PoE Brochure

• PoE Solution • Industrial Solution • Accessory

v.2

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 and COmmunication 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

PoE Solution - Commercial 5

VivoCam L2+ Managed PoE Switch ----------5

VivoCam Web Smart Managed PoE Switch ----------8

10G L2+ Managed Switch ----------11

Unmanaged PoE Switch----------13

PoE Solution - Outdoor 16

Outdoor VivoCam L2+ Managed PoE Switch ----------16

Outdoor Unmanaged PoE Switch ----------20

PoE Solution - Long Range Solution 25

PoE Extender----------25

EPoC Extender ----------27

PoE Solution - PoE Injector 29

PoE Injector ----------29

Industrial Solution 31

Industrial VivoCam L2+ Managed PoE Switch----------31

Industrial Unmanaged PoE Switch ----------34

Industrial PoE Injector----------37

Industrial Media Converter ----------39

Accessories 41

Cabinet Solution ----------41

Outdoor Enclosures ----------43

CaMate Illuminators ----------46

CaMate Accessories ----------51

Outdoor PoE Surge Protector----------52

PoE Accessories ----------53

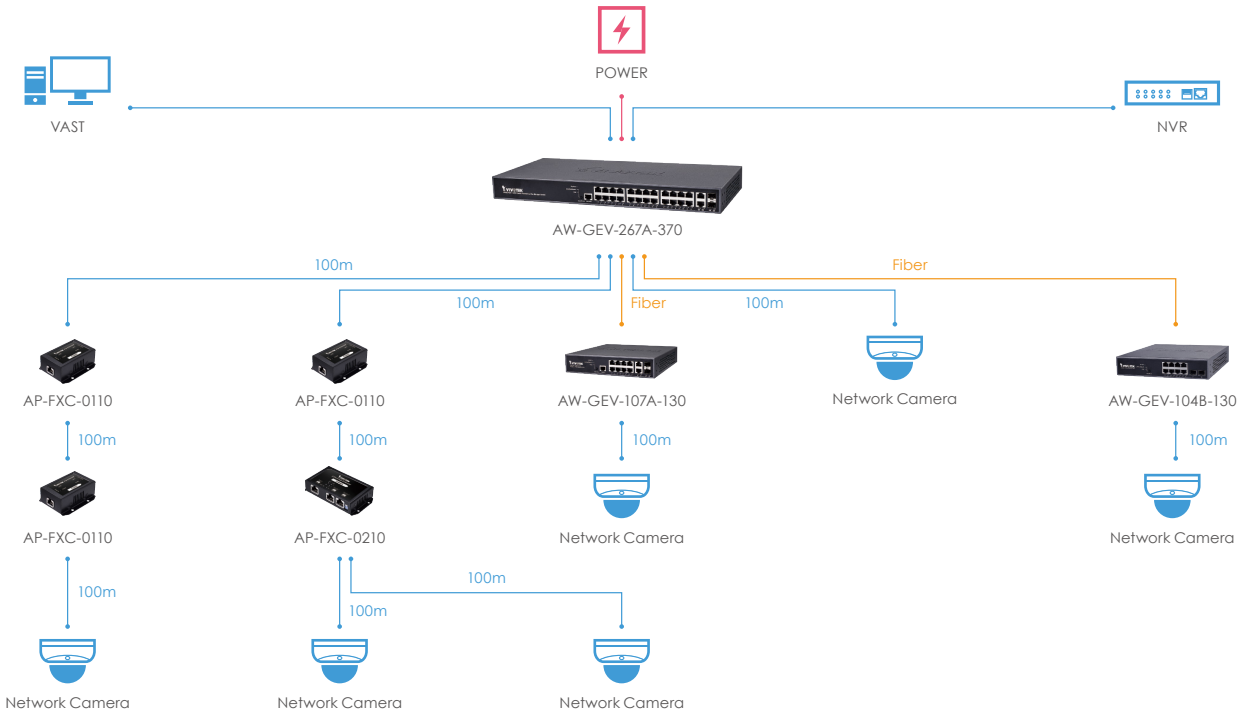
PoE Solution - Commercial

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.

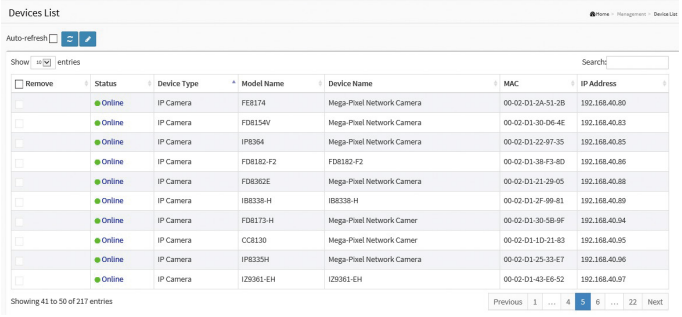
Managing IP Surveillance	Managed Layer 2 Features
• Auto Discovery and Classification of Network Devices • Batch Camera Configuration-File Import & Export • Batch Camera Network/Login Configuration • Auto Generated Surveillance Topology View • Easy Tag VLAN Configuration in Topology View • Smart Device-Management In Topology View • PoE On/Off Control in Topology View • Display IP Camera Live Stream in Topology View, Floor View and Google Map View • Support 3rd Party ONVIF IP Cameras	• DHCP Server • IPv4/IPv6 L3 Static Route • IEEE802.1Q VLAN (up to 4096), Double Tag (Q-in-Q) • IEEE802.1v Protocol VLAN and MAC-based VLAN • IEEE802.1d (STP), 802.1w (RSTP) and 802.1s (MSTP) • IEEE802.3ad Link Aggregation Control Protocol (LACP) • SNMP v1/v2c/v3 for Management • HTTPs/SSL/SSHv1&v2 for Secured Connection

Application

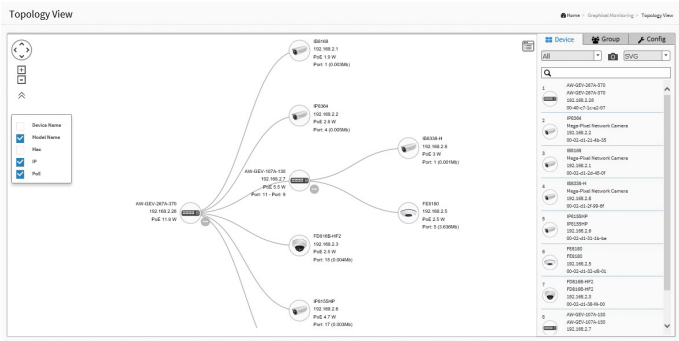


• Feature Highlights - Managing IP Surveillance

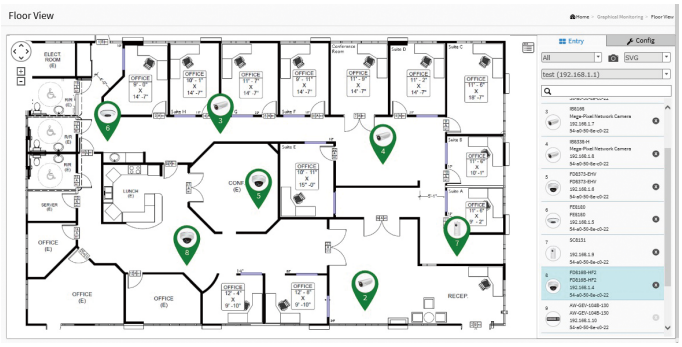
Auto Discovery



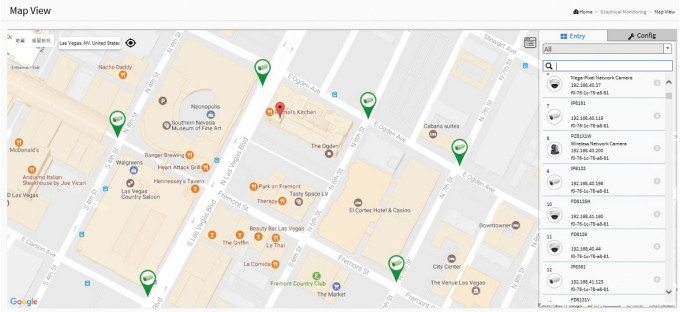
Topology View



Floor View

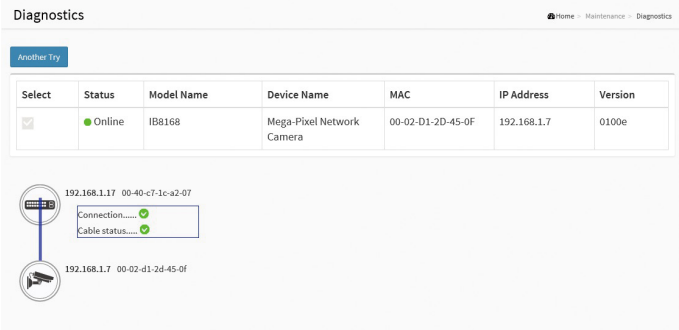


Google Map

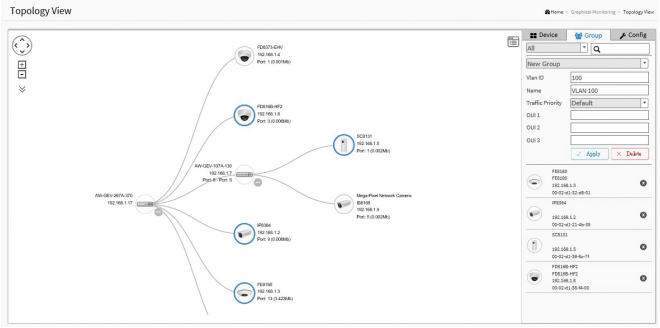


Device Management

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
Ethernet		
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
PoE Function		
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
Ethernet Performance		
Switch Capacity	20 Gbps	52 Gbps
MAC Address	8K	8K
Jumbo Frames	9600 Bytes	9600 Bytes
Auto-MDI/MDI-X, Auto-Negotiation	Supported	Supported
Managing IP Surveillance Management		
Auto Search VIVOTEK Device	Supported	Supported
Surveillance Management List	Supported	Supported
Easy Tag VLAN in Topology View	Supported	Supported
Managing IP Surveillance E-MAP View		
Topology View	Supported	Supported
Floor View	Supported	Supported
Google Map View	Supported	Supported
Managing IP Surveillance Maintenance		
VIVOTEK Camera Configuration File Export/Import	Supported	Supported
Traffic Monitoring	Supported	Supported
L2 Switching Feature		
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
L3 Switching Feature		
IP Host Table	Supported	Supported
Static Route (IPv4/IPv6)	Supported	Supported
Static ARP	Supported	Supported
DHCP Server	Supported	Supported
General		
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)

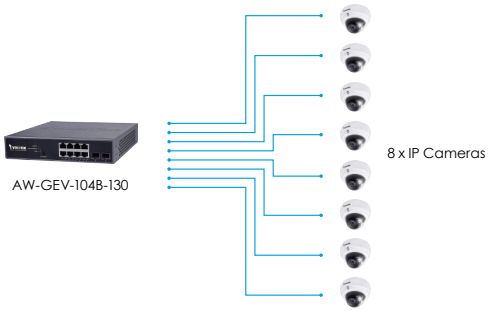
PoE Solution - Commercial

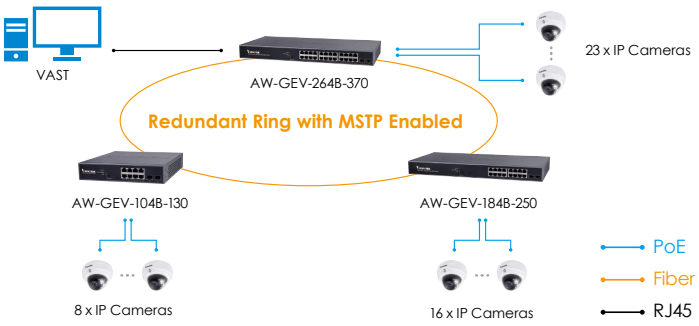
VivoCam Web Smart Managed PoE Switch

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
• Auto Discovery and Classification of Network Devices • Batch Camera Configuration-File Import & Export • Batch Camera Network/Login Configuration • Auto Generated Surveillance Topology View • Easy Tag VLAN Configuration in Topology View • Smart Device-Management in Topology View • PoE On/Off Control in Topology View • Display IP Camera Live Stream in Topology View, Floor View and Google Map View • Support 3rd Party ONVIF IP Cameras	• DHCP Server • IEEE802.1Q VLAN (up to 4096), Double Tag (Q-in-Q) • IEEE802.1v Protocol VLAN and MAC-based VLAN • IEEE802.1d (STP), 802.1w (RSTP) and 802.1s (MSTP) • IEEE802.3ad Link Aggregation Control Protocol (LACP) • SNMP v1/v2c/v3 for Management • IEEE802.3az Energy-Efficient Ethernet

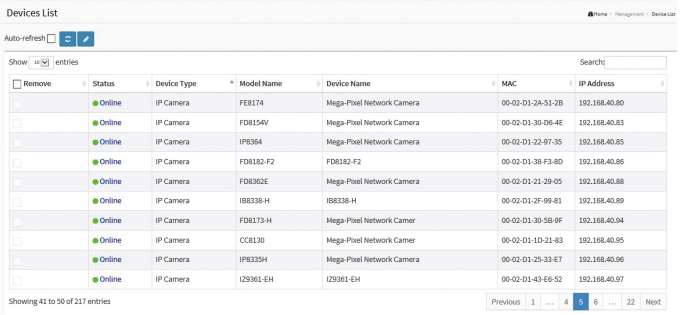
Application



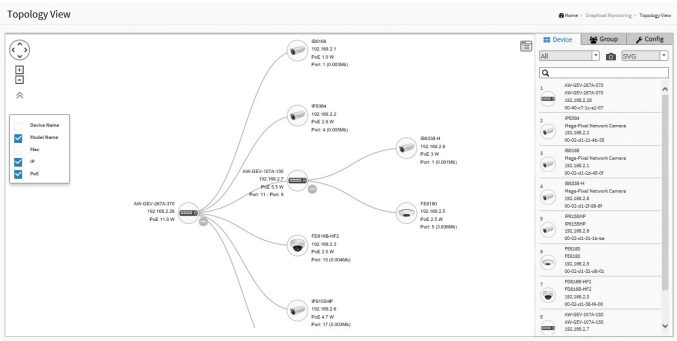


• Feature Highlights - Managing IP Surveillance

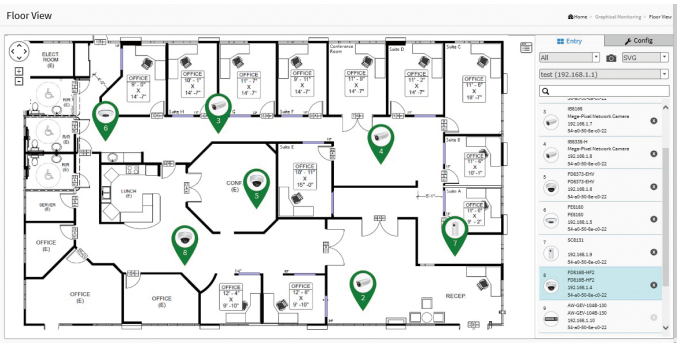
Auto Discovery



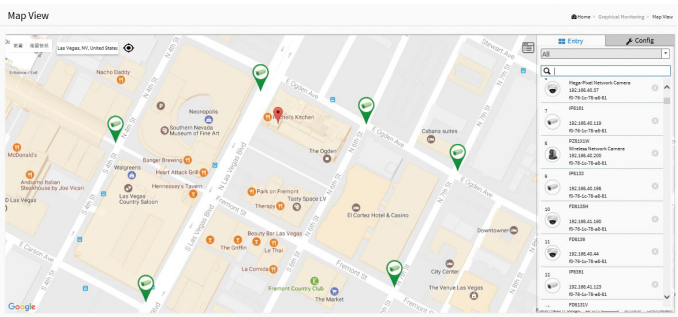
Topology View



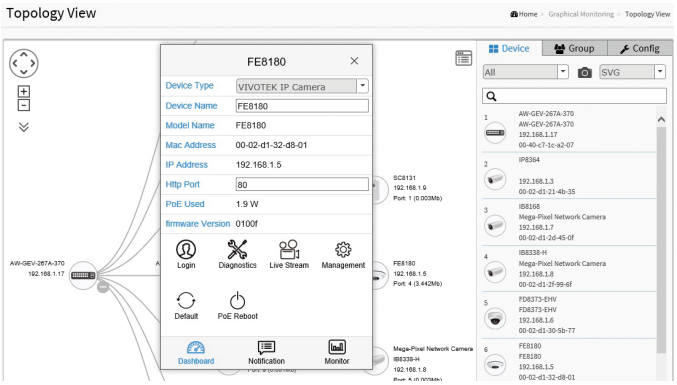
Floor View



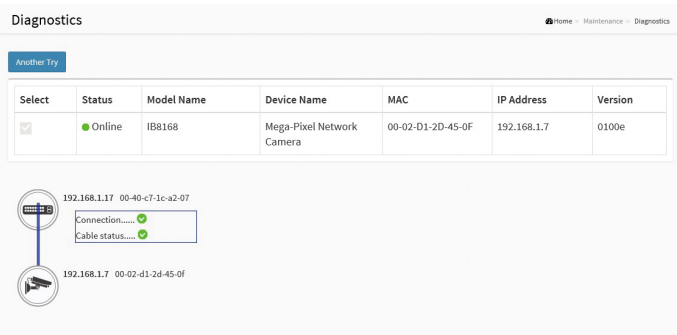
Google Map



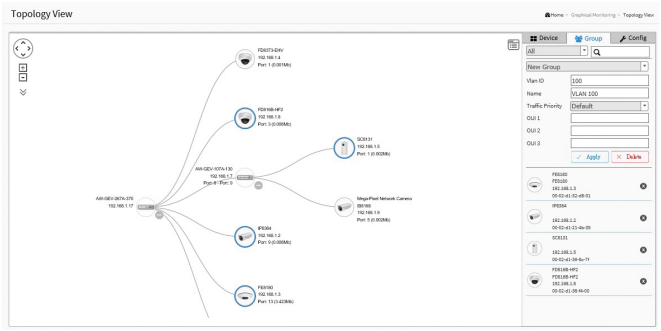
Device Management



Device Status



VLAN Setting



Live Stream

• 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
Ethernet			
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
PoE Function			
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
Ethernet Performance			
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
Managing IP Surveillance Management			
Auto Search VIVOTEK Device	Supported	Supported	Supported
Surveillance Management List	Supported	Supported	Supported
Easy Tag VLAN in Topology View	Supported	Supported	Supported
Managing IP Surveillance E-MAP View			
Topology View	Supported	Supported	Supported
Floor View	Supported	Supported	Supported
Google Map View	Supported	Supported	Supported
Managing IP Surveillance Maintenance			
VIVOTEK Camera Configuration File Export/Import	Supported	Supported	Supported
Traffic Monitoring	Supported	Supported	Supported
L2 Switching Feature			
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
L3 Switching Feature			
DHCP Server	Supported	Supported	Supported
General			
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)

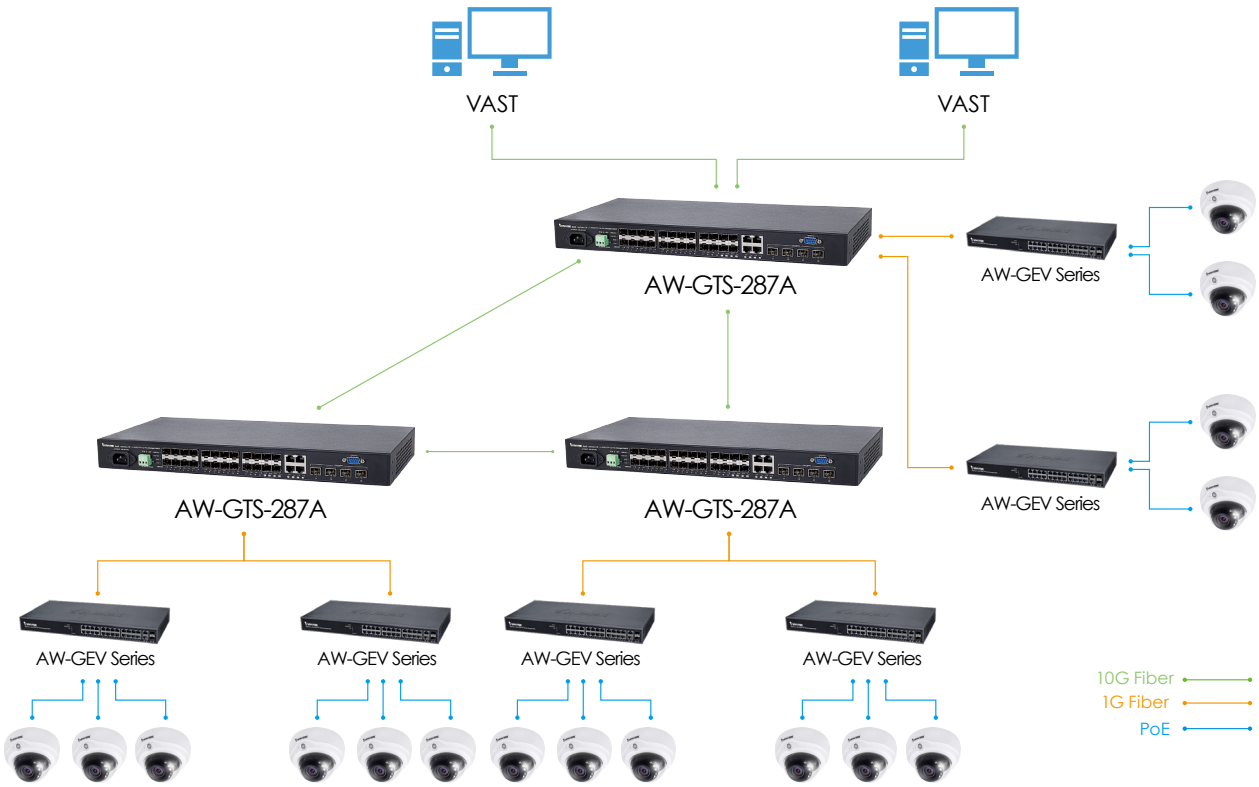
10G L2+ Managed Switch

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
Ethernet	
1G SFP Slot	20
1G Combo Port (RJ45/SFP)	4
10G SFP Slot	4
RS232 Console Port	1
Ethernet Performance	
Switch Capacity	128 Gbps
MAC Address	32 K
Jumbo Frame	10056 Bytes
Auto-MDI/MDI-X, Auto-Negotiation	Supported
L2 Switch Feature	
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
L3 Switching Feature	
IP Host Table	Supported
Static Route (IPv4/IPv6)	Supported
Static ARP	Supported
DHCP Server	Supported
Security	
Port Security (MAC-based)	Supported
RADIUS / TACACS+ Authentication	Supported
HTTPs and SSL (Secured Web)	Supported
SSH v1.5/v2.0 (Secured Telnet Session)	Supported
General	
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)

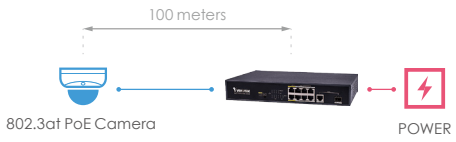
PoE Solution - Commercial

Unmanaged PoE Switch

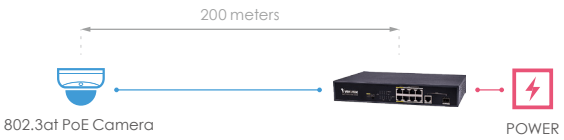
Fast Ethernet	Giga Ethernet
VIVOTEK's FE unmanaged PoE switches equipped with DIP switch provides ST "STandard" and EX "EXtend" operation modes. It's a specially designed for IP Surveillance application, besides standard 802.3af/at PoE functions on ST mode, the EX mode transmits data & power on one single cable up to 200 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 & 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. VIVOTEK's FE unmanaged PoE switch has five sub models consisting of 6, 10, 10,18 and 26 ports with a range of power budgets from 60W to 370W for IP surveillance applications.	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 24 PoE ports, and power output from IEEE802.3af (15.4W) to UPoE (60W). These switches are energy efficient, built to last, and rigorously tested to provide the reliability businesses need.

Application

- ST Mode

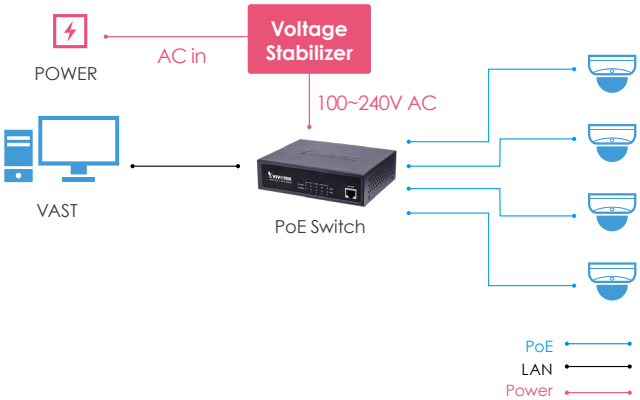


- EX Mode



Range Guide	EX Port @ EX Mode	Any Port @ ST Mode
802.3at PoE IP Camera	200M @ 10Mbps	100M @ 100Mbps

Application



• Specifications

Unmanaged PoE Switch - Fast Ethernet						
Model	**AW-FET-060C-065**	**AW-FET-100C-120**	**AW-FGT-100B-120**	**AW-FGT-100C-120**	**AW-FGT-180C-250**	**AW-FGT-260C-380**
Short Highlight	Unmanaged 4xFE PoE + 2xFE UTP Switch	Unmanaged 8xFE PoE + 2xFE UTP Switch	Unmanaged 8xFE PoE + 2xGE 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	8	16	24
10M/100M/1G RJ45 Port	-	-	2	1	-	-
1G SFP Slot	-	-	-	1	-	-
1G Combo Port (RJ45/SFP)	-	-	-	-	2	2
PoE Function						
Number of PoE Port	4	8	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	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 200M/10Mbps	8 port up to 200M/10Mbps
Total PoE Power Budget	65 W	120W	115W	120W	240 W	370 W
802.3at/af Standard Compatible	Yes	Yes	Yes	Yes	Yes	Yes
Power Pin Assignment	1/2(+), 3/6(-), 4/5(+), 7/8(-)	1/2(+), 3/6(-), 4/5(+), 7/8(-)	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(-)
PoE PD Auto Detection	Yes	Yes	Yes	Yes	Yes	Yes
Ethernet Performance						
Switch Capacity	1.2 Gbps	2 Gbps	5.6 Gbps	5.6 Gbps	7.2 Gbps	8.8 Gbps
MAC Address	2K	2K	8K	4K	16K	16K
Jumbo Frame	1,536 Bytes	1,536 Bytes	1,536 Bytes	1,536 Bytes	1,536 Bytes	1,536 Bytes
Auto-MDI/MDI-X, Auto-Negotiation	Supported	Supported	Supported	Supported	Supported	Supported
General						
Power Input	100~240V AC / 50~60Hz	100~240V AC / 50~60Hz	100V~240VAC / 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 12KV	Per Port 12KV
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	330 (L) x 119 (W) x 44 (H) mm	280 (L) x 180 (W) x 44 (H) mm	440 (L) x 230 (W) x 44 (H) mm	440 (L) x 230 (W) x 44 (H) 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)	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

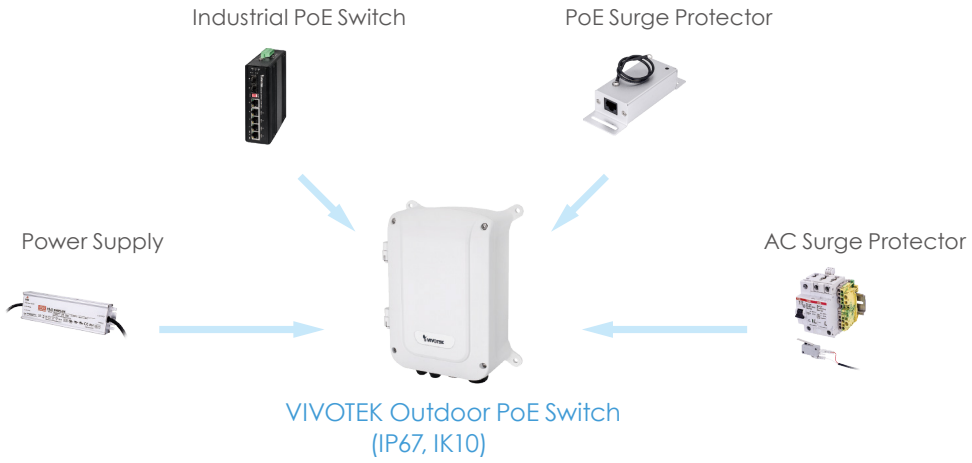
Unmanaged PoE Switch - Gigabit Ethernet Ethernet					
Model	**AW-GET-050A-065**	**AW-GEU-080A-250**	**AW-GET-100A-120**	**AW-GET-180A-250**	**AW-GET-260A-380**
Short Highlight	Unmanaged 4xGE PoE + 1xGE UTP Switch	2xGE 60W UPoE + 4xGE PoE + 2xGE UTP Switch	8xGE PoE + 2xGE SFP Switch	16xGE PoE + 2xGE SFP Switch	24xGE PoE + 2xGE SFP Switch
Ethernet Port					
10M/100M RJ45 Port	-	-	-	-	-
10M/100M/1G RJ45 Port	5	8	8	16	24
1G SFP Slot	-	-	2	2	2
1G Combo Port (RJ45/SFP)	-	-	-	-	-
PoE Function					
Number of PoE Port	4	2x60W UPoE, 4x30W PoE	8	16	24
PoE Output Power	Per Port 56VDC, Max. 30W	Per Port 56V DC, Max. 30W or 60W	Per Port 56VDC, Max. 30W	Per Port 56VDC, Max. 30W	Per Port 56VDC, Max. 30W
PoE EX Mode	-	-	-	-	-
Total PoE Power Budget	60 W	240 W	115 W	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(-) for 30W 1/2(+), 3/6(-), 4/5(+), 7/8(-) for 60W	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	10 Gbps	16 Gbps	20 Gbps	36 Gbps	52 Gbps
MAC Address	8K	8K	8K	8K	8K
Jumbo Frame	9K	9K	9K	9K	9K
Auto-MDI/MDI-X, Auto-Negotiation	Supported	Supported	Supported	Supported	Supported
General					
Power Input	100~240V AC / 50~60Hz	100~240V AC / 50~60Hz	100~240V AC / 50~60Hz	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 182 (W) x 44 (H) mm	280 (L) x 214 (W) x 44 (H) mm	440 (L) x 200 (W) x 44 (H) mm	440 (L) x 200 (W) x 44 (H) 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)	0°C ~ 50°C (32°F ~ 122°F)	0°C ~ 50°C (32°F ~ 122°F)

Outdoor VivoCam L2+ Managed PoE Switch

VIVOTEK's outdoor VivoCam L2+ series is the Layer 2 plus managed PoE switch with IP surveillance management functions and it's outdoor ready with waterproof IP67, Vandal proof IK10 and surge protection each port up to 6KV. 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.

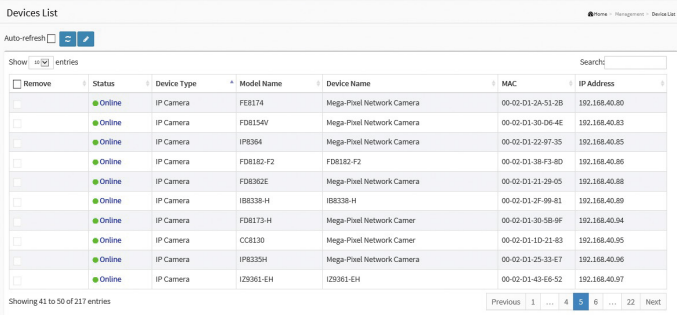
Managing IP Surveillance	Managed Layer 2 Features
• Auto Discovery and Classification of Network Devices • Batch Camera Configuration-File Import & Export • Batch Camera Network/Login Configuration • Auto Generated Surveillance Topology View • Easy Tag VLAN Configuration in Topology View • Smart Device-Management in Topology View • PoE On/Off Control in Topology View • Display IP Camera Live Stream in Topology View, Floor View and Google Map View • Support 3rd Party ONVIF IP Cameras	• DHCP Server • IPv4/IPv6 L3 Static Route • IEEE802.1Q VLAN (up to 4096), Double Tag (Q-in-Q) • IEEE802.1v Protocol VLAN and MAC-based VLAN • IEEE802.1d (STP), 802.1w (RSTP) and 802.1s (MSTP) • IEEE802.3ad Link Aggregation Control Protocol (LACP) • SNMP v1/v2c/v3 for Management • HTTPs/SSL/SSHv1&v2 for Secured Connection

Plug and Play Installation with All-in-One Device

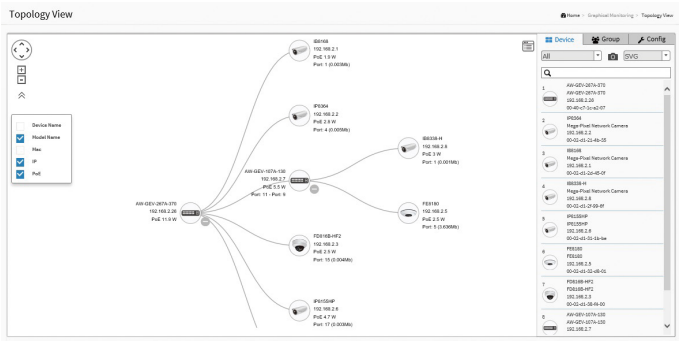


• Feature Highlights - Managing IP Surveillance

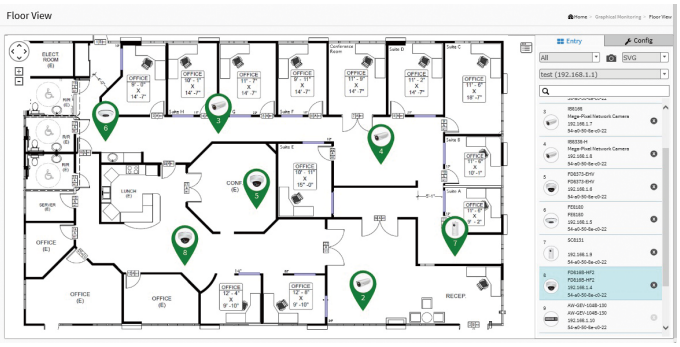
Auto Discovery



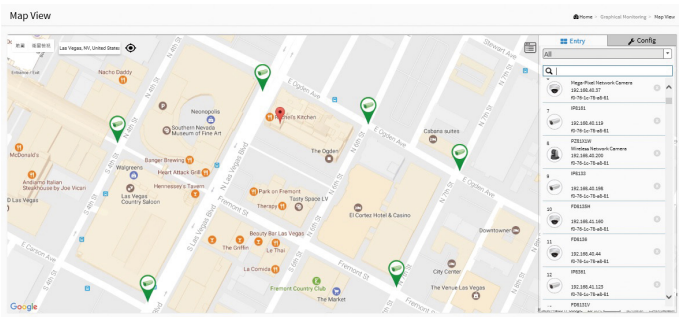
Topology View



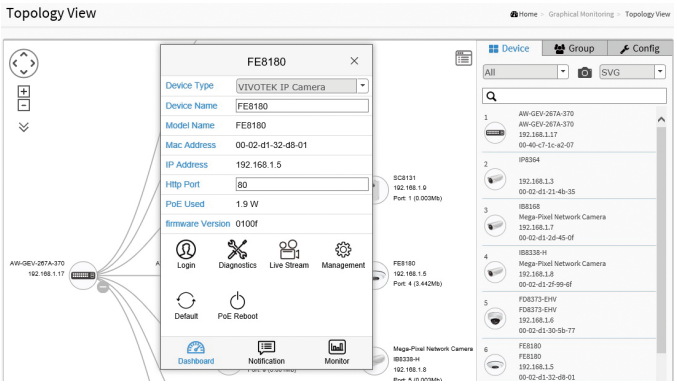
Floor View



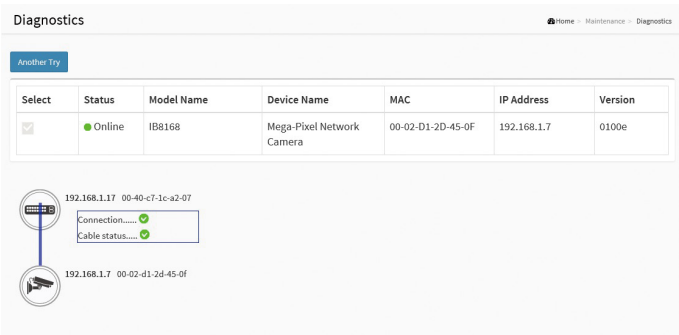
Google Map



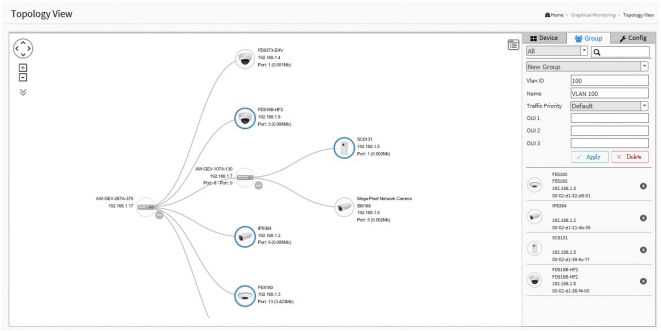
Device Management



Device Status



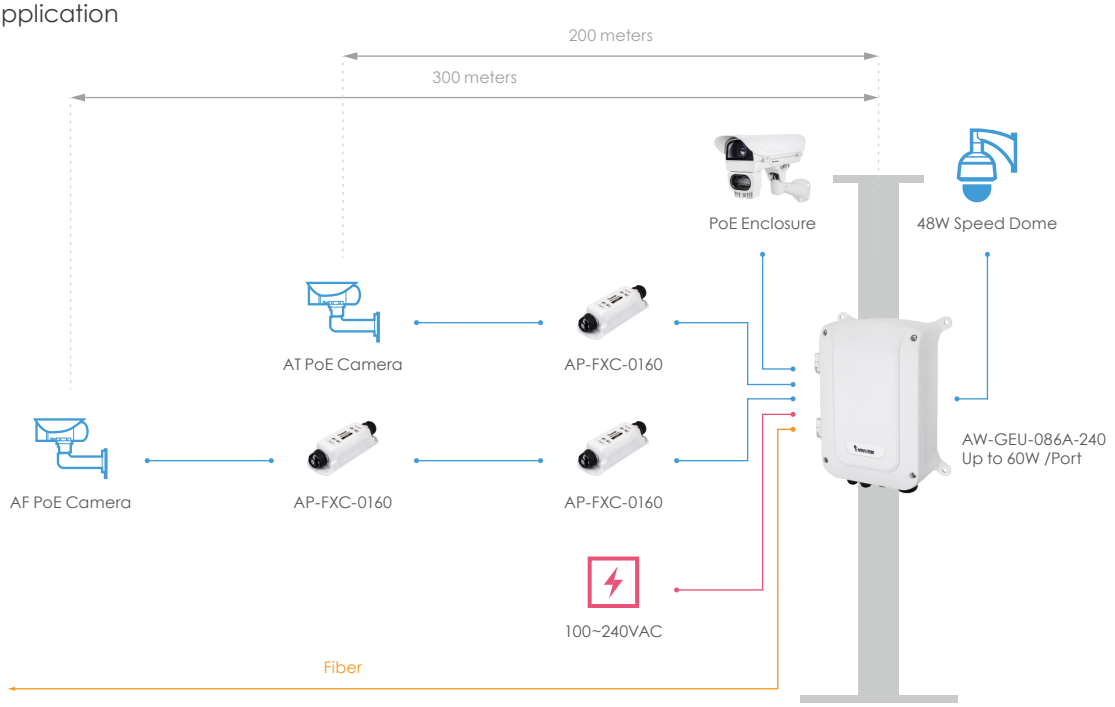
VLAN Setting



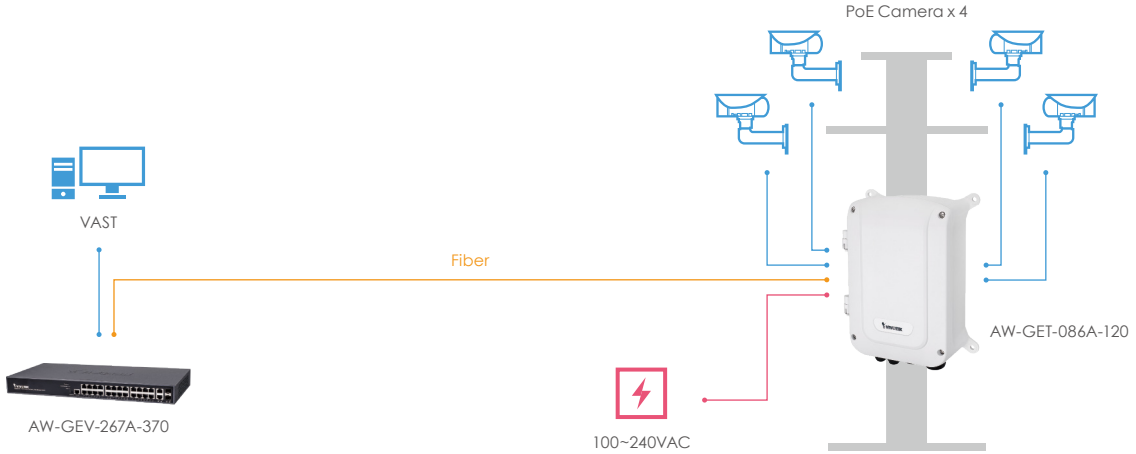
Live Stream

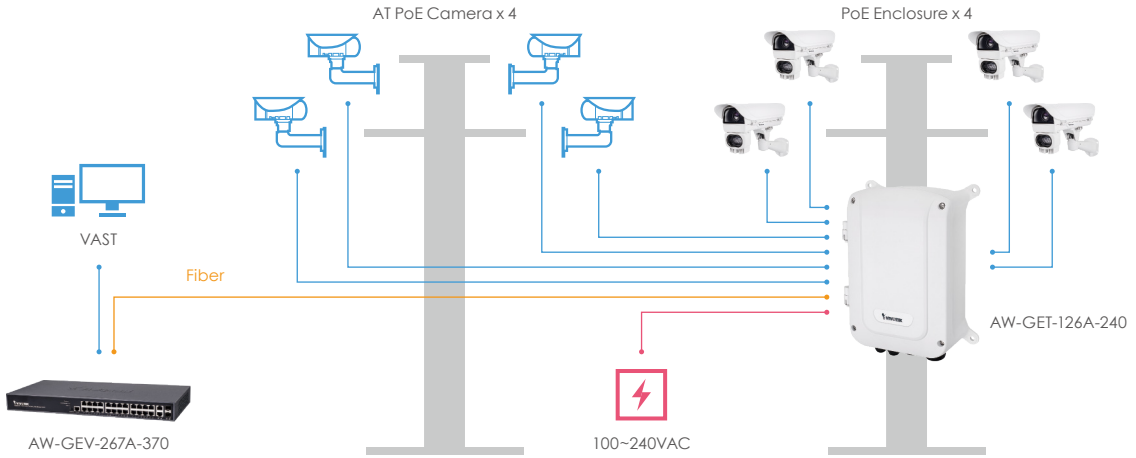
• Application

Long Range Application



Multi-Camera Applicaiton



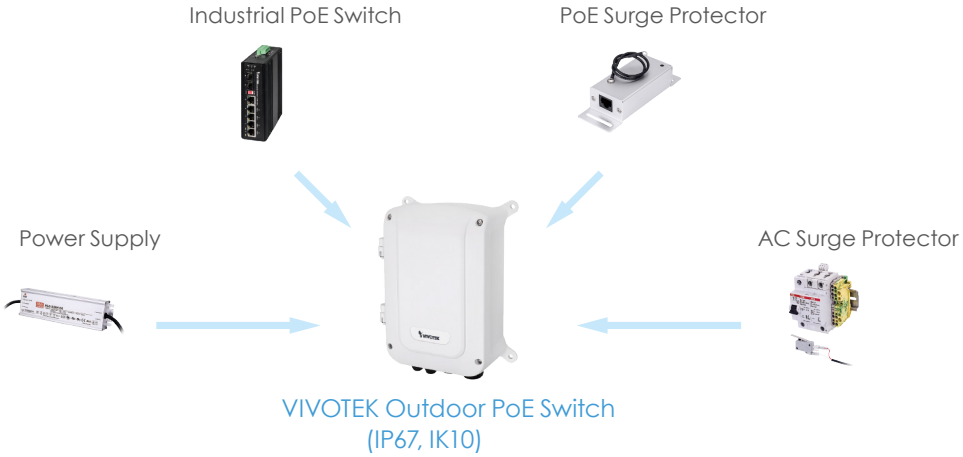


• Specifications

Outdoor VivoCam L2+ Managed PoE Switch			
Model	**AW-GET-086A-120**	**AW-GEU-086A-240**	**AW-GET-126A-240**
Short Highlight	4xGE PoE + 2xGE UTP + 2xGE SFP + 1xRJ45 Console	4xGE UPoE + 2xGE UTP + 2xGE SFP + 1xRJ45 Console	24xGE PoE + 2xGE Combo + 1xRJ45 Console
Ethernet			
10M/100M/1G RJ45 PoE Port	4 /Per Port 30W PoE	4 /Per Port 60W UPoE	8 /Per Port 30W PoE
10M/100M/1G RJ45 Port	2	2	-
1G SFP Slot	2	2	4
RJ45 Console Port	1	1	1
PoE Function			
Number of PoE Port	4	4	8
PoE Output Power	Per Port 54VDC, Max. 30W	Per Port 54VDC, Max. 60W	Per Port 54VDC, Max. 30W
Total PoE Power Budget	120W	240W	240W
Power Pin Assignment	1/2(+), 3/6(-)	15.4W/30W PoE: 1/2(+), 3/6(-) 60W UPoE: 1/2(+), 3/6(-),4/5(+), 7/8(-)	1/2(+), 3/6(-)
PoE Management: PoE Config/Alive Checking/ Scheduling/Power Delay	Supported	Supported	Supported
IEEE 802.3at/af Power over Ethernet	Supported	Supported	Supported
Ethernet Performance			
Switch Capacity	16 Gbps	16 Gbps	24Gbps
MAC Address	8K	8K	8K
Jumbo Frames	9600 Bytes	9600 Bytes	9600 Bytes
Auto-MDI/MDI-X, Auto-Negotiation	Supported	Supported	Supported
Managing IP Surveillance Management			
Auto Search VIVOTEK Device	Supported	Supported	Supported
Surveillance Management List	Supported	Supported	Supported
Easy Tag VLAN in Topology View	Supported	Supported	Supported
Managing IP Surveillance E-MAP View			
Topology View	Supported	Supported	Supported
Floor View	Supported	Supported	Supported
Google Map View	Supported	Supported	Supported
Managing IP Surveillance Maintenance			
VIVOTEK Camera Configuration File Export/Import	Supported	Supported	Supported
Traffic Monitoring	Supported	Supported	Supported
L2 Switching Feature			
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
L3 Switching Feature			
IP Host Table	Supported	Supported	Supported
Static Route (IPv4/IPv6)	Supported	Supported	Supported
Static ARP	Supported	Supported	Supported
DHCP Server	Supported	Supported	Supported
General			
Power Input	100~240V AC / 50~60Hz	100~240V AC / 50~60Hz	100~240V AC / 50~60Hz
Surge Protection /Each PoE Port	6KV	6KV	6KV
Surge Protection for AC Power	40KV	40KV	40KV
Waterproof IP Rating	IP67	IP67	IP67
Vandal Proof	IK10	IK10	IK10
Dimensions	315.4(W) x 245.8(H) x 118(D) mm	315.4(W) x 245.8(H) x 118(D) mm	315.4(W) x 245.8(H) x 118(D) mm
Operating Temperature	-40°C~ 65°C (-40°F~ 149°F)	-40°C~ 65°C (-40°F~ 149°F)	-40°C~ 65°C (-40°F~ 149°F)

Outdoor Unmanaged PoE Switch

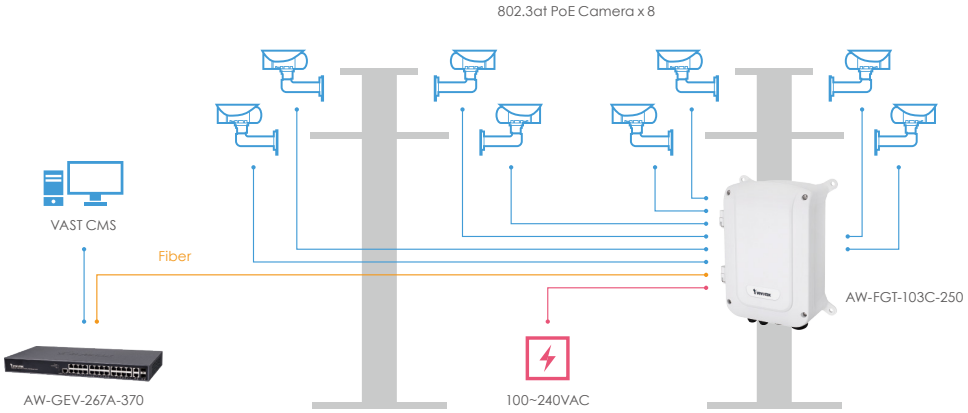
Plug and Play Installation with All-in-One Device



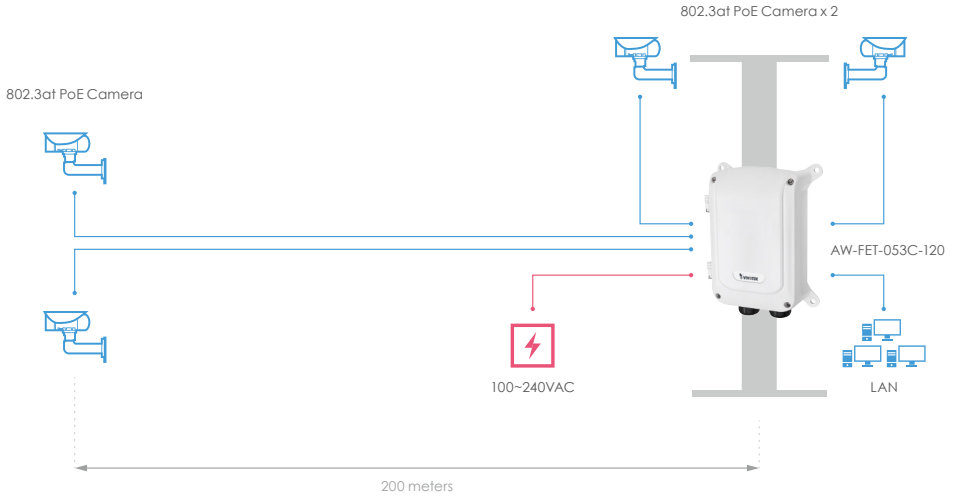
Fast Ethernet	Giga Ethernet
VIVOTEK's FE unmanaged PoE switches quipped with DIP switch provides ST "Standard" and EX "Extend" operational modes. They are specially designed for IP Surveillance applications. Besides standard 802.3af/at PoE functions in ST mode, the EX mode also transmits data & power on one single cable up to 200 meters at 10 Mbps via specific EX ports for long reach PoE IP cameras. VIVOTEK's FE unmanaged PoE switches also feature adding an additional 10% range of input voltage tolerance (280VAC 4hr, 300VAC 1min), lightning surge protection of AC power & PoE surge protection to prevent damage caused by outside unstable AC power, lightning strikes and power spikes. These unique features help to reduce the costs of replacing damaged units.	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.

Fast Ethernet Application

ST Mode



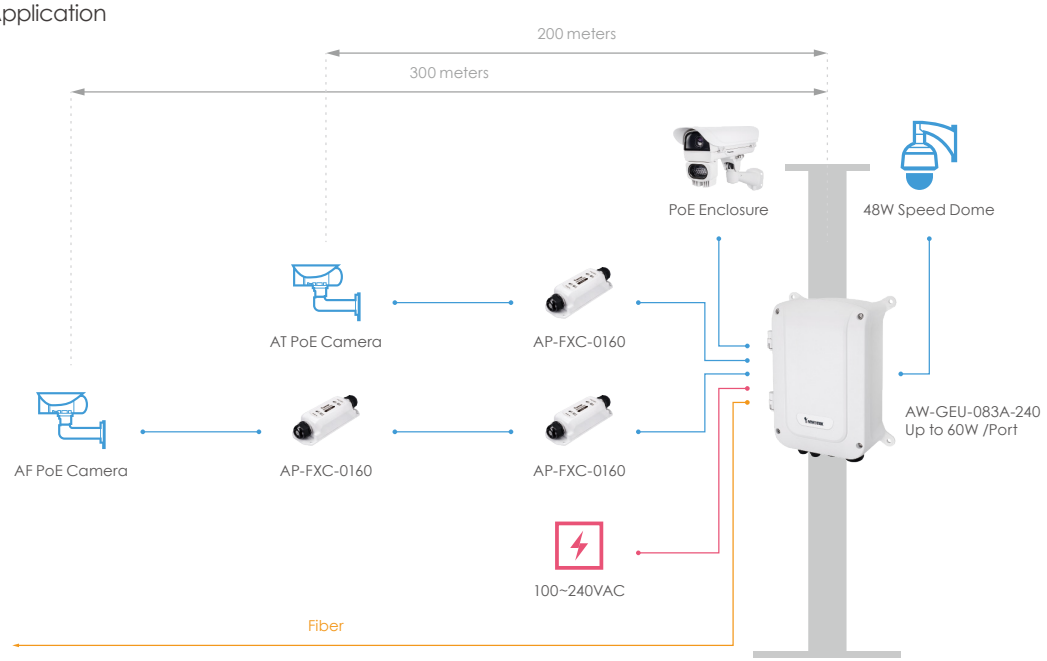
EX Mode



Range Guide	EX Port @ EX Mode	Any Port @ ST Mode
802.3at PoE IP Camera	200M @ 10Mbps	100M @ 100Mbps

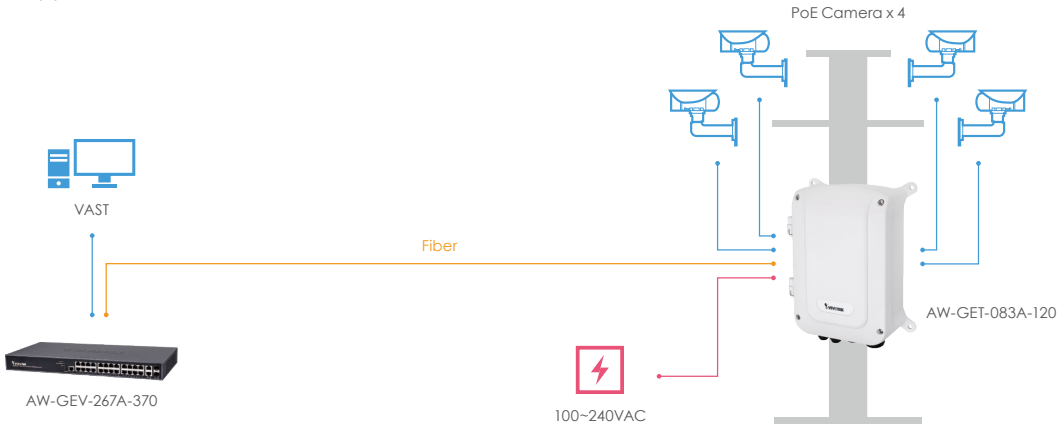
Giga Ethernet Application

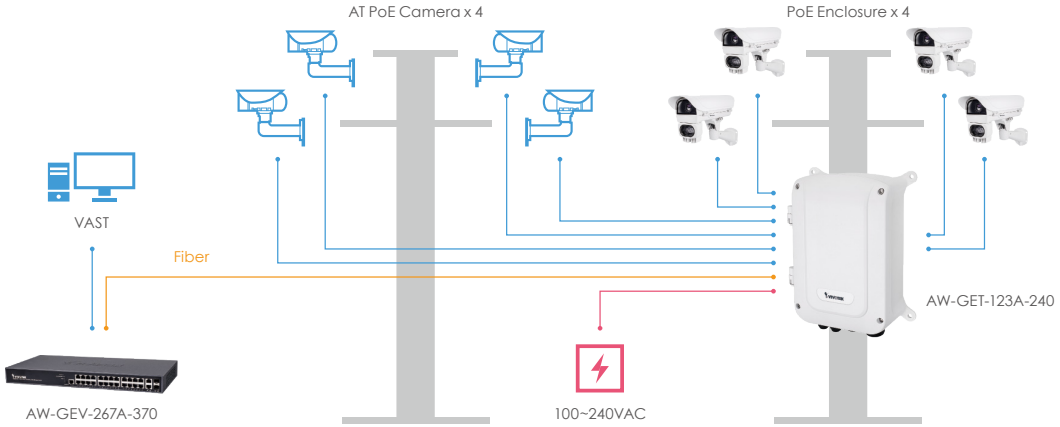
Long Range Application



Giga Ethernet Application

Multi-Camera Applicaiton





• Specifications

Fast Ethernet		
Model	**AW-FET-053C-120**	**AW-FGT-103C-250**
Short Highlight	Outdoor Unmanaged PoE Switch 4xFE PoE + 1xFE UTP	Outdoor Unmanaged PoE Switch 8xFE PoE + 2xGE Combo
Ethernet		
10M/100M RJ45 Port	5	8
10M/100M/1G RJ45 Port	-	-
1G SFP Slot	-	-
1G Combo Port (RJ45/SFP)	-	2
PoE Function		
Number of PoE Port	4	8
Max. PoE Output Power /Per Port	Per Port 56VDC, Max. 30W	Per Port 56VDC, Max. 30W
EX Mode	2 port up to 200M/10Mbps	2 port up to 200M/10Mbps
Total PoE Power Budget	120W	240W
Power Pin Assignment	1/2(+), 3/6(-), 4/5(+), 7/8(-)	1/2(+), 3/6(-), 4/5(+), 7/8(-)
IEEE 802.3af/at	Supported	Supported
PoE PD Auto Detection	Supported	Supported
Ethernet Performance		
Switching Capacity	1 Gbps	5.6 Gbps
Mac Table	2 K	4 K
Jumbo Frame	1536 Bytes	1536 Bytes
Auto-MDI/MDI-X, Auto-Negotiation	Supported	Supported
Power Specifications		
Power Input Voltage	100VAC ~ 240VAC	100VAC ~ 240VAC
Alarm Relay	24VDC	24VDC
General		
Waterproof Rating	IP67	IP67
Vandal Proof	IK10	IK10
Surge Protection /Each PoE Port	12 KV	12 KV
Surge Protection for AC Power	10 KV	40 KV
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 ~ 75°C (-40°F ~ 167°F)
Dimensions	255.2(W) x 199.9(H) x 90(D) mm	315.4(W) x 245.8(H) x 118(D) mm
Weight	3.2KG	4.3KG
Connectors	M25 x 2	M16 x 4, M25 x 2

• Specifications

Gigabit Ethernet			
Model	**AW-GET-083A-120**	**AW-GEU-083A-240**	**AW-GET-123A-240**
Short Highlight	Outdoor Unmanaged PoE Switch 4xGE PoE + 2GE UTP + 2xGE SFP	Outdoor Unmanaged UPoE Switch 4xGE UPoE + 2GE UTP + 2xGE SFP	Outdoor Unmanaged PoE Switch 8xGE PoE + 4xGE SFP
Ethernet			
10M/100M RJ45 Port	-	-	-
10M/100M/1G RJ45 Port	4 /Per Port 30W PoE	4 /Per Port 60W UPoE	8 /Per Port 30W PoE
1G SFP Slot	2	2	-
1G Combo Port (RJ45/SFP)	2	2	4
PoE Function			
Number of PoE Port	4	4	8
Max. PoE Output Power /Per Port	Per Port 56VDC, Max. 30W	Per Port 56VDC, Max. 60W	Per Port 56VDC, Max. 30W
EX Mode	-	-	-
Total PoE Power Budget	120W	240W	240W
Power Pin Assignment	1/2(+), 3/6(-)	"15.4W/30W PoE: 1/2(+), 3/6(-) 60W UPoE: 1/2(+), 3/6(-),4/5(+), 7/8(-)"	1/2(+), 3/6(-)
IEEE 802.3af/at	Supported	Supported	Supported
PoE PD Auto Detection	Supported	Supported	Supported
Ethernet Performance			
Switching Capacity	16 Gbps	16 Gbps	24 Gbps
Mac Table	8 K	8 K	8 K
Jumbo Frame	9216 bytes	9216 bytes	9216 bytes
Auto-MDI/MDI-X, Auto-Negotiation	Supported	Supported	Supported
Power Specifications			
Power Input Voltage	100VAC ~ 240VAC	100VAC ~ 240VAC	100VAC ~ 240VAC
Alarm Relay	24VDC	24VDC	24VDC
General			
Waterproof Rating	IP67	IP67	IP67
Vandal Proof	IK10	IK10	IK10
Surge Protection /Each PoE Port	6KV	6KV	6KV
Surge Protection for AC Power	40KV	40KV	40KV
Operating Temperature	-40°C ~ 65°C (-40°F ~ 149°F)	-40°C ~ 65°C (-40°F ~ 149°F)	-40°C ~ 65°C (-40°F ~ 149°F)
Storage 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)
Dimensions	315.4(W) x 245.8(H) x 118(D) mm	315.4(W) x 245.8(H) x 118(D) mm	315.4(W) x 245.8(H) x 118(D) mm
Weight	4.52 kg	4.52 kg	4.52 kg
Connectors	M16 x 4, M25 x 2	M16 x 4, M25 x 2	M16 x 4, M25 x 2

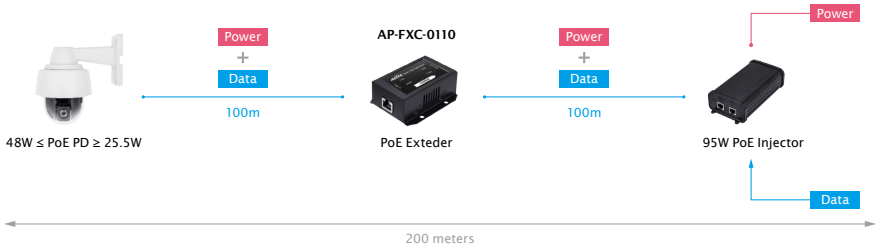
PoE Extender

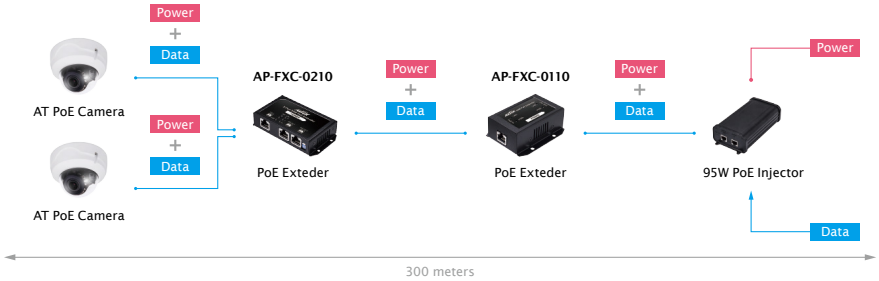
The VIVOTEK PoE Extender series provides a simpler and easier implementation of long-range (up to 300 meters) surveillance system, solving cable length limitations and power supply issues for installers and system integrators. Given the limitations of data-transfer over Ethernet, the previous maximum 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.

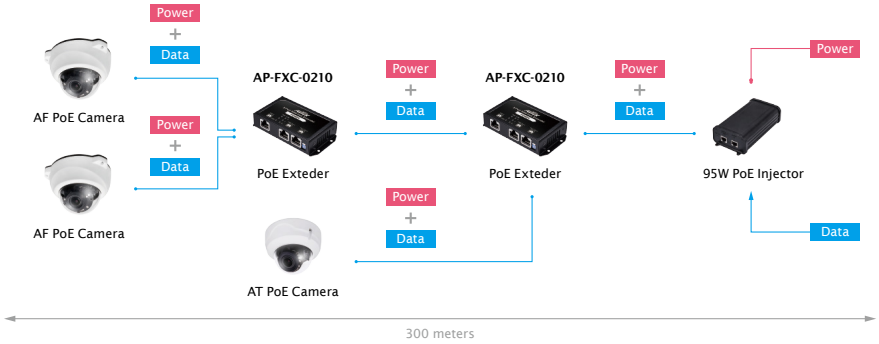
Features

- 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-0400**	**AP-FXC-0160**	**AP-FXC-0260**
Short Highlight	Indoor 1-Port FE PoE Extender	Indoor 2-Port FE PoE Extender	Indoor 4-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	2 Units, Daisy-chain Installation Up to 300M Extension
PoE Input	30W/60W/95W	30W/60W/95W	30W/60W	30W/60W/95W	30W/60W/95W
PoE Function					
Fast Ethernet PoE In	1	1	1	1	1
Fast Ethernet PoE Out	1	2	4	1	2
Pin Assignment	1/2 (+), 3/6 (-); 4/5 (+), 7/8 (-)	1/2 (+), 3/6 (-); 4/5 (+), 7/8 (-)	1/2 (+), 3/6 (-)	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. 30W	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	Supported
IEEE 802.3u 100-BASE-TX (Fast Ethernet)	Supported	Supported	Supported	Supported	Supported
IEEE 802.3x Flow Control (Full-duplex Flow Control)	Supported	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	Supported
Ethernet Performance					
MAC Table	2 K	2 K	1 K	2 K	2 K
Transmission Method	Store and Forward	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	1.0 Gbps
Auto-MDI/MDI-X, Auto-Negotiation	Supported	Supported	Supported	Supported	Supported
Filtering/Forwarding Rates					
10Mbps	14,880 pps	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	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	120 x 90 x 28 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)	0°C ~ 50°C (32°F ~ 122°F)	-40°C ~ 75°C (-40°F ~ 167°F)	-40°C ~ 75°C (-40°F ~ 167°F)

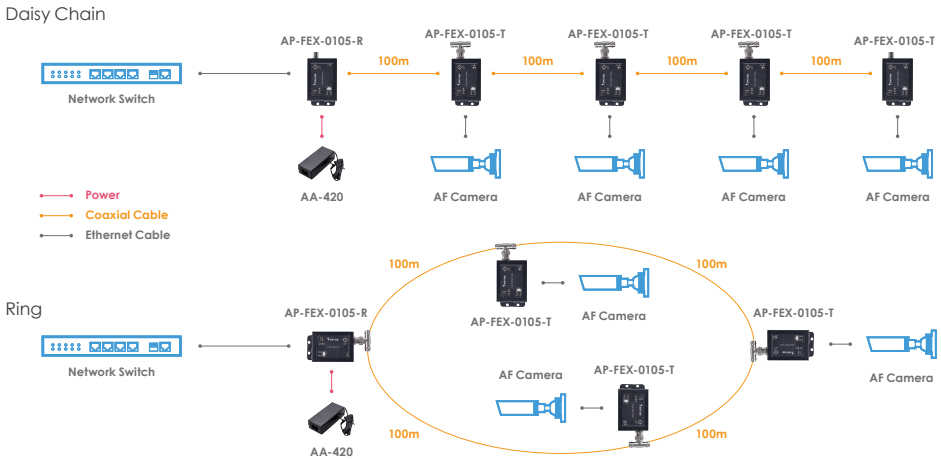
EPoC Extender

The EPoC (**E**thernet & **P**ower **o**ver **C**oaxial) 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.

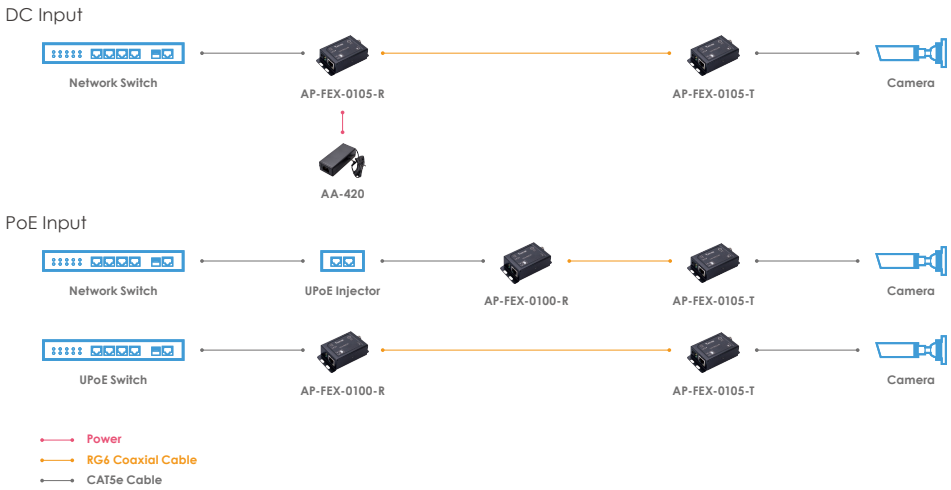
Features

- 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
- Weather-proof IP67-rated and Vandal-proof IK10-rated Housing for outdoor
- Built-in 6KV Surge Protection for outdoor
- Easy installation for a smooth transition from legacy to IP camera
- Both Wall mount and Rackmount supported

Application



EPoC Extender DC Kit



• 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)	-20˚C ~ 60˚C (-4˚F ~ 140˚F)	-20˚C ~ 60˚C (-4˚F ~ 140˚F)	-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)	-20˚C ~ 85˚C (-4˚F ~ 185˚F)	-20˚C ~ 85˚C (-4˚F ~ 185˚F)	-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

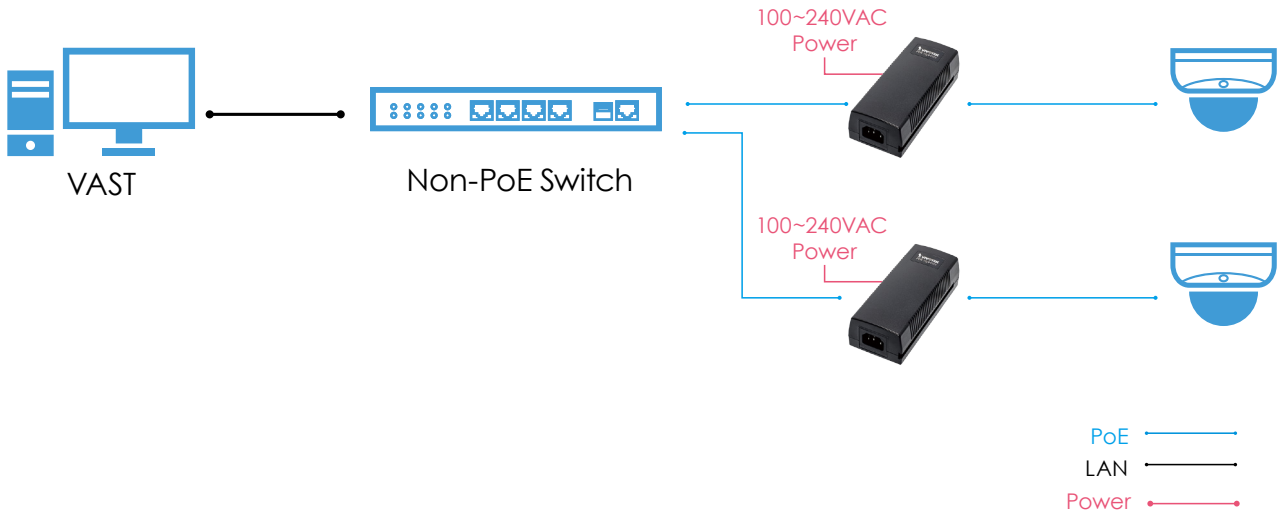
PoE Injector

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

- All-in-One Compact Size Design with Internal Power Supply
- Provide 1-Port PoE Power with Fast or Gigabit Ethernet
- Support PoE Power with 15.4W/30W/60W/95W

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
Ethernet					
10M/100M RJ45 Port	2	-	-	-	-
10M/100M/1G RJ45 Port	-	2	2	2	2
PoE Function					
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
Standards					
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
Transmission Media					
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
General					
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)

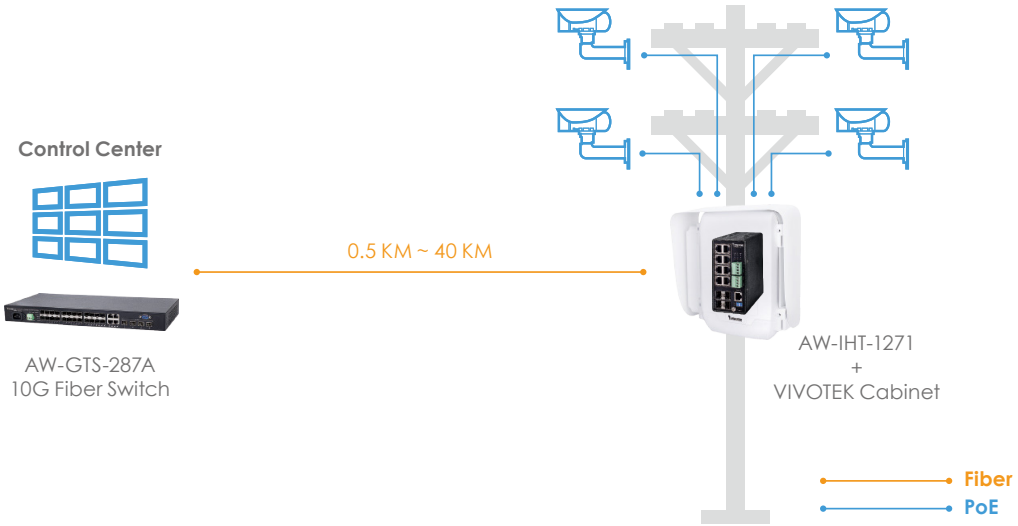
Industrial VivoCam L2+ Managed PoE Switch

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.

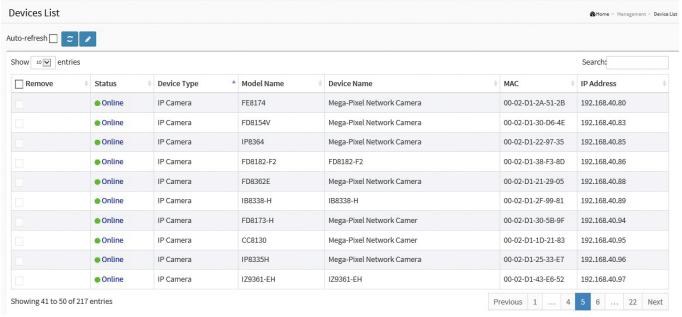
Managing IP Surveillance	Managed Layer 2 Plus PoE Switch
• Auto Discovery and Classification of Network Devices • Batch Camera Configuration-File Import & Export • Batch Camera Network/Login Configuration • Auto Generated Surveillance Topology View • Easy Tag VLAN Configuration in Topology View • Smart Device-Management in Topology View • PoE On/Off Control in Topology View • Display IP Camera Live Stream in Topology View, Floor View and Google Map View • Support 3rd Party ONVIF IP Cameras	• DHCP Server • IPv4/IPv6 L3 Static Route • IEEE802.1Q VLAN (up to 4096), Double Tag (Q-in-Q) • IEEE802.1v Protocol VLAN and MAC-based VLAN • IEEE802.1d (STP), 802.1w (RSTP) and 802.1s (MSTP) • IEEE802.3ad Link Aggregation Control Protocol (LACP) • SNMP v1/v2c/v3 for Management • HTTPs/SSL/SSHv1&v2 for Secured Connection

Outdoor Surveillance Solution

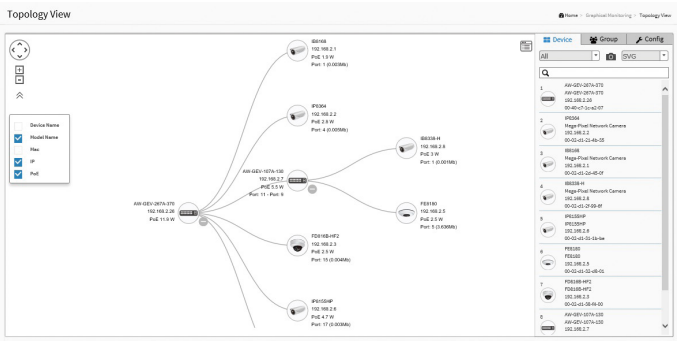


• Feature Highlights - Managing IP Surveillance

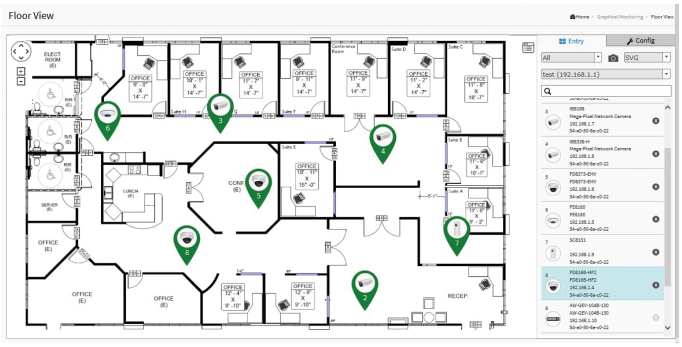
Auto Discovery



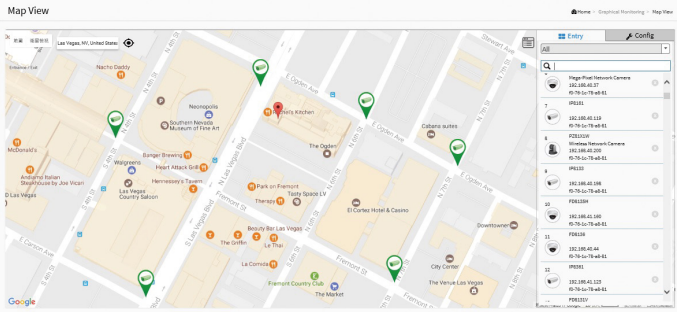
Topology View



Floor View

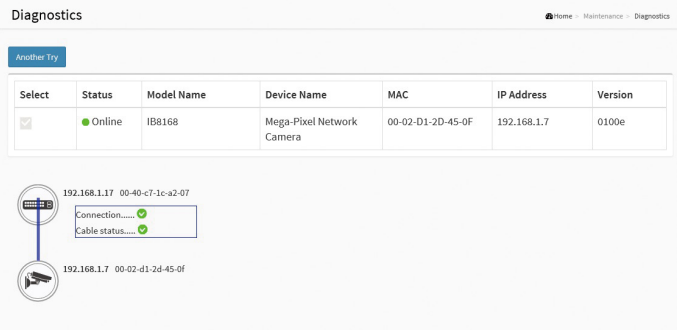


Google Map

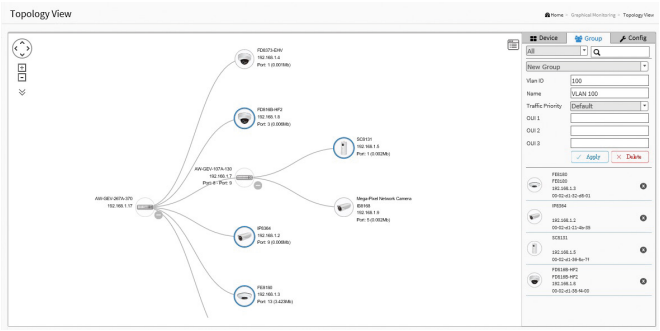


Device Management

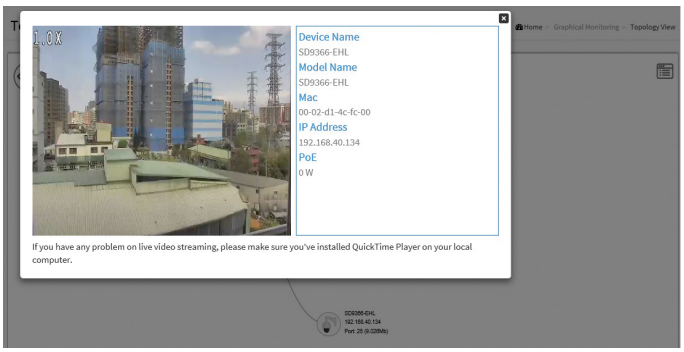
Device Status



VLAN Setting



Live Stream



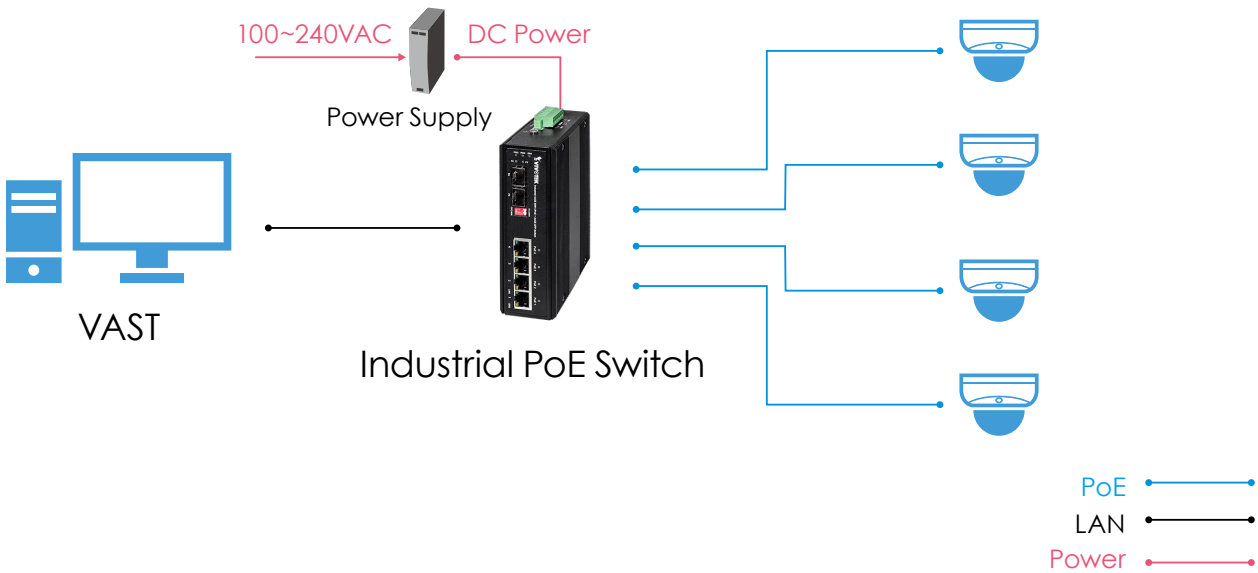
• Specifications

Industrial VivoCam L2+ Managed PoE Switch	
Model	**AW-IHT-1271**
Short Highlight	8xGE PoE + 4xGE SFP
Ethernet	
10M/100M/1G RJ45 PoE Port	8/Per Port up to 30W
100M/1G SFP	4
RJ45 Console Port	1
PoE Function	
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
Ethernet Performance	
Switch Capacity	24Gbps
MAC Address	8K
Jumbo Frames	9600 Bytes
Auto-MDI/MDI-X, Auto-Negotiation	Supported
Managing IP Surveillance Management	
Auto Search VIVOTEK Device	Supported
Surveillance Management List	Supported
Easy Tag VLAN in Topology View	Supported
Managing IP Surveillance E-MAP View	
Topology View	Supported
Floor View	Supported
Google Map View	Supported
Managing IP Surveillance Maintenance	
VIVOTEK Camera Configuration File Export/ Import	Supported
Traffic Monitoring	Supported
L2 Switching Feature	
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
L3 Switching Feature	
IP Host Table	Supported
Static Route (IPv4/IPv6)	Supported
Static ARP	Supported
DHCP Server	Supported
General	
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 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
Ethernet				
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)	-	-	-	-
PoE Function				
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(-)
Ethernet Performance				
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
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 802.3ab 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
Transmission Media				
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
General				
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)

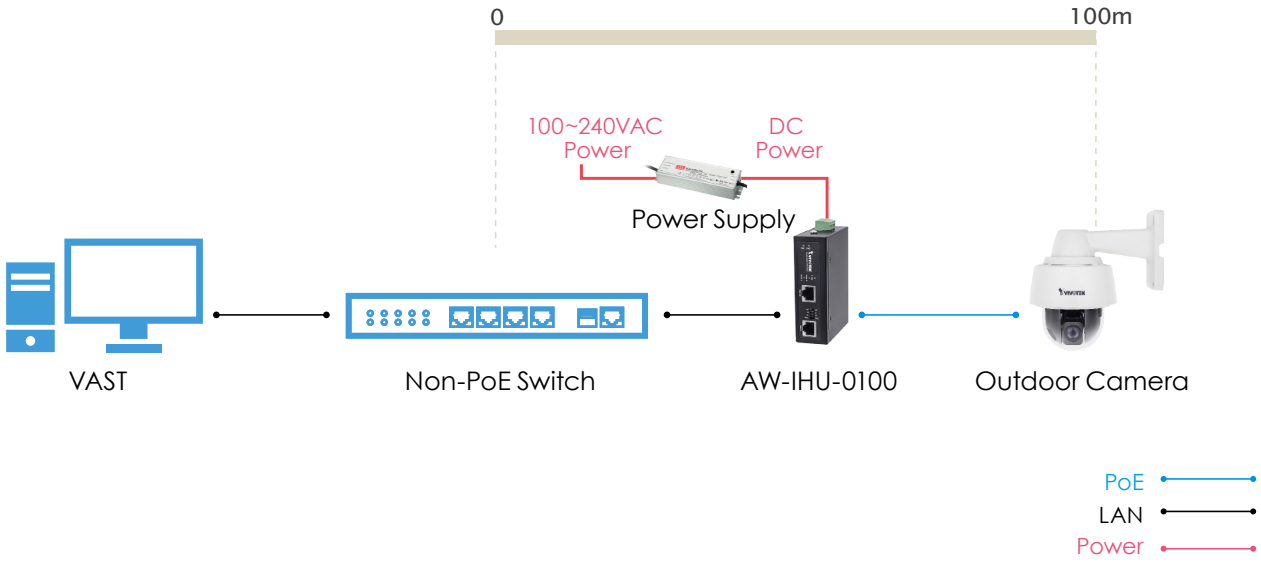
• Specifications

Industrial Unmanaged PoE Switch			
Model	**AW-IHT-0601**	**AW-IHT-0602**	**AW-IHH-0800**
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
Ethernet			
10M/100M RJ45 Port	-	-	-
10M/100M M12 Port	-	6	-
10M/100M/1G RJ45 Port	4	-	6
1G SFP Port	1	-	2
1G Combo Port (RJ45/SFP)	1	-	-
PoE Function			
Number of PoE Out Ports	4	4	4
PoE Output Power	Per Port 56VDC, Max. 30W	Per Port 56VDC, Max. 30W	Per Port 56VDC, Max. 95W
802.3at/af Standard Compatible	Yes	Yes	Yes
Over Current Protection	Supported	Supported	Supported
Circuit Shorting Protection	Supported	Supported	Supported
Total PoE Power Budget	24V DC ~ 56V DC: 120 W 12V DC: 65 W	120 W	240 W
Power Pin Assignment	1/2(+), 3/6(-)	1/2(+), 3/6(-)	1/2(-), 3/6(+), 4/5(+), 7/8(-)
Ethernet Performance			
Switch Capacity	12 Gbps	1.2 Gbps	16 Gbps
MAC Address	1K	1K	4K
Jumbo Frame	9KB	9KB	9KB
Transmission Method	Store and Forward	Store and Forward	Store and Forward
Auto-MDI/MDI-X, Auto-Negotiation	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
IEEE 802.3x Flow Control (Full-Duplex Flow Control)	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
General			
Power Input	Redundant Dual 12V-56VDC	Redundant Dual 24V-56VDC	Redundant Dual 54V-56VDC
Dimensions	142 x 105 x 43 mm	112 x 112 x 60 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)

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



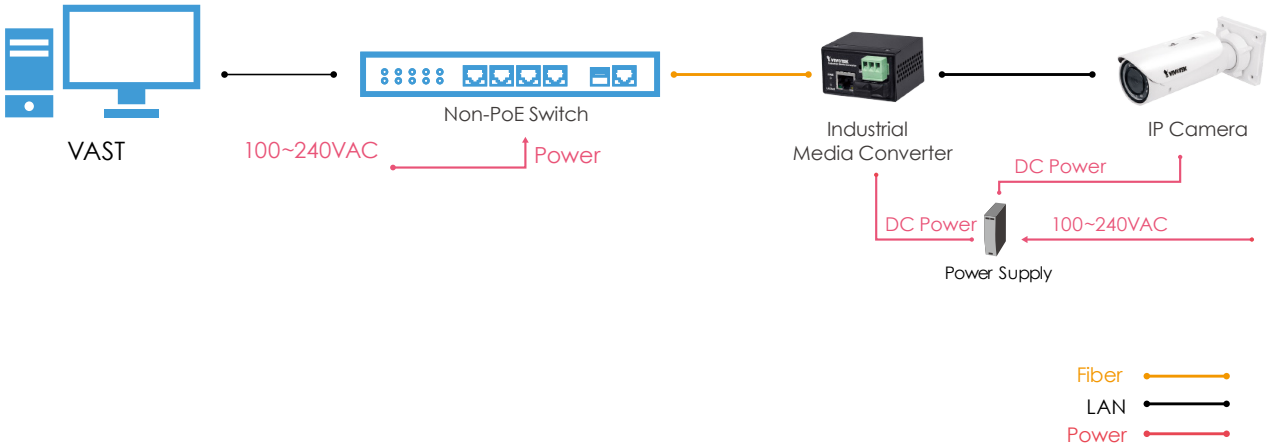
• Specifications

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 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



• Specifications

Industrial Media Converter		
Model	**AW-IHS-0202**	**AW-IHS-0203**
Short Highlight	Industrial 1xFE + 1xFE SFP Media Converter	Industrial 1xGE + 1xGE SFP Media Converter
Ethernet		
10M/100M RJ45 Port	1	-
10M/100M Fiber Port	1	-
10M/100M/1G RJ45 Port	-	1
10M/100M/1G SFP Port	-	1
Ethernet Performance		
MAC Address	1K	1K
Buffer Memory	128 KB	128 KB
Transmission Method	Store and Forward	Store and Forward
Auto-MDI/MDI-X, Auto-Negotiation	Supported	Supported
Standards		
IEEE 802.3 10-BASE-T (Ethernet)	Supported	Supported
IEEE 802.3u 100-BASE-TX (Fast Ethernet)	Supported	Supported
IEEE 802.3ab 1000-BASE-T (Gigabit Ethernet)	-	Supported
IEEE 802.3x Flow Control (Full-Duplex Flow Control)	Supported	Supported
Filtering/Forwarding Rates		
10Mbps	14,880 pps	14,880 pps
100Mbps	148,000 pps	148,000 pps
1000Mbps	-	1,488,000pps
Transmission Media		
10Base T	Cat. 3, 4, 5 UTP/STP	Cat. 3, 4, 5 UTP/STP
100Base TX	Cat. 5, 5e UTP/STP	Cat. 5, 5e UTP/STP
1000Base T	-	Cat. 5e, 6, 7 UTP/STP
General		
Power Input	18V-36VAC or 12V-56VDC	Redundant Dual 18V-36VAC or 12V-56VDC
Dimensions	59 (L) x 49 (W) x 36 (H) mm	103.5 (L) x 81.5 (W) x 32 (H) mm
Operating Temperature	-40°C ~ 75°C (-40°F ~ 167°F)	-40°C ~ 75°C (-40°F ~ 167°F)

Cabinet Solution

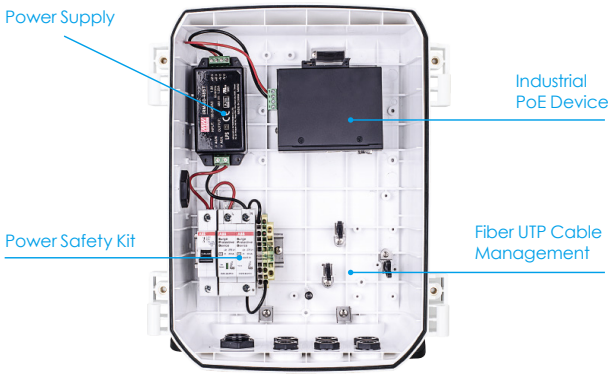
AT-CAB-001

AT-CAS-001

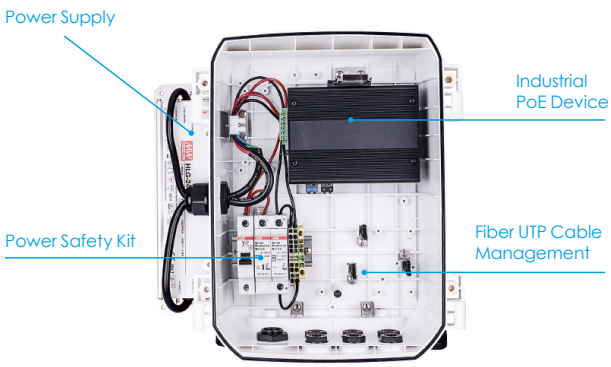
VIVOTEK's AT-CAB-001 and AT-CAS-001 are complete and outdoor-ready surveillance cabinet solutions, built to provide easier installation for any application of VIVOTEK's full range of network cameras, including speed domes, bullets, and fixed dome network cameras as well as for VIVOTEK's outdoor camera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

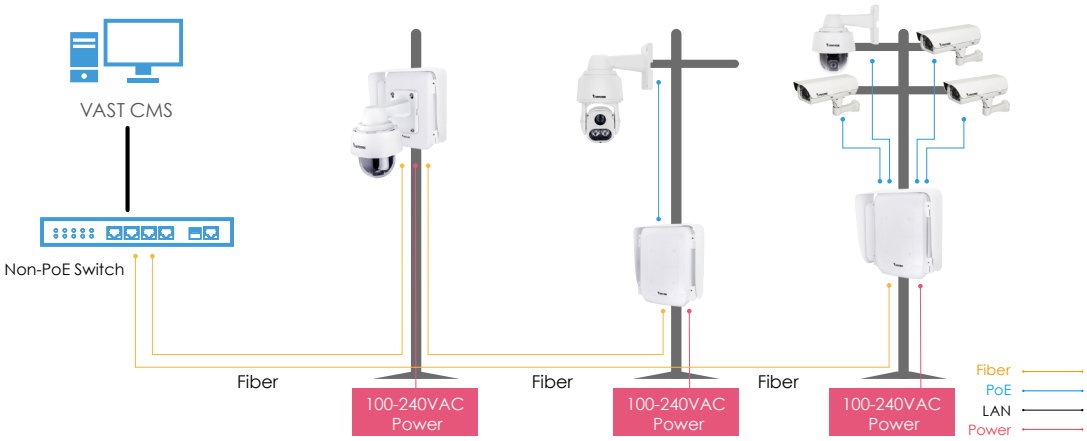


AT-CAB-001/AT-CAS-001



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

AT-CAB-002 Side-mount bracket for HLG series power supply	**AT-SUN-001** Sunshield for AT-CAx series cabinet	**AT-SUN-002** Sunshield for AT-CAx + AT-CAB-002 cabinet	**AT-SWH-001** Power Safety Kit
AT-SWH-002 Door open/close detection switch	**AT-PSP-001** PoE Surge Protector	**AT-WPC-001** M16 CABLE GLAND for 4~7mm AWG	**AT-WPC-002** M16 CABLE GLAND for Corrugated Tubing: 5/16 "
AM-314 Pole monut adapter	**AM-411** Corner monut adapter		

Outdoor Enclosures

Value Series	Supreme Series
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.	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, also support wide temperature from -40°C to 65°C with cold start and wiper for clean image.
Features	**Features**
• Weather-proof IP68-rated • Vandal-proof IK10-rated Cast Aluminum Housing • Window Demister Heater and Fan • Adjustable Sunshield • 24VAC/VDC Power Input (AE-238/243) • PoE Power Input (AE-239/244) • Built-in IR LEDs Viewing up to 50M (AE-243/244)	• Weather-proof IP66-rated Enclosure with Wiper (AE-23B/23D/23F) • Weather-proof IP68-rated Enclosure without Wiper (AE-23A/23C/23E) • Vandal-proof IK10-rated Cast Aluminum Housing • Window Demister Heater and Fan • Adjustable Sunshield • Side-Opening Alarm Switch • 24VAC/VDC Power Input (AE-23A/23B/23C/23D) • PoE Power Input (AE-23E/23F) • Camera Heater Supports Cold Start at -40°C (AE-23C/23D) • Optional snap-in IR LEDs Viewing up to 250M

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 LED, 6W, 25°, 50m	Fixed IR LED, 6W, 25°, 50m
Power Consumption	Window Heater: 10W Blower: 2W Camera: 6 ~ 8W Others: 2W	Window Heater: 5W Blower: 2W Camera: 6 ~ 8W Others: 2W	Window Heater: 10W Blower: 2W Camera: 6 ~ 8W IR LEDs: 6W Others: 2W	Window Heater: 5W Blower: 2W Camera: 6 ~ 8W 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-23B**	**AE-23C**	**AE-23D**	**AE-23F**	**AE-23A**	**AE-23E**

Specifications						
Input Voltage	24VAC/VDC	24VAC/VDC	24VAC/VDC	PoE at 50~57VDC	24VAC/VDC	PoE at 50~57VDC
Max Output Power Budget	80W	100W	100W	25 W thru 30W PSE 48 W thru 60W PSE 72 W thru 95W PSE	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 Wiper: 6W Others: 2W	Window Heater: 10W Cold Start Heater: 30W Blower: 2W Camera: 6 ~ 8W Others: 2W	Window Heater: 10W Cold Start Heater: 30W Blower: 2W Camera: 6 ~ 8W Wiper: 6W Others: 2W	Window Heater: 10W Blower: 2W Camera: 6 ~ 8W Wiper: 6W Others: 2W	Window Heater: 10W Blower: 2W Camera: 6 ~ 8W Others: 2W	Window Heater: 10W Blower: 2W Camera: 6 ~ 8W Others: 2W
Optional Vari-Angle IR LEDs Power consumption	Snap-in IR (optional) AI-106 : 6W 10~40°, 40~100m AI-108: 24W 10°~30°, 70~200m AI-109: 48W 10~30°, 150~350m					
Operating Temperature	-20°C ~ 65°C (-4°F ~ 149°F)	Working: -50°C ~ 65°C (-58°F ~ 149°F) Cold Startup: -40°C (-40°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					
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	-	-	-
Fan ON/OFF	≥ 40°C (104 °F) ON ≤ 35°C (95 °F) OFF					
Wiper	Support	-	Support	Support	-	-
Waterproof IP Rating	IP66	IP68	IP66	IP66	IP68	IP68
Vandal Proof	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	All VIVOTEK Box Cameras	All VIVOTEK Box Cameras
Included Accessories	sunshield	sunshield	sunshield	sunshield	wall bracket sunshield	wall bracket sunshield
Remark	Project model	Project model	Project model	Project model	-	-

Optional Accessories

Wall Mount Bracket		Ceiling Mount Bracket	Standing Mount Bracket
AM-21D	**AM-21E**	**AM-11F**	**AM-811**

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

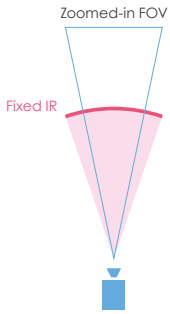
CaMate Illuminators

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.

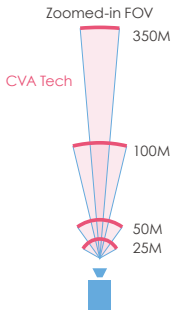
Features

- 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

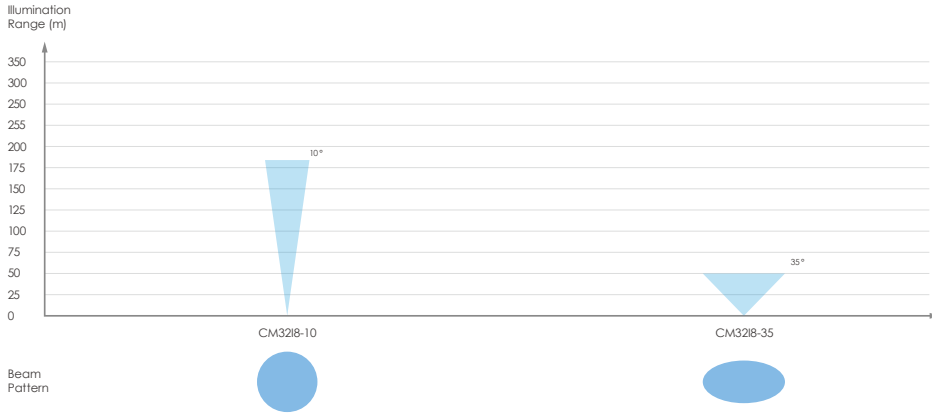
Adopting Models

CM32 Series	CM48 Sereis	CM80 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° ~ 120° FOV • Adjustable Beam Angles up to 350M • IP68, IK10	• 80W IR Illuminator • 10°~40° FOV • Adjust Beam Angle with Remote Control • IP68, IK10

• Specifications

CM32 Series		
Model	**CM32I8-10**	**CM32I8-35**

Illumination Map

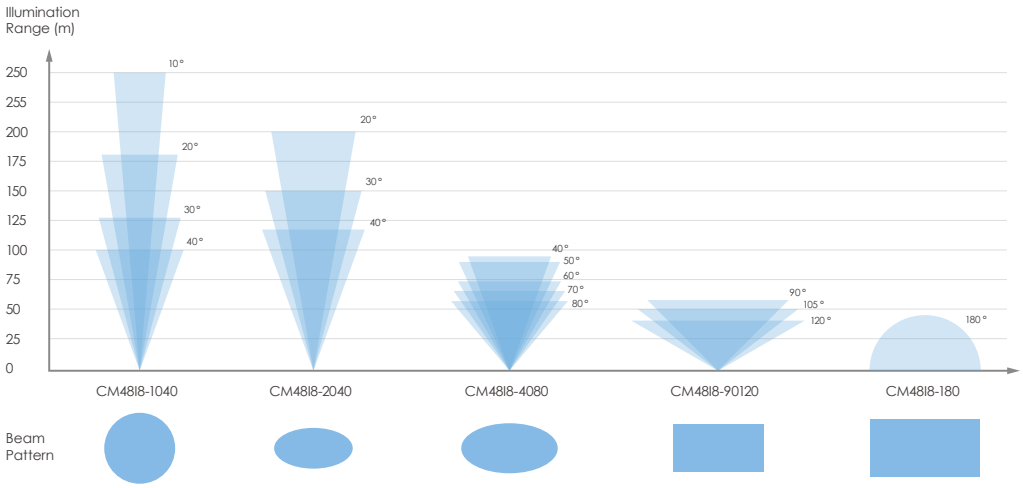


Product Information		
Beam Angle (HxV)	10° x 10°	35° x 25°
Distance	180 m (590 ft)	60.9 m (199 ft)
Beam Pattern	Circle	Elliptical
LED Array	12 pcs	
Wavelength	850 nm	
External Input	Digital input*1 (LED ON/OFF control input)	
External Output	Digital ouput*1 (Day/Night detection output) Digital ouput*1 (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%	
Included Accessories		
Bracketry	U-Type Bracket (68.4 × 25 × 15 mm)	

• Specifications

CM48 Series					
Model	**CM48I8-1040**	**CM48I8-2040**	**CM48I8-4080**	**CM48I8-90120**	**CM48I8-180**

Illumination Map



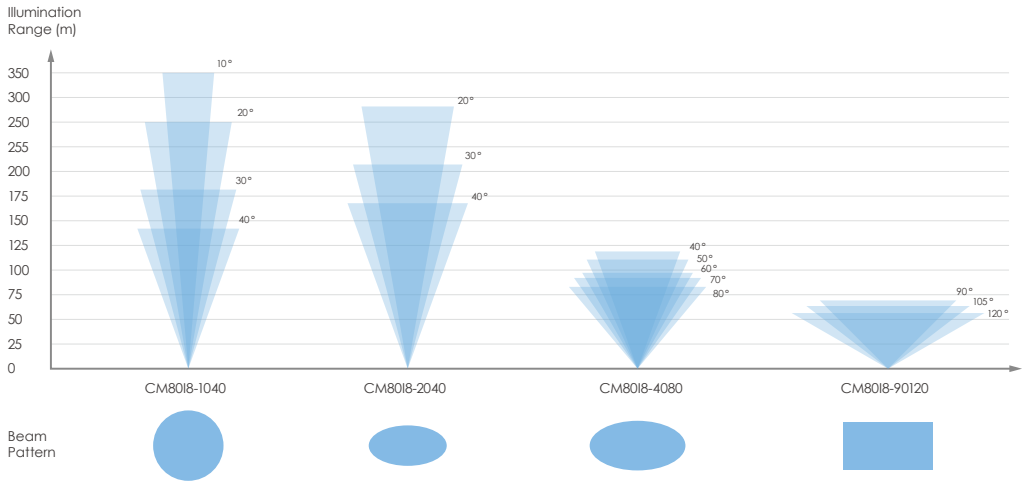
Product Information					
Beam Angle(Horizontal)	10° ~ 40°	20° ~ 40°	40° ~ 80°	90° ~ 120°	180°
Distance	100 -250 m (328 -820 ft)	120 - 200 m (394 - 656 ft)	60 - 90 m (197 - 295 ft)	45 - 55 m (148 - 180 ft)	40 m (131 ft)
Beam Pattern	Circular	Elliptical	Elliptical	Rectangular	Rectangular
LED Array	24 pcs 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)				
General					
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 × 6.3 × 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%				
Optional LED Source (Power input 24V DC/AC ±10%)					
940nm	CM48I9-1040	CM48I9-2040	CM48I9-4080	CM48I9-90120	-
White LED 5000K	CM48W5-1040	CM48W5-2040	CM48W5-4080	CM48W5-90120	-

• Specifications

CM80 Series				
Model	**CM80I8-1040**	**CM80I8-2040**	**CM80I8-4080**	**CM80I8-90120**

CaMate

Illumination Map



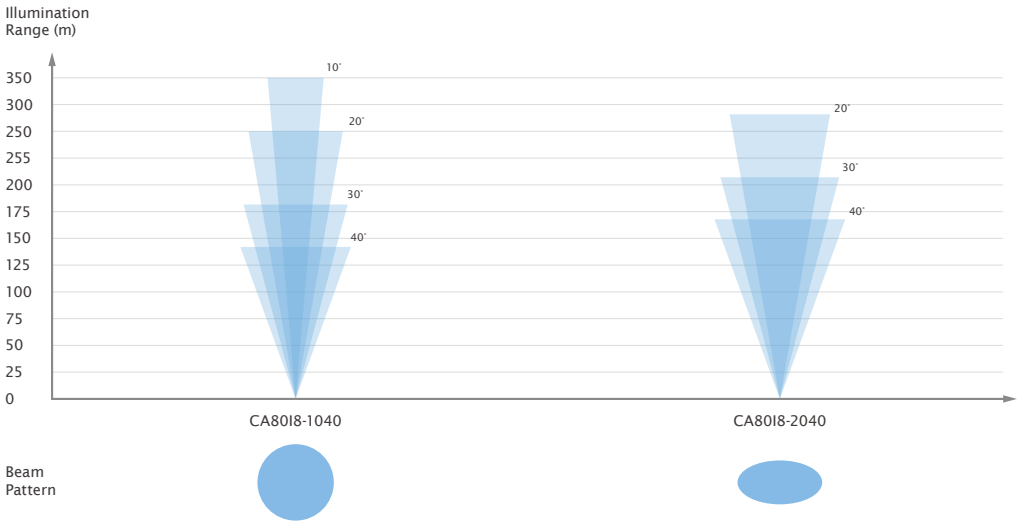
Product Information				
Beam Angle(Horizontal)	10° ~ 40°	20° ~ 40°	40° ~ 80°	90° ~ 120°
Distance	140 - 350 m 459 - 1148 ft	170 - 280 m 557 - 918 ft	80 - 120 m 262 - 393 ft	60 -70 m 196 - 229 ft
Beam Pattern	Circular	Elliptical	Elliptical	Rectangular
LED Array	24 pcs LED			
Wavelength	850 nm			
External 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% (Max. 1000 Lux) (accessed via CaMate remote/RS-485 control)			
Adjustable IR Power	20%-100% (accessed via CaMate remote/RS-485 control)			
General				
Power Input	24VDC ±10%, 24V AC(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 × 6.3 × 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%			
Optional LED Source (Power input 24V DC/AC ±10%)				
940nm	CM80I9-1040	CM80I9-2040	CM80I9-4080	CM80I9-90120
White LED 5000K	CM80W5-1040	CM80W5-2040	CM80W5-4080	CM80W5-90120

• Specifications

CA80 Series		
Model	**CA80I8-1040**	**CA80I8-2040**

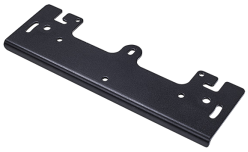
CaMate

Illumination Map



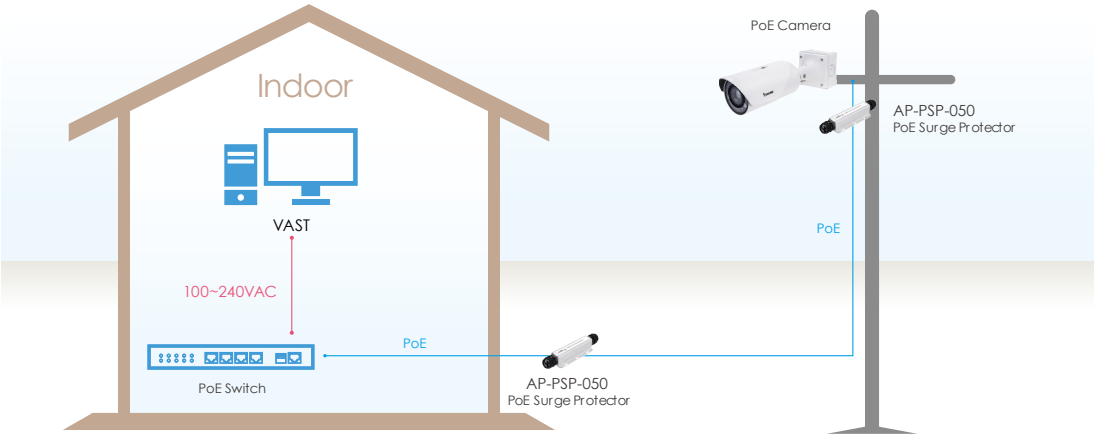
Product Information		
Beam Angle(Horizontal)	10° ~ 40° (adajust via CaMate remote/RS-485 control)	20° ~ 40° (adajust via CaMate remote/RS-485 control)
Distance	140 - 350 m 459 - 1148 ft	170 - 280 m 557 - 918 ft
Beam Pattern	Circular	Elliptical
LED Array	24 pcs LED	
Wavelength	850 nm	
External Input	IR 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)	
General		
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 × 6.3 × 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%	

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

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

PoE Accessories

Industrial Din Rail Power Supply

MDR-10-12
Indoor Industrial Din Rail Power Supply, 12VDC/10W, -20°C ~ 70°C

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

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

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

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

Industrial Power Supply

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

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

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

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

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

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

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

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

PoE Accessories

SFP Transceiver

SFP-1000-MM85-X5
1.25G Multi-Mode SFP, 850nm, 0.5KM, 0°C ~ 70°C

SFP-1000-MM13-02
1.25G Multi-Mode SFP,LC, 1310nm, 2KM, 0°C ~ 70°C

SFP-1000-SM13-10
1.25G Single-Mode SFP, LC, 1310nm, 10KM, 0°C ~ 70°C

SFP-1000-SM13-40
1.25G Single-Mode SFP, LC, 1310nm, 40KM, 0°C ~ 70°C

SFP-1000-MM85-X5I
Industrial 1.25G Multi-Mode SFP, LC, 850nm, 0.5KM, -40°C ~ 85°C

SFP-1000-MM13-02I
Industrial 1.25G Multi-Mode SFP, LC, 1310nm, 2KM, -40°C ~ 85°C

SFP-1000-SM13-10I
Industrial 1.25G Single-Mode SFP, LC, 1310nm, 10KM, -40°C ~ 85°C

SFP-1000-SM13-40I
Industrial 1.25G Single-Mode SFP, LC, 1310nm, 40KM, -40°C ~ 85°C

SFP-1000-CPTX-X1
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
10G Multi-Mode SFP+, LC, 850nm, 0.3KM, 0°C ~ 70°C

SFP-2000-SM13-10
10G Single-Mode SFP+, LC, 1310nm, 10KM, 0°C ~ 70°C

Outdoor Power Box

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

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

www.vivotek.com

All specifications are subject to change without notice.
Copyright © VIVOTEK INC. All rights reserved. P/N: 972000800 Ver. 4

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 USA

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

VIVOTEK Europe

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

VIVOTEK Japan

9th floor Shiba Park Building.A 2-4-1 Shibakoen,
Minato-ku, Tokyo 105-0011, Japan
| E: salesjp@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 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 México

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