

# H21 series

## Outdoor Surveillance EXPoE Switches



H21-041-30-075



H21-082-31-150



**H21 outdoor unmanaged EXPoE switch series**, a IP67 / IK10 unit, operates in harsh environments for outdoor IP Surveillance application. Besides standard 802.3af/at PoE functions, the **EX**tensive mode delivers extreme distances of camera image & power maximum up to 250m via specific **EXPoE** ports for long reach PoE IP cameras. Meanwhile, the H21 series also features extra 20% range of input voltage tolerance, lightning surge protection on AC power & PoE surge protection to prevent the damage caused by outside unstable AC power, lightning surge and power spike.

The H21 series has two sub models consisting of 5-port H21-041-30-075 and 10-port H21-082-31-150 with a range of power budgets from 75W to 150W for outdoor IP surveillance.

### Features

- All-in-One easy outdoor installation
- 15.4W / 802.3af & 30W / 802.3at compliant
- 6KV PoE surge protection each port
- 10KV/40KV AC surge protection
- Extra 20% range of input voltage tolerance
- Circuit protection prevents power interference between ports
- Detects PoE PD (power device) automatically
- EX mode OFF reaches PoE camera up to 100m@100Mbps via any PoE port
- EX mode ON reaches 802.3af camera up to 250m@10Mbps via EXPoE ports
- EX mode ON reaches 802.3at camera up to 200m@10Mbps via EXPoE ports

### Traditional Outdoor PoE Switch



### All-in-One AETEK Outdoor EXPoE Switch

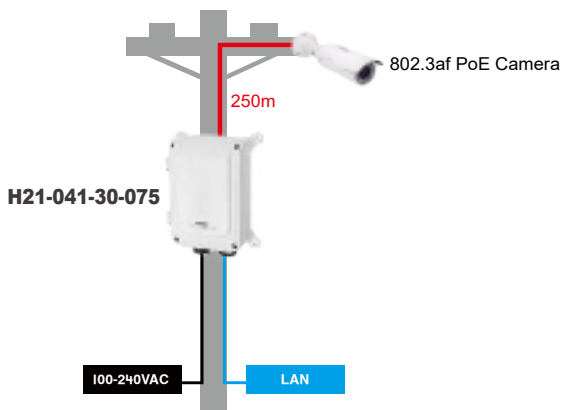


## Range Guide

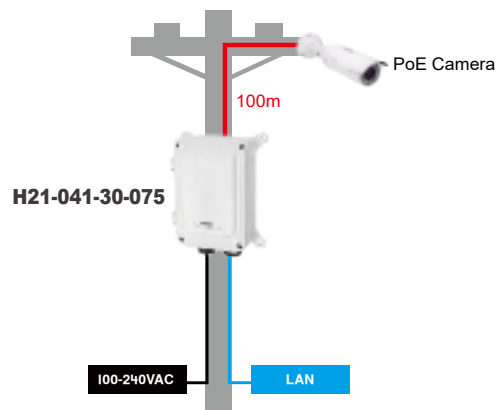
	EX Port@ EX Mode ON	Any Port@ EX Mode OFF
802.3af PoE IP Camera	250m@10Mbps	100m@100Mbps
802.3at PoE IP Camera	200m@10Mbps	100m@100Mbps

## Applications

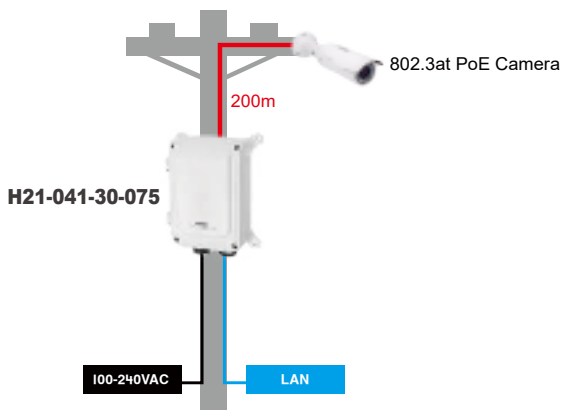
### EXtensive Mode



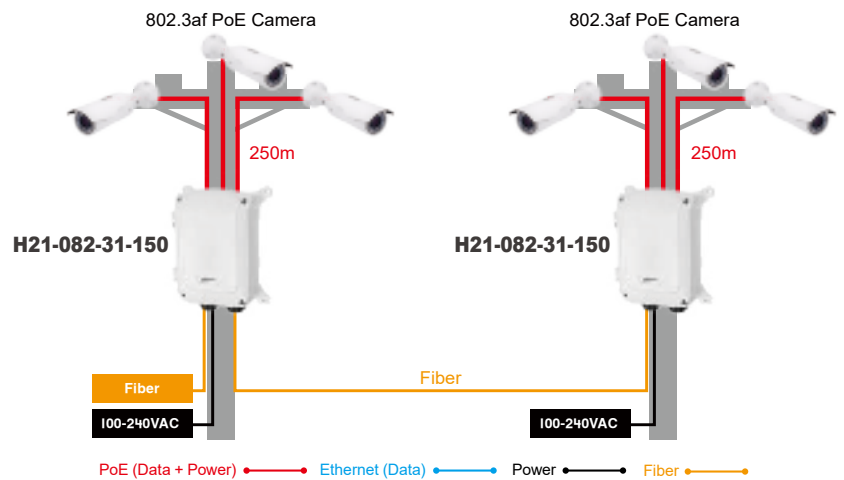
### EXtensive Mode OFF



### EXtensive Mode



### EXtensive Mode



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

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

## Specifications



	H21-041-30-075	H21-082-31-150
<b>Networking Specifications</b>		
Total Fast Ethernet Ports	5	8
Total Gigabit Ports	-	2
PoE Port@EX Mode OFF	4x30W PoE ports	8x30W PoE ports
PoE Port@EX Mode ON	2x30W EXPoE + 2x30W PoE ports	2x30W EXPoE + 6x30W PoE ports
Fast Ethernet Ports (RJ45)	1	-
Gigabit RJ45/SFP Combo Ports	-	2
Mac Table	2K	4K
Jumbo Frames	1,536 Bytes	1,536 Bytes
Switching Capacity	1 Gbps	5.6 Gbps

## Specifications




	H21-041-30-075	H21-082-31-150
<b>Power Specifications</b>		
Input Voltage	100VAC ~ 240VAC 280VAC 4Hr 300VAC 1min.	100VAC ~ 240VAC 280VAC 4Hr 300VAC 1min.
Backup Power Input Voltage	48VDC ~ 56VDC	48VDC ~ 56VDC
Output Voltage Range /per PoE Port	54VDC PoE IEEE 802.3af (Max. 15.4W) output PoE+ IEEE802.3at (Max. 30W) output	54VDC PoE IEEE 802.3af (Max. 15.4W) output PoE+ IEEE802.3at (Max. 30W) output
PSE Power Pin Assignment	12(+),36(-)	12(-),36(+)
PoE Surge Protection	6KV	6KV
AC Power Surge Protection	10KV	40KV
Power Budget	75W	150W
<b>Mechanical Specifications</b>		
Dimensions (L x W x H)	255.2 x 199.9 x 90 mm	315.4 x 245.8 x 118mm
Weight	3.2 kg (7.05 lb)	4.3 kg (9.48 lb)
Connectors	M25 x 2	M16 x 4, M25 x 2
<b>Environmental Specifications</b>		
Weather Rating	IP67	IP67
Vandal Proof	IK10	IK10
Operating Temperature	-40°C ~ 65°C (-40°F ~ 149°F)	-20°C ~ 65°C (-4°F ~ 149°F)
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F )	-40°C ~ 85°C (-40°F ~ 185°F )
Operating Humidity	5% ~ 95% non-condensing	5% ~ 95% non-condensing
<b>Certifications</b>		
EMC	CE, FCC, VCCI, C-Tick Class A	CE, FCC, VCCI, C-Tick Class A
Safety	EN62368-1	EN62368-1
Surge	EN61000-4-5	EN61000-4-5

Note : Cat.6 or better cable is high recommend for EX mode

## Ordering Information

PoE Switches			
	<p><b>H21-041-30-075</b></p> <ul style="list-style-type: none"> <li>• 4xFE PoE (30W) + 1xFE RJ45</li> <li>• 100-240VAC,75W power budget</li> </ul>		<p><b>H21-082-31-150</b></p> <ul style="list-style-type: none"> <li>• 8xFE PoE (30W) + 2xCombo GbE</li> <li>• 100-240VAC, 150W power budget</li> </ul>

## Optional Accessories

Pole Mount Brackets		Corner Mount Bracket
		
<b>AT-100</b> Pole Mount Adapter	<b>AT-101</b> Pole Mount Adapter	<b>AT-200</b> Corner Mount Adapter

### \*Effect factors

- 1.Must connect of PoE PD
- 2.Poor cabling quality with insufficient copper
- 3.IP camera's networking design could not support 10Mbps@250m transmission

### \*\*Suggestion

Checking the interoperability reaching 10Mbps @ 250m before physical deployment  
Adjust to "EX Mode OFF" reaching 10/100M bps @ 100m if "EX Mode ON" is fail.