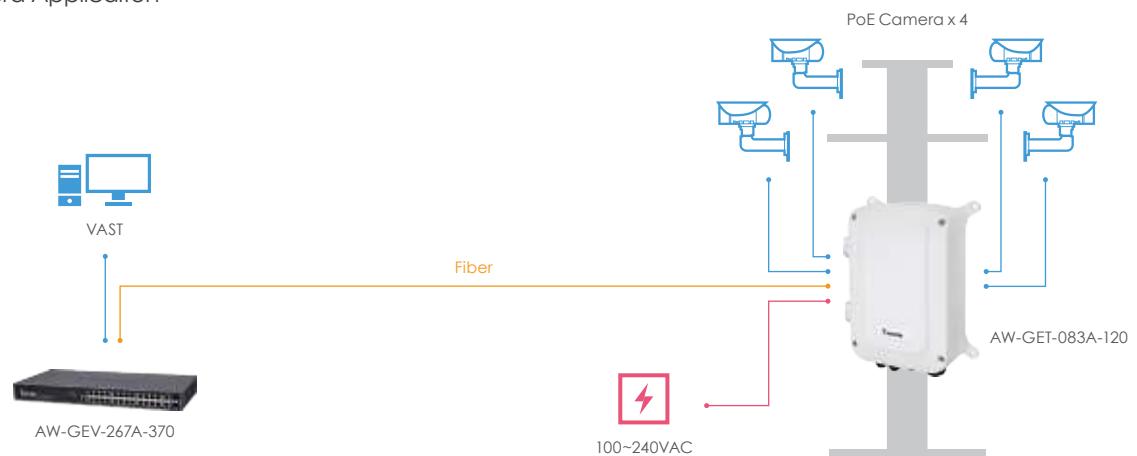


### Gigabit Ethernet

VIVOTEK's outdoor unmanaged PoE switch is designed with IP67, IK10, 6KV PoE Ethernet port surge protection, 40KV surge protection in AC power, and hardened-grade operation from -40°C to 65 °C during harsh weather conditions. The outdoor unmanaged PoE switch enables outdoor connections of PoE devices to the network such as outdoor bullet cameras, outdoor PoE enclosures, speed domes, and other industrial applications. It provides multiport Gigabit PoE(10M/100M/1G) delivering data and power to PoE devices over a single network cable as well as additional SFP transceiver slots for flexible uplink. The outdoor unmanaged PoE switch also allows easy installation to reduce extra equipment and installation costs.

## Outdoor PoE Switch Application

Multi-Camera Application



## • Specifications

Gigabit Ethernet	
Model	AW-GET-083A-120
	
Short Highlight	Outdoor Unmanaged PoE Switch 4xGE PoE + 2GE UTP + 2xGE SFP
<b>Ethernet</b>	
10M/100M RJ45 Port	-
10M/100M/1G RJ45 Port	4 /Per Port 30W PoE
1G SFP Slot	2
1G Combo Port (RJ45/SFP)	2
<b>PoE Function</b>	
Number of PoE Port	4
Max. PoE Output Power /Per Port	Per Port 56VDC, Max. 30W
EX Mode	-
Total PoE Power Budget	120W
Power Pin Assignment	1/2(+), 3/6(-)
IEEE 802.3af/at	Supported
PoE PD Auto Detection	Supported
<b>Ethernet Performance</b>	
Switching Capacity	16 Gbps
Mac Table	8 K
Jumbo Frame	9216 bytes
Auto-MDI/MDI-X, Auto-Negotiation	Supported
<b>Power Specifications</b>	
Power Input Voltage	100VAC ~ 240VAC
Alarm Relay	24VDC
<b>General</b>	
Waterproof Rating	IP67
Vandal Proof	IK10
Surge Protection /Each PoE Port	6KV
Surge Protection for AC Power	40KV
Operating Temperature	-40°C ~ 65°C (-40°F ~ 149°F)
Storage Temperature	-40°C ~ 75°C (-40°F ~ 167°F)
Dimensions	315.4(W) x 245.8(H) x 118(D) mm
Weight	4.52 kg
Connectors	M16 x 4, M25 x 2

## PoE Injector

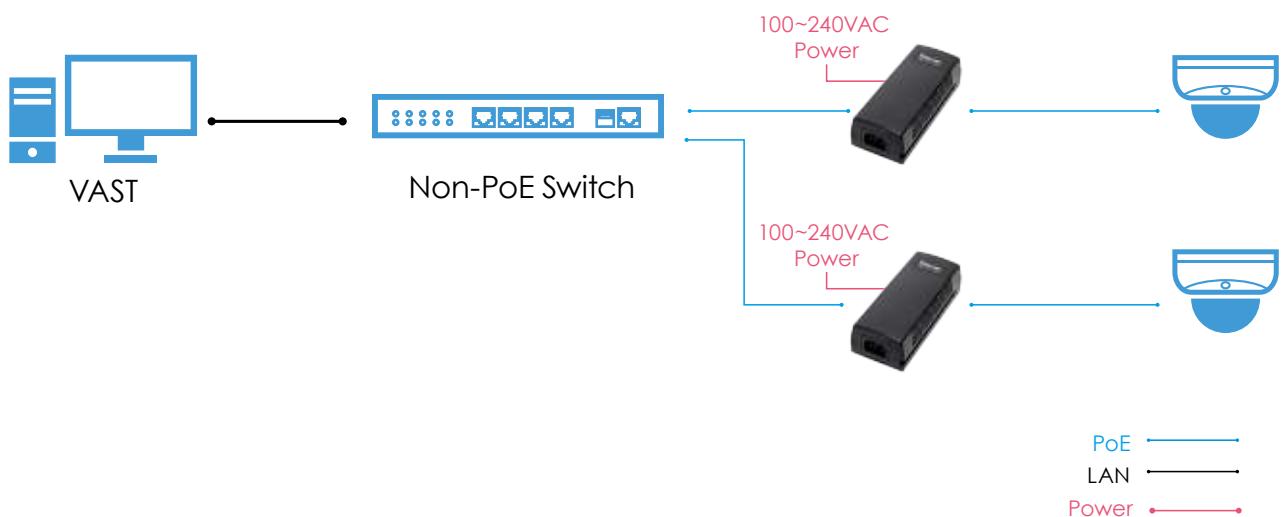
# PoE Injector



VIVOTEK launches a series of single-port PoE Injectors from 15.4W to 95W, meeting the requirements of a wide range of IP surveillance devices wattage output and providing easier installation. The AP-FIC/GIC series are designed with internal power supply in a compact housing. Carrying both Ethernet data and power simultaneously, it helps users to utilize just one Ethernet cable to easily install and deploy IP camera, wireless AP or VoIP phone networking in environments where power outlets are hard to find.

Features
<ul style="list-style-type: none"><li>• All-in-One Compact Size Design with Internal Power Supply</li><li>• Provide 1-Port PoE Power with Fast or Gigabit Ethernet</li><li>• Support PoE Power with 15.4W/30W/60W/95W</li></ul>

## Application



## • Specifications

PoE Injector					
Model	AP-FIC-010A-015	AP-GIC-010A-030	AP-GIC-011A-060	AP-GIC-011A-095	AP-GIC-015B-095
					
Short Highlight	Indoor 1xFE IEEE 802.3af PoE Injector	Indoor 1xGE IEEE 802.3at PoE Injector	Indoor 1xGE 60W High Power UPoE Injector	Indoor 1xGE 95W High Power PoH/PoE Injector	Outdoor 1xGE 95W PoH/PoE Injector with Adaptor
<b>Ethernet</b>					
10M/100M RJ45 Port	2	-	-	-	-
10M/100M/1G RJ45 Port	-	2	2	2	2
<b>PoE Function</b>					
Number of PoE Port	1	1	1	1	1
PoE Output Power	Per Port 54VDC, Max. 15.4W	Per Port 54VDC, Max. 30W	Per Port 54VDC, Max. 60W	Per Port 54VDC, Max. 95W	Per Port 54VDC, Max. 95W
802.3at Standard Compatible	-	Yes	Yes	Yes	Yes
802.3af Standard Compatible	Yes	Yes	Yes	Yes	Yes
Over Current Protection	Supported	Supported	Supported	Supported	Supported
Circuit Shorting Protection	Supported	Supported	Supported	Supported	Supported
Power Pin Assignment	1/2(+), 3/6(-)	1/2(+), 3/6(-)	1/2(-), 3/6(+), 4/5(+), 7/8(-)	1/2(-), 3/6(+), 4/5(+), 7/8(-)	1/2(-), 3/6(+), 4/5(+), 7/8(-)
PoE PD Auto Detection	Supported	Supported	Supported	Supported	Supported
<b>Standards</b>					
IEEE 802.3 10-BASE-T (Ethernet)	Supported	Supported	Supported	Supported	Supported
IEEE 802.3u 100-BASE-TX (Fast Ethernet)	Supported	Supported	Supported	Supported	Supported
IEEE 802.3ab 1000-BASE-T (Gigabit Ethernet)	-	Supported	Supported	Supported	Supported
IEEE 802.3af Power over Ethernet	Supported	Supported	Supported	Supported	Supported
IEEE 802.3at Power over Ethernet Plus	-	Supported	Supported	Supported	Supported
<b>Transmission Media</b>					
10Base T	Cat. 3, 4, 5 UTP/STP	Cat. 3, 4, 5 UTP/STP	Cat. 3, 4, 5 UTP/STP	Cat. 3, 4, 5 UTP/STP	Cat. 3, 4, 5 UTP/STP
100Base TX	Cat. 5, 5e UTP/STP	Cat. 5, 5e UTP/STP	Cat. 5, 5e UTP/STP	Cat. 5, 5e UTP/STP	Cat. 5, 5e UTP/STP
1000Base T	-	Cat. 5e, 6, 7 UTP/STP	Cat. 5e, 6, 7 UTP/STP	Cat. 5e, 6, 7 UTP/STP	Cat. 5e, 6, 7 UTP/STP
<b>General</b>					
Surge Protection	-	-	PoE Port: 12KV, AC Power: 4KV	PoE Port: 12KV, AC Power: 4KV	PoE Port: 12KV, AC Power: 4KV
Waterproof	-	-	-	-	IP67
Vandal Proof	-	-	-	-	IK10
Power Input	100~240V AC / 50~60Hz	100~240V AC / 50~60Hz	100~240V AC / 50~60Hz	100V~240VAC / 50~60Hz	100V~240VAC / 50~60Hz
Power Consumption	19 W	35 W	65 W	100W	100W
Dimensions	145 x 63 x 42 mm	145 x 63 x 42 mm	182 x 78.6 x 41.9 mm	182 x 78.6 x 41.9 mm	255.2 x 199.9 x 90 mm
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)	-20°C ~ 30° (-4°F ~ 86°F)	-40°C ~ 60°C (-40°F ~ 140°F)

## Long Range PoE Solution

# PoE Extender

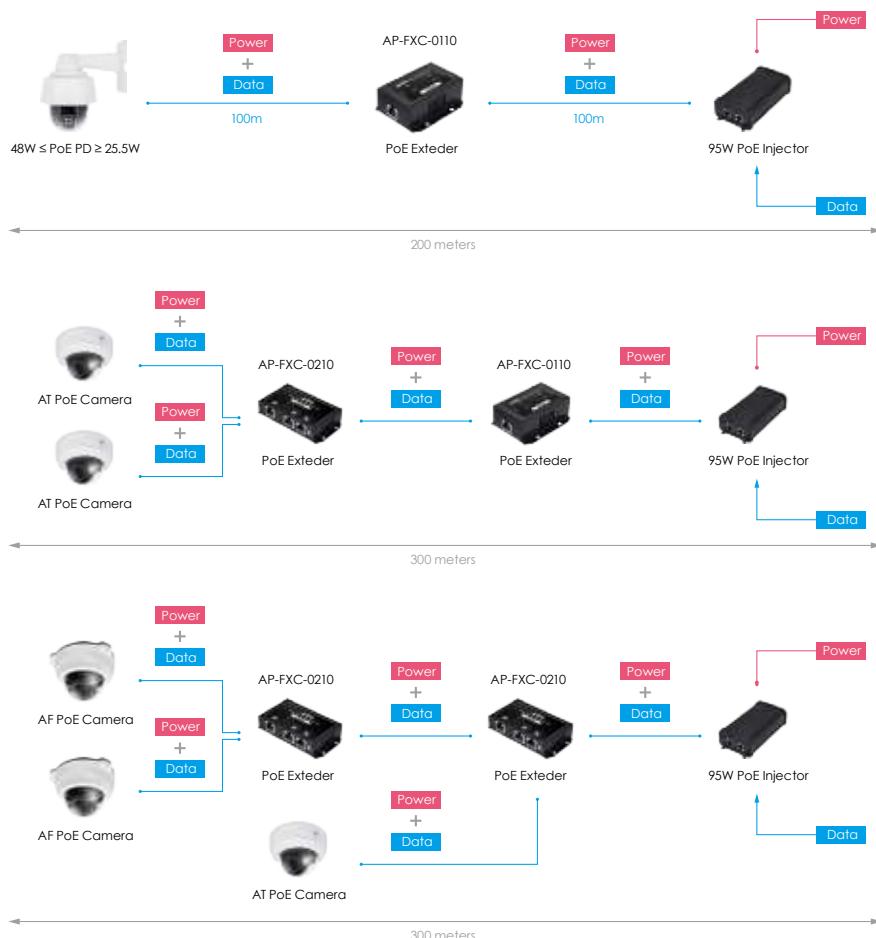


The VIVOTEK PoE Extender series provides a simpler and easier implementation of long-range (up to 300 meters) surveillance system, solving cable length limitations and power supply issues for installers and system integrators. Given the limitations of data-transfer over Ethernet, the previous maximum distance between a PoE switch and network cameras were 100 meters. However, with VIVOTEK's new PoE extender technology, installers and systems integrators can now build wider networks while still maintaining reliability.

### Features

- Extend Range Up to 300 Meters (984ft)
- No Local Power Required
- Simple Installation, No Set-Up or Configuration Required
- Conduit Box Type for VIVOTEK Dome Camera Installation
- Outdoor Model Supports by AP-FXC-0160 / AP-FXC-0260

### Application



## • Specifications

PoE Extender				
Model	AP-FXC-0110	AP-FXC-0210	AP-FXC-0160	AP-FXC-0260
				
Short Highlight	Indoor 1-Port FE PoE Extender	Indoor 2-Port FE PoE Extender	Outdoor 1-Port FE PoE Extender	Outdoor 2-Port FE PoE Extender
PoE Extension				
Extension Distance	2 Units, Daisy-chain Installation Up to 300M Extension	2 Units, Daisy-chain Installation Up to 300M Extension	2 Units, Daisy-chain Installation Up to 300M Extension	2 Units, Daisy-chain Installation Up to 300M Extension
PoE Input	30W/60W/95W	30W/60W/95W	30W/60W/95W	30W/60W/95W
PoE Function				
Fast Ethernet PoE In	1	1	1	1
Fast Ethernet PoE Out	1	2	1	2
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 (-)
Output Power	45-55VDC Max. 70W	45-55VDC Max. 70W	45-55VDC Max. 70W	45-55VDC Max. 70W
Surge Protection /Each PoE Port	-	-	6KV	6KV
Standards				
IEEE 802.3 10-BASE-T (Ethernet)	Supported	Supported	Supported	Supported
IEEE 802.3u 100-BASE-TX (Fast Ethernet)	Supported	Supported	Supported	Supported
IEEE 802.3x Flow Control (Full-duplex Flow Control)	Supported	Supported	Supported	Supported
IEEE 802.3af Power over Ethernet	Supported	Supported	Supported	Supported
IEEE 802.3at Power over Ethernet Plus	Supported	Supported	Supported	Supported
Ethernet Performance				
MAC Table	2 K	2 K	2 K	2 K
Transmission Method	Store and Forward	Store and Forward	Store and Forward	Store and Forward
Backplane	1.0 Gbps	1.0 Gbps	1.0 Gbps	1.0 Gbps
Auto-MDI/MDI-X, Auto-Negotiation	Supported	Supported	Supported	Supported
Filtering/Forwarding Rates				
10Mbps	14,880 pps	14,880 pps	14,880 pps	14,880 pps
100Mbps	148,000 pps	148,000 pps	148,000 pps	148,000 pps
General				
Waterproof IP Rating	-	-	IP67	IP67
Vandal Proof	-	-	IK10	IK10
Dimensions	87.72 x 69.4 x 31 mm	108 x 58 x 22 mm	157 x 55.8 x 39.8 mm	157.3 x 72.8 x 39.8 mm
Operating Temperature	0°C ~ 50°C (32°F ~ 122°F)	0°C ~ 50°C (32°F ~ 122°F)	-40°C ~ 75°C (-40°F ~ 167°F)	-40°C ~ 75°C (-40°F ~ 167°F)

## Long Range PoE Solution

# Hyper PoE Extender



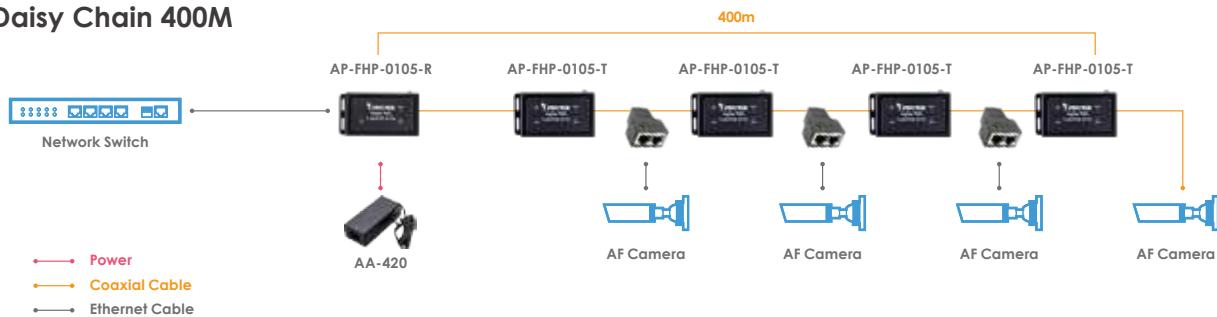
The Hyper PoE Extender for IP cameras is a long-range solution providing Fast Ethernet and Power over Ethernet cables up to 1,200m. This product line is the best solution for IP video surveillance in cases of long-distance applications. By adopting VIVOTEK'S Hyper PoE Extender, our customers no longer require a fiber cable for data transmission over distances above 300m, thereby saving on wiring and extra installation costs. In addition, the Hyper PoE Extender transmits both power and data to IP cameras whereas fiber solutions only provide data, further reducing installation and maintenance expenditure.

### Features

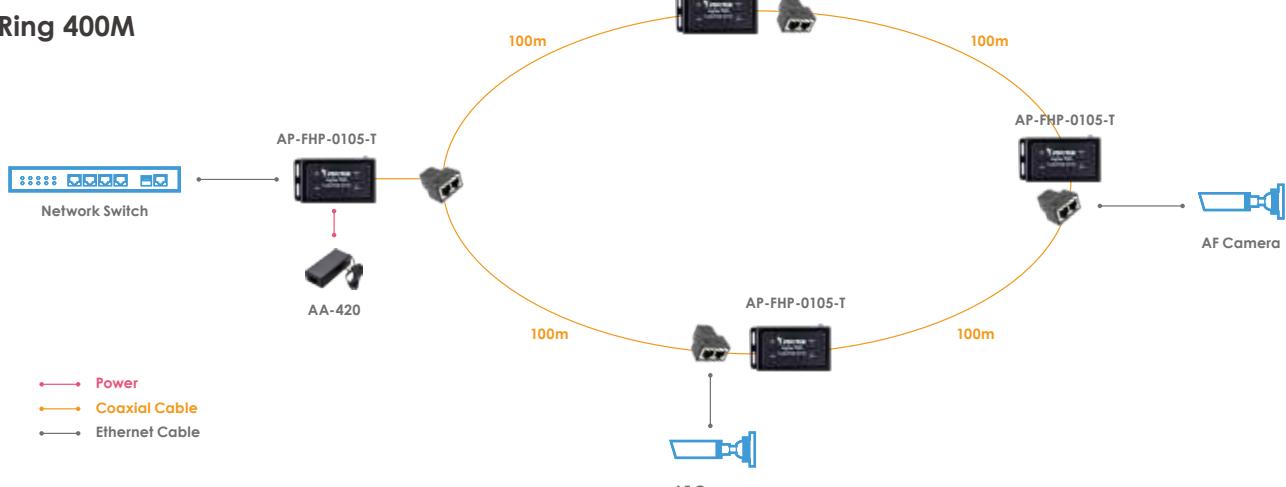
- Extend Ethernet and Power up to 1,200m (3,937 ft) over Cat 5e Ethernet Cable
- Support Ring Topology up to 4 IEEE 802.3af Camera for Power Redundancy
- Support Daisy Chain Topology up to 4 IEEE 802.3af Camera
- Easy Installation
- Both Wall Mount and Rackmount Supported

### Application

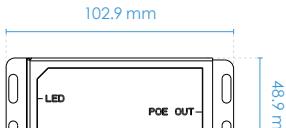
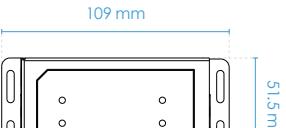
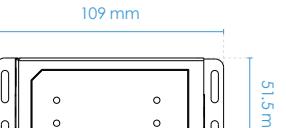
#### Daisy Chain 400M



#### Ring 400M



## • Specifications

PoE Extender			
Model	AP-FHP-0100-R	AP-FHP-0105-R	AP-FHP-0105-T
			
Product Description	1 Port Hyper PoE Rx Module, PoE input	1 Port Hyper PoE Rx Module	1 Port Hyper PoE Tx Module
Hyper PoE Port	1x FE RJ45 Power Pin 1~4(-), 5~8(+)	1x FE RJ45 Power Pin 1~4(-), 5~8(+)	1x FE RJ45 Power Pin 1~4(-), 5~8(+)
Ethernet Port	1 x FE RJ45, 30/60/95w PoE input	1 x FE RJ45	1 x FE RJ45, PoE output 1/2(+), 3/6(-), 4/5(+), 7/8(-)
DC Jack	-	1	1
PoE on/off Switch	-	-	1
Transmission Mode	Rx	Rx	Tx
Max. PoE Distance (Cat 6)		8.8W @1200m, 100Mbps	
Max. Ethernet Distance (Cat 6)		2400m, 100Mbps	
Power Input	30/60/95W PoE input	DC 56V	DC 56V or Hyper PoE
Power Consumption	3W	3W	3W
PoE Standard	IEEE 802.3 bt	-	-
Dimension	102.9 x 48.9 x 23.4 mm	109 x 51.5 x 24 mm	109 x 51.5 x 24 mm
Weight	156 g	169 g	169 g
Operating Temperature	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)
Storage Temperature	-20°C ~ 85°C (-4°F ~ 185°F)	-20°C ~ 85°C (-4°F ~ 185°F)	-20°C ~ 85°C (-4°F ~ 185°F)
Operating Humidity	5% ~ 95% non-condensing	5% ~ 95% non-condensing	5% ~ 95% non-condensing
Safety Certification	CE, FCC, VCCI, C-Tick	CE, FCC, VCCI, C-Tick	CE, FCC, VCCI, C-Tick
Notes	VIVOTEK's Hyper PoE Rx modules are only compatible with Hyper PoE Tx modules		
Dimension	 <p>102.9 mm 48.9 mm 23.4 mm</p>	 <p>109 mm 51.5 mm 24 mm</p>	 <p>109 mm 51.5 mm 24 mm</p>

## Long Range PoE Solution

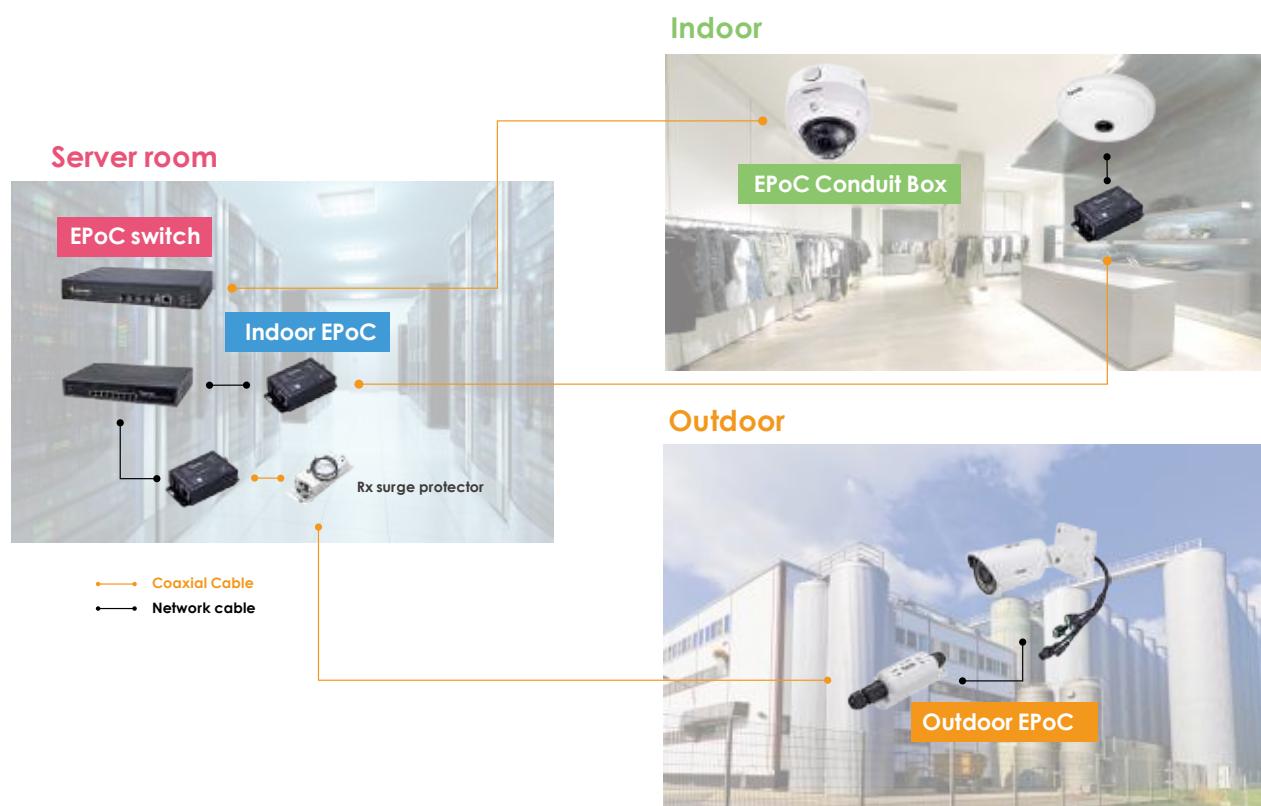
# EPoC Extender



The EPoC (Ethernet & Power over Coaxial) product line is a long-range solution providing Fast Ethernet and Power over RG6 coaxial cables up to 1200m for IP cameras. This product line is the best solution for transforming CCTV to IP cameras without needing to change legacy RG59 cables, thereby saving on wiring costs. Additionally, EPoC transmits both power and data to IP cameras whereas fiber solutions only provide data.

### Features

- Extend Ethernet and Power up to 1,200m (3,937 ft) over RG6 coaxial cable
- Support Ring topology up to 4 IEEE 802.3af camera for power redundancy
- Support Daisy chain topology up to 4 IEEE 802.3af camera
- Support IP66/IK10 and surge protection for outdoor
- Easy installation for a smooth transition from legacy to IP camera
- Both Wall mount and Rackmount supported



## • Specifications

EPoC Extender						
Model	AP-FEX-0100-R	AP-FEX-0105-R	AP-FEX-0105-T	AP-FEX-0200-T	AP-FEX-0150-T	AP-FEX-0250-T
						
Short Highlight	1 Port PoE in EPoC Rx Module	1 Port EPoC Rx Module	1 Port EPoC Tx Module	2 Port EPoC Tx Module	Outdoor 1 Port EPoC Tx Module	Outdoor 2 Port EPoC Tx Module
BNC Port (75Ω)	1	1	1	1	1	1
Ethernet Port	1 x 10/100Mbps RJ45	1 x 10/100Mbps RJ45	1 x 10/100Mbps RJ45	2 x 10/100Mbps RJ45	1 x 10/100Mbps RJ45	2 x 10/100Mbps RJ45
DC Jack	-	1	1	1	-	-
PoE on/off Switch	-	-	1	2	1	2
Transmission Mode	Rx	Rx	Tx	Tx	Tx	Tx
Max. PoE Distance (RG6)	1.2km/8W	1.2km/8W	1.2km/8W	500m/17W	1.2km/7.5W	500m/17W
Max. Ethernet Distance (RG6)	2.4 km	2.4 km	2.4 km	2.4 km	2.4 km	2.4 km
Power Input	PoE in up to 95W	DC 56V	DC 56V	DC 56V	-	-
Power Consumption	2W	2W	2W	2W	3W	3W
PoE Standard	802.3at/af	802.3at/af	802.3at/af	802.3at/af	802.3at/af	802.3at/af
BNC Surge Protection	-	-	-	-	6KV	6KV
Water Proof	-	-	-	-	IP67	IP67
Vandal Proof	-	-	-	-	IK10	IK10
Dimension	85.4 x 47.1 x 23 mm	85.4 x 47.1 x 23 mm	85.4 x 47.1 x 23 mm	105.2 x 86.4 x 28 mm	157 x 55.8 x 39.75 mm	167.5 x 72.8 x 39.8 mm
Weight	0.2 kg (0.44lb)	0.2 kg (0.44lb)	0.2 kg (0.44lb)	0.26 kg (0.57 lb)	0.3 kg (0.66lb)	0.36 kg (0.79lb)
Operating Temperature	-20°C ~ 60°C (-4°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)			
Storage Temperature	-20°C ~ 85°C (-4°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)			
Operating Humidity	5% ~ 95% non-condensing	5% ~ 95% non-condensing	5% ~ 95% non-condensing	5% ~ 95% non-condensing	5% ~ 95% non-condensing	5% ~ 95% non-condensing
Safety Certification	CE, FCC, VCCI, LVD	CE, FCC, VCCI, LVD	CE, FCC, VCCI, LVD	CE, FCC, VCCI	CE, FCC, VCCI	CE, FCC, VCCI

Optional Accessories		
Power Adapter	PoE Injector	
		
AA-420 65W@56V Power Adapter for AP-FEX-0105-R	AP-GIC-011A-060 For AP-FEX-0100-R	AP-GIC-011A-095 For AP-FEX-0100-R
Rackmount		BNC Surge Protector
		
AR-100 Supports up to 4x AP-FEX-0105-R + 4x AA-420	AR-101 Supports up to 8x AP-FEX-0100-R	AT-BSP-001 For AP-FEX-0105-R & AP-FEX-0100-R

## • Specifications

### EPoC Conduit Box - AM-713-E



Model	AP-FEX-0106-T	Model	AM-713	
Product Description			1 Port EPoC Tx	
BNC Port (75Ω)	1	Construction		
Ethernet Port	1	Dimensions		
PoE On/Off Switch	1	Ø 163 x 56 mm		
Transmission Mode	Tx	Inner Dimension		
Max. PoE Distance (RG6)	1.2km/7.5w	Ø 145 x 44 mm		
Max. Ethernet Distance (RG6)	2.4 km	Color		
Power Consumption	3W	White		
Surge Protection	BNC port 6KV*	Max. Load		
PoE Standard	802.3 at/af	3 kg		
Dimension	111(L) x 51.4(W) x 22(D) mm	Weight		
Weight	171 g	865 g		
Operating Temperature	-30°C ~ 60°C (-22°F ~ 140°F)	Water Proof		
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)	IP66		
Operating Humidity	5% ~ 95% non-condensing	Dimensions		
Safety Certification	CE, FCC, VCCI	Ø 163 mm		
Dimension	51 mm			
	111 mm			
	22 mm			

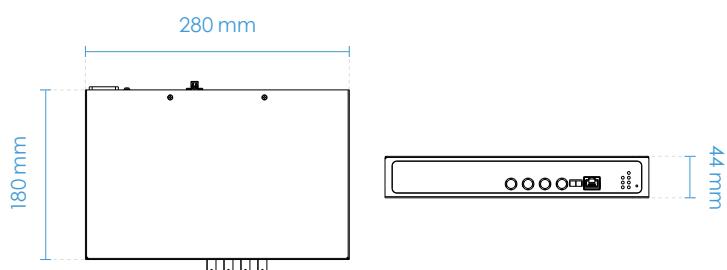
- **Specifications**

### 4 Port Unmanaged EPoC Rx Switch

<b>Model</b>	<b>AW-FCT-050A-250</b>
--------------	------------------------



BNC Port (75Ω)	4xFE
Ethernet Port	1xGE
PoE on/off switch	4
Transmission Mode	Rx
Max. PoE Distance (RG6)	1.2 km/7.5w per port
Max. Ethernet Distance (RG6)	2.4 km per port
Power input	"Input: 100VAC ~ 240VAC 56 VDC"
PoE Standard	802.3at/af
BNC Surge Protection	6KV
Dimension	276.6 x 178 x 44 mm (10.89x7x1.73")
Weight	1 kg (2.20 lb)
Operating Temperature	0°C ~ 50°C (32°F ~ 122°F)
Storage Temperature	-20~ 85°C (-28°F ~ 185°F)
Operating Humidity	5% ~ 95% non-condensing
Safety Certification	CE, FCC, VCCI, LVD
Dimension	



## Industrial PoE Products

# Industrial VivoCam L2+ Managed PoE Switch

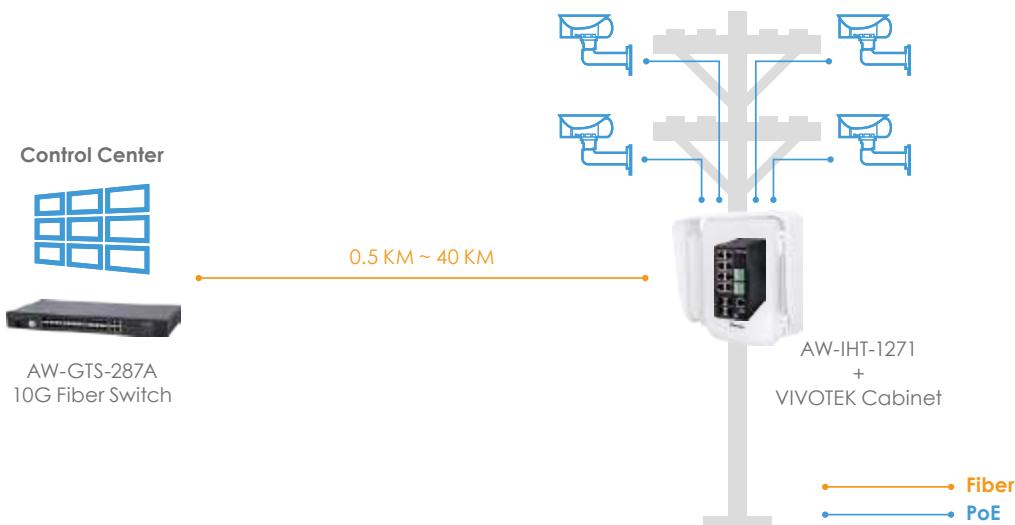


The AW-IHT-1271 is an Industrial 8-port Gigabit PoE port (Supports 802.3 at/af, and total up to 240W) + 4-port Gigabit SFP L2 plus managed PoE switch with a wide operating temperature range from -40°C to 75°C and supports surge protection per port up to 6KV. The AW-IHT-1271 combines high hardware performance and environmental flexibility for use in outdoor surveillance, outdoor telecom, heavy industry, factory automation and transportation applications.

The AW-IHT-1271 supports surveillance features such as Topology/Floor/Map views for controlling and understanding network topology and device status. It not only features surveillance network environment set up functions, but also troubleshooting and traffic monitoring functions which help users to clarify and troubleshoot any connection and device issue. In addition, the AW-IHT-1271 also supports Rapid ring, a redundancy proprietary protocol with convergence time within 20ms and up to 250 switches.

Managing IP Surveillance	Managed Layer 2 Plus PoE Switch
<ul style="list-style-type: none"><li>• Auto Discovery and Classification of Network Devices</li><li>• Batch Camera Configuration-File Import &amp; Export</li><li>• Batch Camera Network/Login Configuration</li><li>• Auto Generated Surveillance Topology View</li><li>• Easy Tag VLAN Configuration in Topology View</li><li>• Smart Device-Management in Topology View</li><li>• PoE On/Off Control in Topology View</li><li>• Display IP Camera Live Stream in Topology View, Floor View and Google Map View</li><li>• Support 3rd Party ONVIF IP Cameras</li></ul>	<ul style="list-style-type: none"><li>• DHCP Server</li><li>• IPv4/IPv6 L3 Static Route</li><li>• IEEE802.1Q VLAN (up to 4096), Double Tag (Q-in-Q)</li><li>• IEEE802.1v Protocol VLAN and MAC-based VLAN</li><li>• IEEE802.1d (STP), 802.1w (RSTP) and 802.1s (MSTP)</li><li>• IEEE802.3ad Link Aggregation Control Protocol (LACP)</li><li>• SNMP v1/v2c/v3 for Management</li><li>• HTTPS/SSL/SSHv1&amp;v2 for Secured Connection</li></ul>

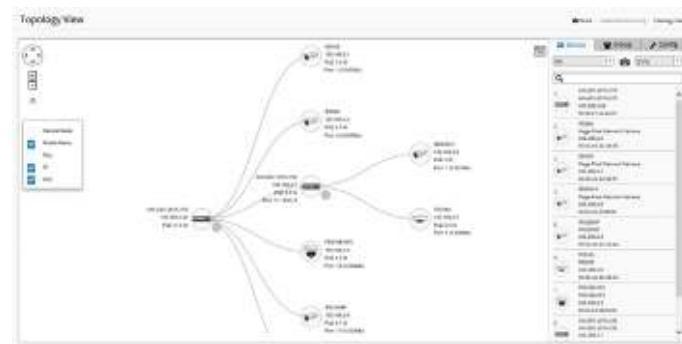
## Outdoor Surveillance Application



## • Feature Highlights - Managing IP Surveillance

## Auto Discovery

## Topology View



## Floor View



## Google Map



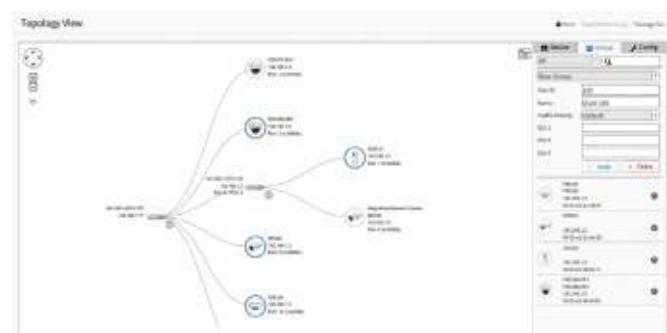
Device Management



## Device Status



## VLAN Setting



## Live Stream



## • Specifications

Industrial VivoCam L2+ Managed PoE Switch	
Model	AW-IHT-1271
	
Short Highlight	8xGE PoE + 4xGE SFP
<b>Ethernet</b>	
10M/100M/1G RJ45 PoE Port	8/Per Port up to 30W
100M/1G SFP	4
RJ45 Console Port	1
<b>PoE Function</b>	
Number of PoE Port	8
PoE Output Power	Per Port 54VDC, Max. 30W
Total PoE Power Budget	240W
Power Pin Assignment	1/2(+), 3/6(-)
PoE Management: PoE Config/Alive Checking/Scheduling/Power Delay	Supported
IEEE 802.3at/af Power over Ethernet	Supported
<b>Ethernet Performance</b>	
Switch Capacity	24Gbps
MAC Address	8K
Jumbo Frames	9600 Bytes
Auto-MDI/MDI-X, Auto-Negotiation	Supported
<b>Managing IP Surveillance Management</b>	
Auto Search VIVOTEK Device	Supported
Surveillance Management List	Supported
Easy Tag VLAN in Topology View	Supported
<b>Managing IP Surveillance E-MAP View</b>	
Topology View	Supported
Floor View	Supported
Google Map View	Supported
<b>Managing IP Surveillance Maintenance</b>	
VIVOTEK Camera Configuration File Export/Import	Supported
Traffic Monitoring	Supported
<b>L2 Switching Feature</b>	
IEEE 802.1p Quality of Service	Supported
IEEE 802.1q Tag based VLAN	Supported
IEEE 802.1d/w/S STP/RSTP/MSTP	Supported
IEEE 802.3ad Link Aggregation Control Protocol	Supported
IEEE 802.1X Authorization	Supported
<b>L3 Switching Feature</b>	
IP Host Table	Supported
Static Route (IPv4/IPv6)	Supported
Static ARP	Supported
DHCP Server	Supported
<b>General</b>	
Power Input	PW1: 48 ~ 56VDC PW1: 48 ~ 56VDC Redundant Power Backup
Surge Protection	Per port 6KV
Dimensions	62(W) x 135(H) x 130(D) mm
Operating Temperature	-40°C ~ 75°C (-40°F ~ 167°F)

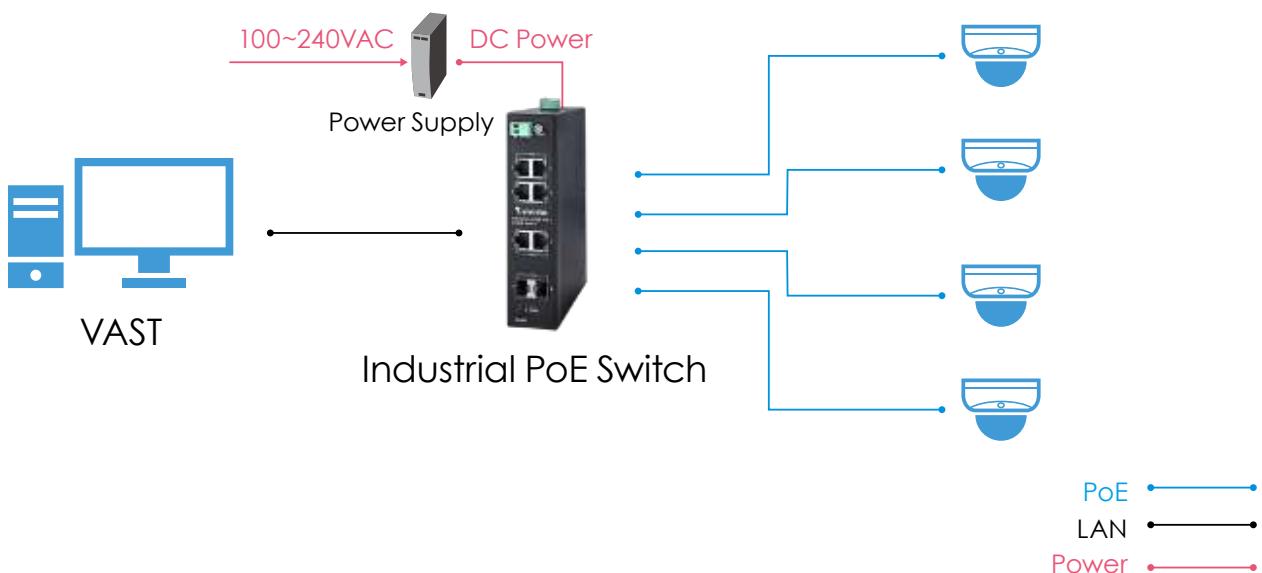
## Industrial PoE Products

# Industrial Unmanaged PoE Switch



The VIVOTEK industrial unmanaged PoE Switch series is a robust and cost-effective solution for harsh IP Surveillance environment of extending network. These industrial-grade unmanaged PoE switches come in a wide range of models including din-rail, rack-mount form factors, as well as M12 connectors with EN50155 for mobile applications, from 1 to 8 PoE Ports, and power output from IEEE802.3af (15.4W) to PoH/PoE (95W). These switches are energy efficient, built to last, and rigorously tested to provide the reliability businesses need.

## Application



## • Specifications

Industrial Unmanaged PoE Switch				
Model	AW-IHT-0200	AW-IHU-0200	AW-IHH-0200	AW-IHT-0800
				
Short Highlight	Industrial 1xGE PoE + 1xGE SFP Switch	Industrial 1xGE 60W UPoE + 1xGE SFP Switch	Industrial 1xGE 95W PoH/PoE + 1xGE SFP Switch	Industrial 4xGE PoE + 2xGE UTP + 2xGE SFP Switch
<b>Ethernet</b>				
10M/100M RJ45 Port	-	-	-	-
10M/100M M12 Port	-	-	-	-
10M/100M/1G RJ45 Port	1	1	1	6
1G SFP Port	1	1	1	2
1G Combo Port (RJ45/SFP)	-	-	-	-
<b>PoE Function</b>				
Number of PoE Out Ports	1	1	1	4
PoE Output Power	Per Port 56VDC, Max. 30W	Per Port 56VDC, Max. 60W	Per Port 56VDC, Max. 95W	Per Port 56VDC, Max. 30W
802.3at/af Standard Compatible	Yes	Yes	Yes	Yes
Over Current Protection	Supported	Supported	Supported	Supported
Circuit Shorting Protection	Supported	Supported	Supported	Supported
Total PoE Power Budget	30 W	60 W	95 W	120 W
Power Pin Assignment	1/2(+), 3/6(-)	1/2(-), 3/6(+), 4/5(+), 7/8(-)	1/2(-), 3/6(+), 4/5(+), 7/8(-)	1/2(+), 3/6(-)
<b>Ethernet Performance</b>				
Switch Capacity	2 Gbps	2 Gbps	2 Gbps	16 Gbps
MAC Address	1K	1K	1K	4K
Jumbo Frame	9KB	9KB	9KB	9KB
Transmission Method	Store and Forward	Store and Forward	Store and Forward	Store and Forward
Auto-MDI/MDI-X, Auto-Negotiation	Supported	Supported	Supported	Supported
<b>Standards</b>				
IEEE 802.3 10-BASE-T (Ethernet)	Supported	Supported	Supported	Supported
IEEE 802.3u 100-BASE-TX (Fast Ethernet)	Supported	Supported	Supported	Supported
IEEE 802.3ab 1000-BASE-T (Gigabit Ethernet)	Supported	Supported	Supported	Supported
IEEE 802.3x Flow Control (Full-Duplex Flow Control)	Supported	Supported	Supported	Supported
IEEE 802.3af Power over Ethernet	Supported	Supported	Supported	Supported
IEEE 802.3at Power over Ethernet Plus	Supported	Supported	Supported	Supported
<b>Transmission Media</b>				
10Base T	Cat. 3, 4, 5 UTP/STP	Cat. 3, 4, 5 UTP/STP	Cat. 3, 4, 5 UTP/STP	Cat. 3, 4, 5 UTP/STP
100Base TX	Cat. 5, 5e UTP/STP	Cat. 5, 5e UTP/STP	Cat. 5, 5e UTP/STP	Cat. 5, 5e UTP/STP
1000Base T	Cat. 5e, 6, 7 UTP/STP	Cat. 5e, 6, 7 UTP/STP	Cat. 5e, 6, 7 UTP/STP	Cat. 5e, 6, 7 UTP/STP
<b>General</b>				
Power Input	Redundant Dual 48V-56VDC	Redundant Dual 50V-56VDC	50V-56VDC	Redundant Dual 48V-56VDC
Dimensions	103.5 x 81.5 x 32 mm	103.5 x 81.5 x 32 mm	103.5 x 81.5 x 32 mm	172 x 132 x 39 mm
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)	-40°C ~ 75°C (-40°F ~ 167°F)

## • Specifications

Industrial Unmanaged PoE Switch				
Model	AW-IHT-0601	AW-IHT-0602	AW-IHH-0800	AW-IHT-1000
				
Short Highlight	Industrial 4xGE PoE + 1xGE Combo + 1xGE SFP Switch	Industrial EN50155 4xFE M12 PoE + 2xFE M12 Switch	Industrial 4xGE 95W PoH/PoE + 2xGE RJ45 + 2xGE SFP Switch	Industrial 8xGE PoE + 2xGE SFP Switch
<b>Ethernet</b>				
10M/100M RJ45 Port	-	-	-	-
10M/100M M12 Port	-	6	-	-
10M/100M/1G RJ45 Port	4	-	6	10
1G SFP Port	1	-	2	2
1G Combo Port (RJ45/SFP)	1	-	-	-
<b>PoE Function</b>				
Number of PoE Out Ports	4	4	4	8
PoE Output Power	Per Port 56VDC, Max. 30W	Per Port 56VDC, Max. 30W	Per Port 56VDC, Max. 95W	Per Port 56VDC, Max. 30W
802.3at/af Standard Compatible	Yes	Yes	Yes	Yes
Over Current Protection	Supported	Supported	Supported	Supported
Circuit Shorting Protection	Supported	Supported	Supported	Supported
Total PoE Power Budget	24V DC ~ 56V DC: 120 W 12V DC: 65 W	120 W	240 W	240 W
Power Pin Assignment	1/2(+), 3/6(-)	1/2(+), 3/6(-)	1/2(-), 3/6(+), 4/5(+), 7/8(-)	1/2(+), 3/6(-)
<b>Ethernet Performance</b>				
Switch Capacity	12 Gbps	1.2 Gbps	16 Gbps	20 Gbps
MAC Address	1K	1K	4K	4 K
Jumbo Frame	9KB	9KB	9KB	9 KB
Transmission Method	Store and Forward	Store and Forward	Store and Forward	Store and Forward
Auto-MDI/MDI-X, Auto-Negotiation	Supported	Supported	Supported	Supported
<b>Standards</b>				
IEEE 802.3 10-BASE-T (Ethernet)	Supported	Supported	Supported	Supported
IEEE 802.3u 100-BASE-TX (Fast Ethernet)	Supported	Supported	Supported	Supported
IEEE 802.3ab 1000-BASE-T (Gigabit Ethernet)	Supported	-	Supported	Supported
IEEE 802.3x Flow Control (Full-Duplex Flow Control)	Supported	Supported	Supported	Supported
IEEE 802.3af Power over Ethernet	Supported	Supported	Supported	Supported
IEEE 802.3at Power over Ethernet Plus	Supported	Supported	Supported	Supported
<b>Transmission Media</b>				
10Base T	Cat. 3, 4, 5 UTP/STP	Cat. 3, 4, 5 UTP/STP	Cat. 3, 4, 5 UTP/STP	Cat. 3, 4, 5 UTP/STP
100Base TX	Cat. 5, 5e UTP/STP	Cat. 5, 5e UTP/STP	Cat. 5, 5e UTP/STP	Cat. 5, 5e UTP/STP
1000Base T	Cat. 5e, 6, 7 UTP/STP	-	Cat. 5e, 6, 7 UTP/STP	Cat. 5e, 6, 7 UTP/STP
<b>General</b>				
Power Input	Redundant Dual 12V-56VDC	Redundant Dual 24V-56VDC	Redundant Dual 54V-56VDC	Redundant Dual 48V-56V DC Power Input
Dimensions	142 x 105 x 43 mm	112 x 112 x 60 mm	172 x 132 x 39 mm	172 (L) x 132 (W) x 39 (H) mm
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)	-40°C ~ 75°C (-40°F ~ 167°F)

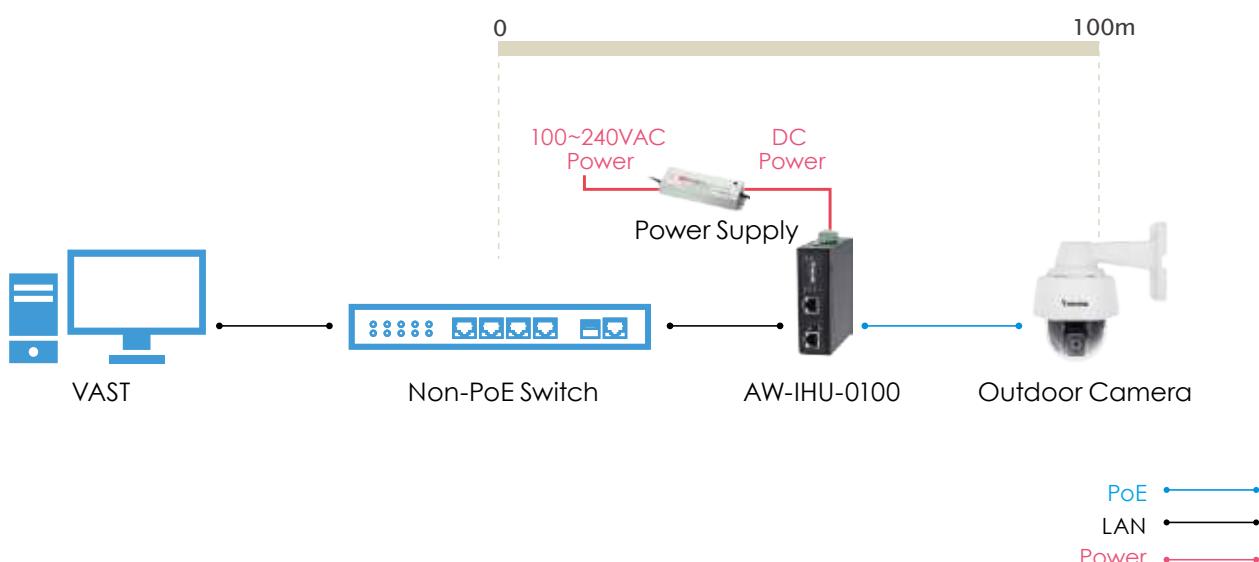
## Industrial PoE Products

# Industrial PoE Injector



The VIVOTEK Industrial PoE Injector series is designed for IP surveillance devices of wide wattage output and easy installation under extreme temperature from -40°C to 75°C requirements. With redundant power backup design, VIVOTEK industrial PoE injectors provide an imminently and sufficient back-up for unpredictable and unstable power environment. These industrial-grade PoE injectors are designed for wall-mount/din-rail mount, and power output from IEEE802.3at (30W) to PoH/PoE (95W) for different installation requirements.

## Application



- **Specifications**

Industrial PoE Injector			
Model	AW-IHT-0100	AW-IHU-0100	AW-IHH-0100
			
Short Highlight	Industrial 1xGE PoE Injector	Industrial 1xGE 60W UPoE Injector	Industrial 1xGE 95W PoH/PoE Injector
Ethernet			
10M/100M/1G RJ45 Port	2	2	2
PoE Function			
Number of PoE Out Ports	1	1	1
PoE Output Power	Per Port 56VDC, Max. 30W	Per Port 56VDC, Max. 60W	Per Port 56VDC, Max. 95W
802.3at Standard Compatible	Yes	Yes	Yes
802.3af Standard Compatible	Yes	Yes	Yes
Over Current Protection	Supported	Supported	Supported
Circuit Shorting Protection	Supported	Supported	Supported
Power Pin Assignment	1/2(+), 3/6(-)	1/2(-), 3/6(+), 4/5(+), 7/8(-)	1/2(-), 3/6(+), 4/5(+), 7/8(-)
PoE PD Auto Detection	Supported	Supported	Supported
Standards			
IEEE 802.3 10-BASE-T (Ethernet)	Supported	Supported	Supported
IEEE 802.3u 100-BASE-TX (Fast Ethernet)	Supported	Supported	Supported
IEEE 802.3ab 1000-BASE-T (Gigabit Ethernet)	Supported	Supported	Supported
IEEE 802.3af Power over Ethernet	Supported	Supported	Supported
IEEE 802.3at Power over Ethernet Plus	Supported	Supported	Supported
Transmission Media			
10Base T	Cat. 3, 4, 5 UTP/STP	Cat. 3, 4, 5 UTP/STP	Cat. 3, 4, 5 UTP/STP
100Base TX	Cat. 5, 5e UTP/STP	Cat. 5, 5e UTP/STP	Cat. 5, 5e UTP/STP
1000Base T	Cat. 5e, 6, 7 UTP/STP	Cat. 5e, 6, 7 UTP/STP	Cat. 5e, 6, 7 UTP/STP
General			
Power Input	Redundant Dual 48V-56VDC	Redundant Dual 48V-56VDC	Redundant Dual 50V-56VDC
Power Consumption	35 W	65 W	100 W
Dimensions	103 (L) x 81 (W) x 32 (H) mm	103 (L) x 81 (W) x 32 (H) mm	103 (L) x 81 (W) x 32 (H) mm
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)

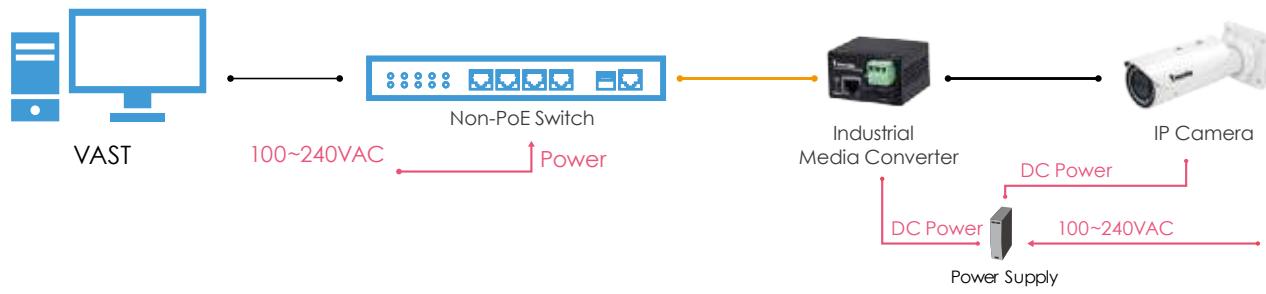
## Industrial PoE Products

# Industrial Media Converter



VIVOTEK offers a series of Fiber to Ethernet and Gigabit Fiber to Ethernet media converters for Ethernet extension under harsh environment. It is equipped with one RJ-45 cooper and flexible options SFP slot interface in a rugged metal case with redundant power system. VIVOTEK industrial media converter allows effortless and convenient long-range installation.

## Application



Fiber  
LAN  
Power

- **Specifications**

Industrial Media Converter	
Model	AW-IHS-0202
	
Short Highlight	Industrial 1xFE + 1xFE SFP Media Converter
<b>Ethernet</b>	
10M/100M RJ45 Port	1
10M/100M Fiber Port	1
10M/100M/1G RJ45 Port	-
10M/100M/1G SFP Port	-
<b>Ethernet Performance</b>	
MAC Address	1K
Buffer Memory	128 KB
Transmission Method	Store and Forward
Auto-MDI/MDI-X, Auto-Negotiation	Supported
<b>Standards</b>	
IEEE 802.3 10-BASE-T (Ethernet)	Supported
IEEE 802.3u 100-BASE-TX (Fast Ethernet)	Supported
IEEE 802.3ab 1000-BASE-T (Gigabit Ethernet)	-
IEEE 802.3x Flow Control (Full-Duplex Flow Control)	Supported
<b>Filtering/Forwarding Rates</b>	
10Mbps	14,880 pps
100Mbps	148,000 pps
1000Mbps	-
<b>Transmission Media</b>	
10Base T	Cat. 3, 4, 5 UTP/STP
100Base TX	Cat. 5, 5e UTP/STP
1000Base T	-
<b>General</b>	
Power Input	18V-36VAC or 12V-56VDC
Dimensions	59 (L) x 49 (W) x 36 (H) mm
Operating Temperature	-40°C ~ 75°C (-40°F ~ 167°F)

## Accessories

# Cabinet



AT-CAB-001



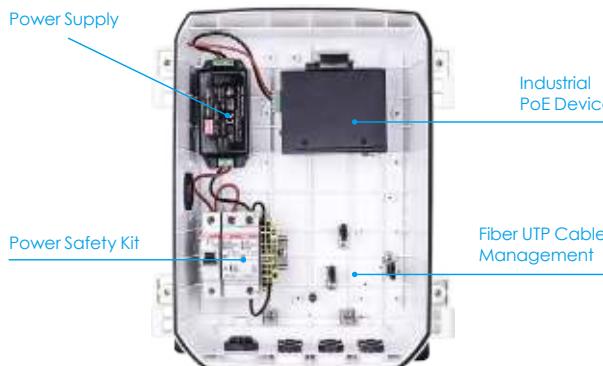
AT-CAS-001

VIVOTEK's AT-CAB-001 and AT-CAS-001 are complete and outdoor-ready surveillance cabinet solutions, built to provide easier installation for any application of VIVOTEK's full range of network cameras, including speed domes, bullets, and fixed dome network cameras as well as for VIVOTEK's outdoor camera enclosures.

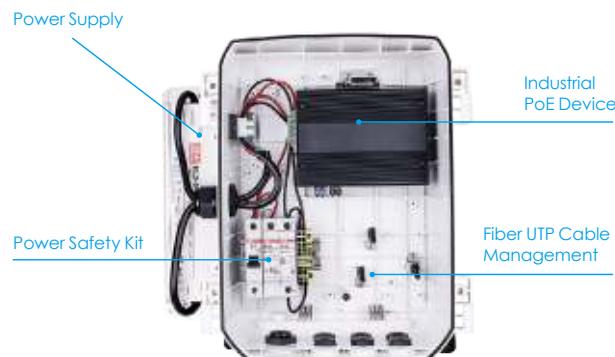
In order to cover a wide range of surveillance projects, users can choose from a cabinet only or all the way up to a complete cabinet with power supply, industrial PoE device, fiber media converter, and surge protection kit. VIVOTEK's AT-CAB-001 and AT-CAS-001 therefore provide both a flexible and turnkey solution for any surveillance scenario. Additionally, by equipping VIVOTEK's AT-CAB-001 and AT-CAS-001 with weather-proof IP66-rated and vandal-proof IK10-rated housing, VIVOTEK ensures full protection against both harsh environments and acts of vandalism. This extra protection makes this series the perfect choice for any exposed outdoor application, such as city surveillance.

### Features

- Support All VIVOTEK Cameras
- IP66/IK10
- -40°C ~ 75°C
- AC & PoE Surge Protector Included
- Single and Multiple Camera Applications



AT-CAB-001/AT-CAS-001



AT-CAB-001/AT-CAS-001+AT-CAB-002

## Application



## Accessories

Model	AT-CAB-001	AT-CAS-001
Short Highlight	Cabinet for all VIVOTEK network cameras	Cabinet for VIVOTEK speed dome cameras (SD936X)
Housing		IP66, IK10
Operating Temperature		-40 °C ~ 75 °C (-40 °F ~ 167 °F)
Humidity		90%
Dimensions	AT-CAB-001/AT-CAS-001: 289 x 280 x 132 mm AT-CAB-001/AT-CAS-001 + AT-CAB-002: 349 x 280 x 132 mm	
Weight		Net: 3.5 kg
Included Accessories	Quick installation guide, accessories pack, stainless steel wall-mount bracket	

## Cabinet Accessories

	<b>AT-CAB-002</b> Side-mount bracket for HLG series power supply		<b>AT-SUN-001</b> Sunshield for AT-CAx series cabinet		<b>AT-SUN-002</b> Sunshield for AT-CAx + AT-CAB-002 cabinet		<b>AT-SWH-001</b> Power Safety Kit
	<b>AT-SWH-002</b> Door open/close detection switch		<b>AT-PSP-001</b> PoE Surge Protector		<b>AT-WPC-001</b> M16 CABLE GLAND for 4~7mm AWG		<b>AT-WPC-002</b> M16 CABLE GLAND for Corrugated Tubing: 5/16 "
	<b>AM-314</b> Pole mount adapter		<b>AM-414</b> Corner mount adapter				

## Accessories

# Outdoor Enclosures



Value Series	Supreme Series
<p>Value series enclosures are compatible with all VIVOTEK box cameras, including wide-angle lenses or long-distance remote focus lenses. The camera enclosures are constructed from cast aluminum to meet IP68, and IK10 standards. Also support windows heater and blower.</p>	<p>Supreme outdoor enclosures are compatible with all VIVOTEK box cameras, including wide-angle lenses or long-distance remote focus lenses. The camera enclosures are constructed from cast aluminum to meet IP66/68, and IK10 standards.</p>
Features	Features
<ul style="list-style-type: none"><li>• Weather-proof IP68-rated</li><li>• Vandal-proof IK10-rated Cast Aluminum Housing</li><li>• Window Demister Heater and Fan</li><li>• Adjustable Sunshield</li><li>• 24VAC/VDC Power Input (AE-238/243)</li><li>• PoE Power Input (AE-239/244)</li><li>• Built-in IR LEDs Viewing up to 50M (AE-243/244)</li></ul>	<ul style="list-style-type: none"><li>• Weather-proof IP68-rated Enclosure (AE-23A/23E-v2)</li><li>• Vandal-proof IK10-rated Cast Aluminum Housing</li><li>• Window Demister Heater and Fan</li><li>• 24VAC/VDC Power Input (AE-23A)</li><li>• PoE IEEE 802.3 bt Power Input (AE-23E-v2)</li><li>• Adjustable Sunshield</li><li>• Side-Opening Alarm Switch</li><li>• Vari-Angle IR Illuminators (Optional)</li></ul>

## Application



## • Specifications

Value Series Enclosure				
Model	AE-238	AE-239	AE-243	AE-244
				
Specifications				
Input Voltage	24VAC/VDC	PoE at 30W 50-57VDC	24VAC/VDC	PoE at 30W 50-57VDC
Max Output Power Budget	30W	30W	30W	30W
IR LEDs Range	-	-	Fixed IR, 6W, 50m	Fixed IR, 6W, 50m
Power Consumption	Window Heater: 10W Blower: 2W Others: 2W	Window Heater: 5W Blower: 2W Others: 2W	Window Heater: 10W Blower: 2W IR LEDs: 6W Others: 2W	Window Heater: 5W Blower: 2W IR LEDs: 6W Others: 2W
Operating Temperature	-20°C ~ 65°C (-4°F ~ 149°F)	-20°C ~ 65°C (-4°F ~ 149°F)	-20°C ~ 65°C (-4°F ~ 149°F)	-20°C ~ 65°C (-4°F ~ 149°F)
Windows Heater ON/OFF	≤ 30°C (86°F) ON ≥ 35°C (95°F) OFF	≤ 30°C (86°F) ON ≥ 35°C (95°F) OFF	≤ 30°C (86°F) ON ≥ 35°C (95°F) OFF	≤ 30°C (86°F) ON ≥ 35°C (95°F) OFF
Fan ON/OFF	≥ 40°C (104 °F) ON ≤ 35°C (95 °F) OFF	≥ 40°C (104 °F) ON ≤ 35°C (95 °F) OFF	≥ 40°C (104 °F) ON ≤ 35°C (95 °F) OFF	≥ 40°C (104 °F) ON ≤ 35°C (95 °F) OFF
Waterproof IP Rating	IP68	IP68	IP68	IP68
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
Supported Cameras	All VIVOTEK Box Cameras	All VIVOTEK Box Cameras	All VIVOTEK Box Cameras	All VIVOTEK Box Cameras
Included Accessories	wall bracket sunshield	wall bracket sunshield	wall bracket sunshield	wall bracket sunshield

Optional Accessories				
Wall Mount Bracket	Ceiling Mount Bracket	Standing Mount Bracket		
				
AM-21D	AM-21E	AM-11F	AM-811	
Sunshield	Pole Mount Bracket			
				
AE-2S1	AM-314	AM-315		

## • Specifications

Supreme Series Enclosure		
Model	AE-23A	AE-23E-v2
		
Specifications		
Input Voltage	24VAC/VDC	PoE at 50~57VDC
Max Output Power Budget	80W	25 W thru 30W PSE 48 W thru 60W PSE 72 W thru 95W PSE
Power Consumption		Window Heater: 10W Blower: 2W Camera: 6 ~ 8W Others: 2W
Optional Vari-Angle IR LEDs Power consumption		AI-106 : 6W AI-108: 24W AI-109: 48W
Operating Temperature		-20°C ~ 65°C (-4°F ~ 149°F)
Windows Heater ON/OFF		≤ 30°C (86°F) ON ≥ 35°C (95°F) OFF
Fan ON/OFF		≥ 40°C (104 °F) ON ≤ 35°C (95 °F) OFF
Waterproof IP Rating		IP68
Vandal Proof		IK10 Impact Rated on Cast Aluminum Housing
Supported Cameras		All VIVOTEK Box Cameras
Included Accessories		wall bracket sunshield

Optional Accessories				
Wall Mount Bracket	Ceiling Mount Bracket	Standing Mount Bracket	Sunshield	
				
AM-21D	AM-21E	AM-11F	AM-811	AE-2S1
Pole Mount Bracket			Vari-Angle IR Illuminator	
				
AM-314	AM-315	AI-106 6W adjustable beam angle 10° ~ 40°, 25 ~ 100 m	AI-108 24W adjustable beam angle 10° ~ 30°, 80 ~ 160 m	AI-109 48W adjustable beam angle 10° ~ 30°, 120 ~ 250 m

## Accessories

# CaMate Illuminators

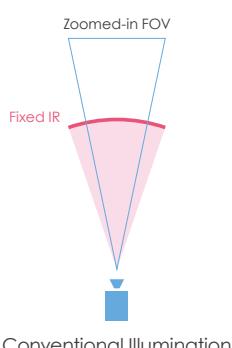


VIVOTEK's CaMate illuminator is a series of professional IR illuminators designed with Continuous Variable Angle Technology (CVA Tech), providing highly efficient intensity and uniform distribution to fit 10° ~ 180° FOV via adjustable beam angles up to 350 meters. The series offers multiple options for outdoor and long-distance in many applications such as traffic LPR/ANPR, airports, parking lots and many more.

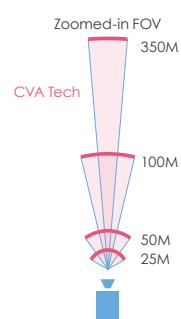
### Features

- Continuous Variable Angle Technology (CVA Tech)
- Variable Field of View 10° ~ 180°
- Adjustable Beam Angle up to 350 Meters
- Adjustable Light Sensitivity via RS485 Command
- Control Beam Angle and IR Power via RS485 Command
- Weather-proof IP68- and Vandal-proof IK10-rated Housing
- Extreme Weather Support
- Flexible Installation
- Five-year Warranty

### CVA Tech (Continuous Variable Angle Technology)



Conventional Illumination



Illuminator with CVA Tech

- High Uniformity without Hot Spots and Overexposure
- Accurate Image Quality with Special Beam Patterns for Different Solutions
- Optimizes Energy Efficiency

### Adopting Models

CM32 Series



CM48 Series



CA80 Series

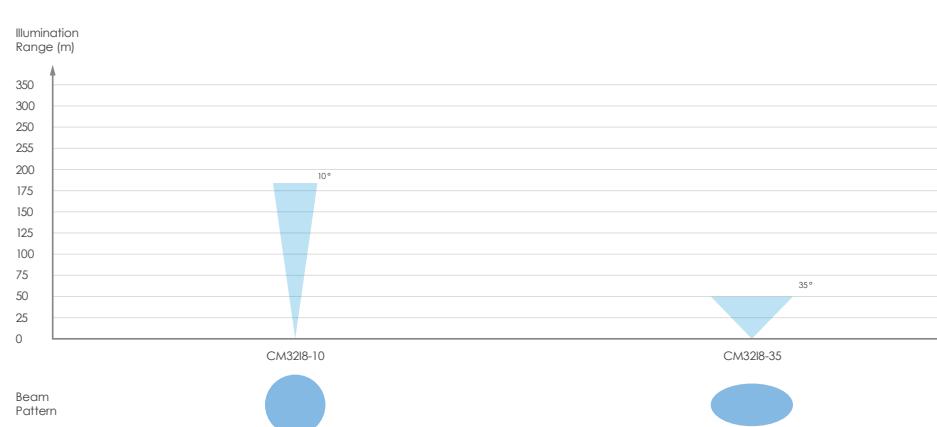


- 32W IR Illuminator
- 10° /35° FOV
- Fixed Beam Angle
- IP68, IK10

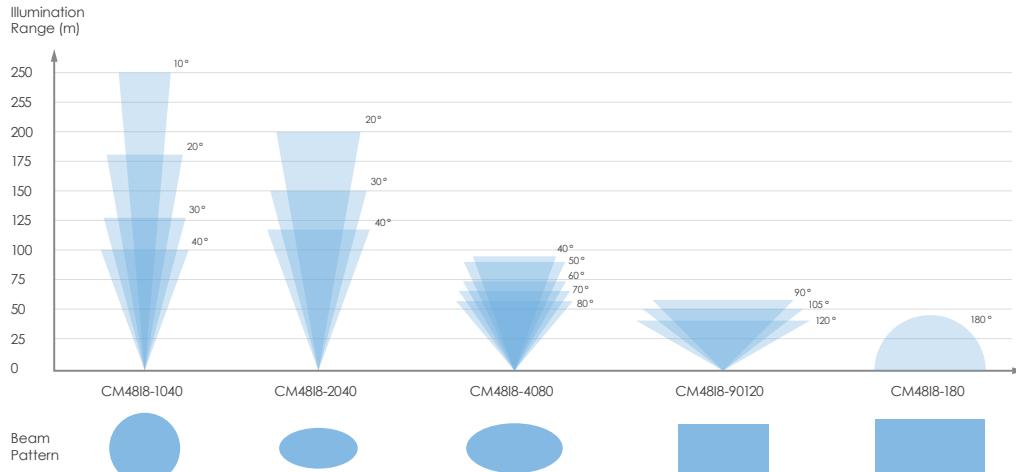
- 48W IR Illuminator
- 10° ~ 180° FOV
- Adjustable Beam Angles up to 250M
- IP68, IK10

- 80W IR Illuminator
- 10°~40° FOV
- Adjust Beam Angle with Remote Control
- IP68, IK10

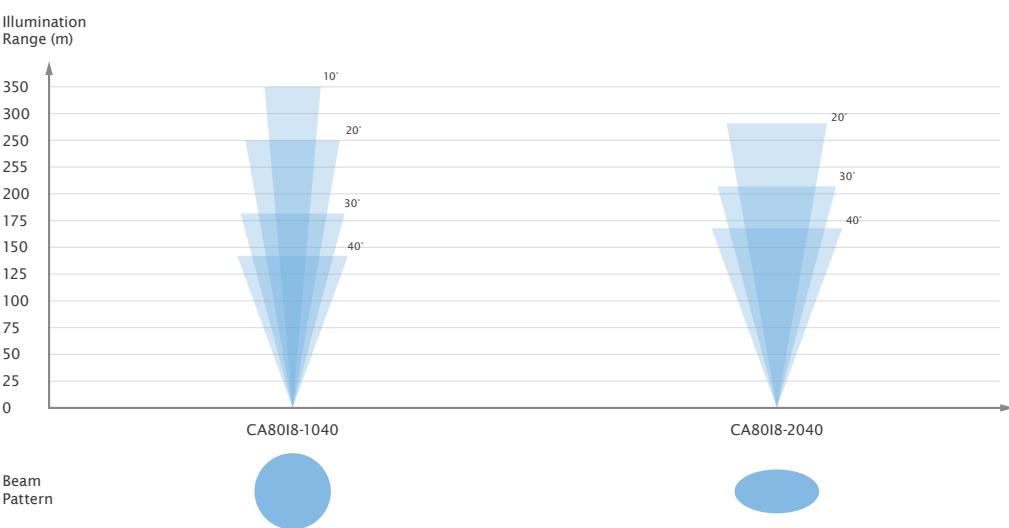
## • Specifications

CM32 Series		
Model	CM32I8-010	CM32I8-035
 		
Illumination Map		
 <p>The graph illustrates the illumination range (m) versus beam angle (HxV). The vertical axis represents the illumination range from 0 to 350 meters. The horizontal axis represents the beam angle. Two curves are shown: one for CM32I8-10 with a beam angle of 10° x 10°, and another for CM32I8-35 with a beam angle of 35° x 25°.</p>		
Product Information		
Beam Angle (HxV)	10° x 10°	35° x 25°
Distance	180 m (590 ft)	60.9 m (199 ft)
Beam Pattern	Circle	Elliptical
LED Array	12 pcs	
Wavelength	850 nm	
External Input	Digital input*1 (LED ON/OFF control input)	
External Output	Digital output*1 (Day/Night detection output) Digital output*1 (Error status output)	
Automatic IR On/Off	Controlled by Light Sensor	
Light Sensor Sensitivity (On/Off)	600/1000, 300/600(default), 50/200, 3/30 Lux (accessed via CM32 DIP switch)	
General		
Power Input	24 VAC ±20%, 24 VDC ±10%	
Power Consumption	Max. 32 W	
Operating Temperature	-40 °C ~ +60 °C	
Working Temperature	-40 °C ~ +60 °C	
Dimensions	157 x 105 x 80.62 mm (6.12" x 4.09" x 3.14")	
Weight	0.85 kg	
Cable Length	0.75 m (2.46 ft) UL AWM	
Casing	IP68, IK10	
Safety Certifications	EN 50130-4, CE: EN61000-6-3, FCC Class B, EN60529	
Humidity	90%	

## • Specifications

CM48 Series																							
Model	CM48I8-1040	CM48I8-2040	CM48I8-4080	CM48I8-90120	CM48I8-180																		
																							
<b>Illumination Map</b>																							
 <p>The graph illustrates the illumination range (m) versus distance (m) for five CaMate CM48 series models. The vertical axis represents the illumination range from 0 to 250 meters. The horizontal axis represents distance from 0 to 250 meters. Each model's beam pattern is shown as a shaded cone, with specific angles labeled at the top of each cone.</p> <table border="1"> <thead> <tr> <th>Model</th> <th>Horizontal Beam Angle (°)</th> <th>Vertical Beam Angle (°)</th> </tr> </thead> <tbody> <tr> <td>CM48I8-1040</td> <td>10° ~ 40°</td> <td>10°</td> </tr> <tr> <td>CM48I8-2040</td> <td>20° ~ 40°</td> <td>20°</td> </tr> <tr> <td>CM48I8-4080</td> <td>40° ~ 80°</td> <td>30°</td> </tr> <tr> <td>CM48I8-90120</td> <td>90° ~ 120°</td> <td>40°</td> </tr> <tr> <td>CM48I8-180</td> <td>180°</td> <td>105°</td> </tr> </tbody> </table>						Model	Horizontal Beam Angle (°)	Vertical Beam Angle (°)	CM48I8-1040	10° ~ 40°	10°	CM48I8-2040	20° ~ 40°	20°	CM48I8-4080	40° ~ 80°	30°	CM48I8-90120	90° ~ 120°	40°	CM48I8-180	180°	105°
Model	Horizontal Beam Angle (°)	Vertical Beam Angle (°)																					
CM48I8-1040	10° ~ 40°	10°																					
CM48I8-2040	20° ~ 40°	20°																					
CM48I8-4080	40° ~ 80°	30°																					
CM48I8-90120	90° ~ 120°	40°																					
CM48I8-180	180°	105°																					
<b>Product Information</b>																							
Beam Angle(Horizontal)	10° ~ 40°	20° ~ 40°	40° ~ 80°	90° ~ 120°	180°																		
Distance	100 - 250 m (328 - 820 ft)	120 - 200 m (394 - 656 ft)	60 - 90 m (197 - 295 ft)	45 - 55 m (148 - 180 ft)	40 m (131 ft)																		
Beam Pattern	Circular	Elliptical	Elliptical	Rectangular	Rectangular																		
LED Array	24 pcs LED																						
Wavelength	850 nm																						
External Input	IR ON/OFF control																						
External Output	Day/Night switching																						
Automatic IR On/Off	Controlled by Light Sensor																						
Light Sensor Sensitivity	1/5/10/30(default)/50/100 Lux (accessed via CaMate remote/RS-485 control)																						
Adjustable IR Power	20%-100% (accessed via CaMate remote/RS-485 control)																						
<b>General</b>																							
Power Input	12~24V DC ±10%, 24V AC(50/60Hz) ±10% (14.5VDC current controlled)																						
Power Consumption	Max. 48 W																						
Operating Temperature	-40°C ~ +60°C (-104°F ~ +140°F)																						
Working Temperature	-50°C ~ +60°C (-122°F ~ +140°F)																						
Dimensions	220 x 160 x 73 mm (8.6 x 6.3 x 2.9 inch)																						
Weight	2.1 kg																						
Cable Length	0.75 m (2.46 ft) UL AWM																						
Casing	IP68, IK10																						
Safety Certifications	IEC 62471, EN 50130-4, CE: EN61000-6-3, EN60598-1, EN60598-2-5, FCC Class B, EN60529																						
Humidity	90%																						
<b>Optional LED Source (Power input 24V DC/AC ±10%)</b>																							
940nm	CM48I9-1040	CM48I9-2040	CM48I9-4080	CM48I9-90120	-																		
White LED 5000K	CM48W5-1040	CM48W5-2040	CM48W5-4080	CM48W5-90120	-																		

## • Specifications

CA80 Series		
Model	CA80I8-1040	CA80I8-2040
		
<b>Illumination Map</b>		
		
<b>Product Information</b>		
Beam Angle(Horizontal)	10° ~ 40° (adjust via CaMate remote/RS-485 control)	20° ~ 40° (adjust via CaMate remote/RS-485 control)
Distance	140 - 350 m 459 - 1148 ft	170 - 280 m 557 - 918 ft
Beam Pattern	Circular	Elliptical
LED Array	24 pcs LED	
Wavelength	850 nm	
External Input	IR ON/OFF control	
External Output	Day/Night switching	
Automatic IR On/Off	Controlled by Light Sensor	
Light Sensor Sensitivity	1/5/10/30(default)/50/100% (Max. 1000 Lux) (accessed via CaMate remote/RS-485 control)	
Adjustable IR Power	20%-100% (accessed via CaMate remote/RS-485 control)	
<b>General</b>		
Power Input	24VDC ±10%, 24VAC(50/60Hz) ±10%	
Power Consumption	Max. 90 W	
Operating Temperature	-40 °C ~ +50°C (-104 °F ~ +122 °F)	
Working Temperature	-50 °C ~ +50 °C (-122 °F ~ +122 °F)	
Dimensions	220 x 160 x 73 mm (8.6 x 6.3 x 2.9 inch)	
Weight	2.1 kg	
Cable Length	0.75 m (2.46 ft) UL AWM	
Casing	IP68, IK10	
Safety Certifications	IEC 62471, EN 50130-4, CE: EN61000-6-3, EN60598-1, EN60598-2-5, FCC Class A, EN60529	
Humidity	90%	

## Accessories

# CaMate Accessories

### CaMate Accessories



CMA-B01	AM-219	CMA-B03
L-Bracket for single CaMate	L-Bracket for dual CaMate	U-type bracket for single CaMate



CMA-B04	CMA-B05	CMA-B06
Wall-Mount Kit for single or dual CaMate	Wall-Mount Kit for dual or triple CaMate	Wall-Mount Kit for dual or triple CaMate



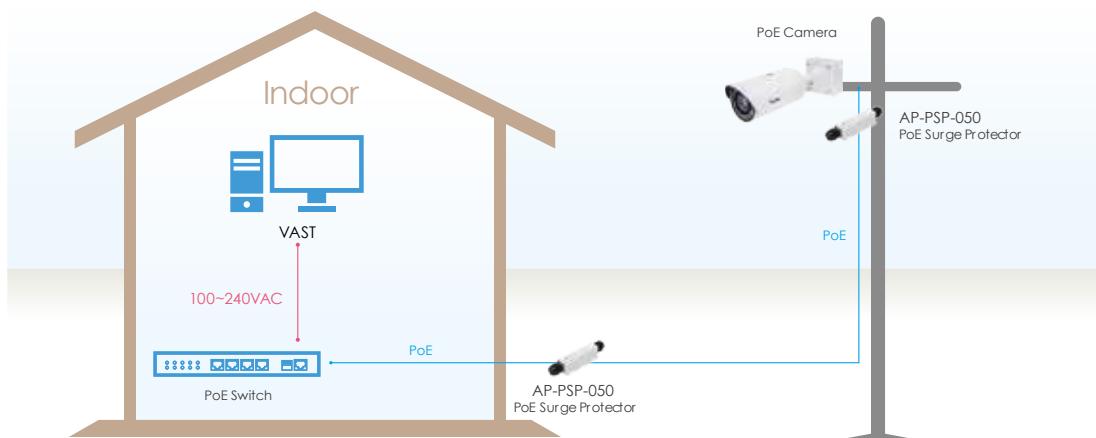
CMA-A01	CMA-E01	HLG-120H-24
Laser Alignment Kit	Remote Controller	Outdoor Industrial Power Supply, 24VDC/120W, -40°C ~ 70°C, IP67

## Accessories

# Outdoor PoE Surge Protector



## Application



### • Specifications

Model	AP-PSP-050
	
Specification	
Cable Gland	PG-16(RJ45) x 2
Pass Through Data Rates	10/100/1000 Mbps
Max Discharge Current (8/20us, 1KA per Line)	8KA,16KV
Maximum Operation DC Voltage	60VDC
Maximum Operation DC Current	1A for 2 pair, 2A for 4 pair, Max. 95W
Common Mode Protection Level (10/700us)	20KV
Differential Mode Protection Level (10/700us)	4KV
Clamping Voltage (Line to GND)	600V
Clamping Voltage (Line to Line)	20V
Insertion Loss @ 10MHz/100MHz	1dB
Return Loss @ 10MHz/100MHz	-20dB
Response Time	5ns
General	
Waterproof IP Rating	IP67
Operating Temperature	-40°C~ 85°C (-40°F~ 185°F)
Dimension	186.2 (L) x 50 (W) x 32 (H) mm

## Accessories

### PoE Accessories

#### Industrial Din Rail Power Supply



MDR-10-12	NDR-75-24	NDR-75-48
Indoor Industrial Din Rail Power Supply, 12VDC/10W, -20°C ~ 70°C	Indoor Industrial Din Rail Power Supply, 24~28VDC/75W, -20°C ~ 70°C	Indoor Industrial Din Rail Power Supply, 48~55VDC/75W, -20°C ~ 70°C



NDR-120-48	NDR-240-48
Indoor Industrial Din Rail Power Supply, 48~55VDC/120W, -20°C ~ 70°C	Indoor Industrial Din Rail Power Supply, 48~55VDC/240W, -20°C ~ 70°C

#### Industrial Power Supply



HLG-80H-24	HLG-80H-48	HLG-80H-54
Outdoor Industrial Power Supply, 24VDC/80W, -40°C ~ 70°C, IP67	Outdoor Industrial Power Supply, 48VDC/80W, -40°C ~ 70°C, IP67	Outdoor Industrial Power Supply, 54VDC/80W, -40°C ~ 70°C, IP67



HLG-120H-24	HLG-120H-48	HLG-120H-54
Outdoor Industrial Power Supply, 24VDC/120W, -40°C ~ 70°C, IP67	Outdoor Industrial Power Supply, 48VDC/120W, -40°C ~ 70°C, IP67	Outdoor Industrial Power Supply, 54VDC/120W, -40°C ~ 70°C, IP67



HLG-240H-54	HLG-240H-24
Outdoor Industrial Power Supply, 54VDC/240W, -40°C ~ 70°C, IP67	Outdoor Industrial Power Supply, 24VDC/240W, -40°C ~ 70°C, IP67

## Accessories

### PoE Accessories

#### SFP Transceiver



SFP-1000-MM85-X5	SFP-1000-MM13-02	SFP-1000-SM13-10
1.25G Multi-Mode SFP, 850nm, 0.5KM, 0°C ~ 70°C	1.25G Multi-Mode SFP, LC, 1310nm, 2KM, 0°C ~ 70°C	1.25G Single-Mode SFP, LC, 1310nm, 10KM, 0°C ~ 70°C



SFP-1000-SM13-40	SFP-1000-MM85-X5I	SFP-1000-MM13-02I
1.25G Single-Mode SFP, LC, 1310nm, 40KM, 0°C ~ 70°C	Industrial 1.25G Multi-Mode SFP, LC, 850nm, 0.5KM, -40°C ~ 85°C	Industrial 1.25G Multi-Mode SFP, LC, 1310nm, 2KM, -40°C ~ 85°C



SFP-1000-SM13-10I	SFP-1000-SM13-40I	SFP-1000-CPTX-X1
Industrial 1.25G Single-Mode SFP, LC, 1310nm, 10KM, -40°C ~ 85°C	Industrial 1.25G Single-Mode SFP, LC, 1310nm, 40KM, -40°C ~ 85°C	1000BaseT, SFP to RJ45, 100M, 0°C ~ 70°C



SFP-1000-CPTX-X1I
1000BaseT, SFP to RJ45, 100M, -40°C ~ 85°C

#### SFP+ Transceiver



SFP-2000-MM85-X3	SFP-2000-SM13-10
10G Multi-Mode SFP+, LC, 850nm, 0.3KM, 0°C ~ 70°C	10G Single-Mode SFP+, LC, 1310nm, 10KM, 0°C ~ 70°C

#### Outdoor Power Box



AA-351	AA-352
Outdoor IP67, IK10, 24VAC/6A, -40°C ~ 60°C	Outdoor IP67, IK10, 24VAC/6A, -40°C ~ 60°C



vivotek.com



#### VIVOTEK Inc.

6F, No.192, Lien-Cheng Rd., Chung-Ho,  
New Taipei City, 235, Taiwan  
| T: +886-2-82455282 | F: +886-2-82455532  
| E: sales@vivotek.com

#### VIVOTEK Middle East

Room 1802, P.O.Box: 61053, Jafza ONE,  
Jebel Ali free zone, Dubai, UAE  
| T: +971-4-8815333  
| F: +971-4-8815205  
| E: salesme@vivotek.com

#### VIVOTEK USA

2050 Ringwood Avenue,  
San Jose, CA 95131  
| T: 408-773-8686 | F: 408-773-8298  
| E: salesusa@vivotek.com

#### VIVOTEK India

602, Best Sky Tower, Plot No. F-5,  
Netaji Subhash Place, Pitam Pura,  
Delhi-110 034  
| T: +91-11-45137465  
| E: salesindia@vivotek.com

#### VIVOTEK Europe

Randstad 22-133, 1316BW Almere,  
The Netherlands  
| T: +31(0)36-5298-434  
| E: saleseurope@vivotek.com

#### VIVOTEK LATAM

Ejército Nacional N. 418 Piso 7, Oficina 711 Col.  
Polanco  
V Sección, Delegación Miguel Hidalgo México, D.F.  
| T: +52 55 1101 1793  
| E: salesmexico@vivotek.com

#### VIVOTEK Japan

〒 105-0011 東京都港区芝公園2-4-1  
芝パークビルA館9階  
| T: +81-3-5733-1280  
| E: salesjp@vivotek.com

All specifications are subject to change without notice.  
Copyright © VIVOTEK INC. All rights reserved. Ver. 4