

1200m(3937ft) Long Range EPoC Series

Fast Ethernet EPoC Extender

EPoC Camera Housing

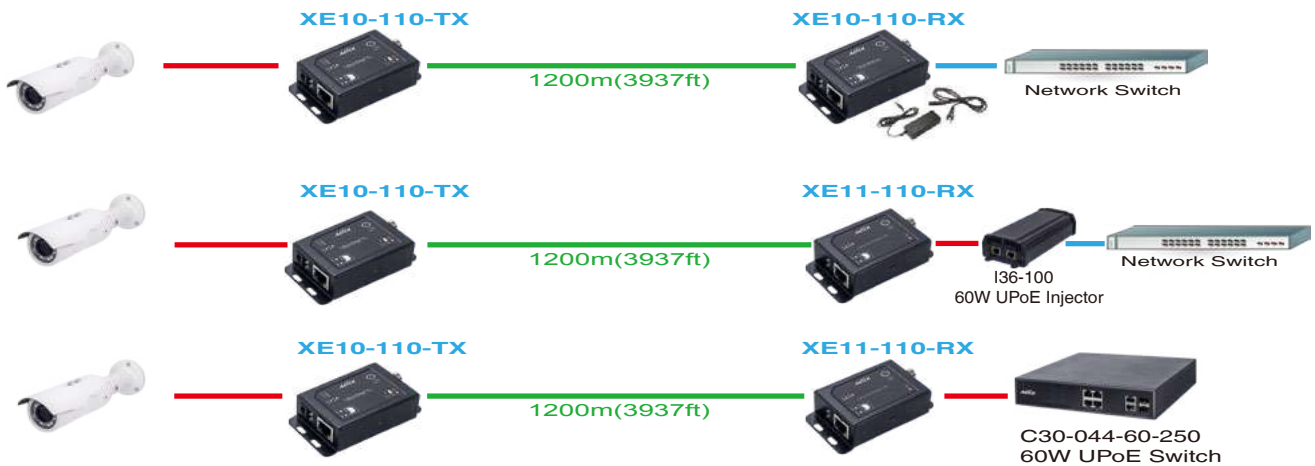


EPoC series

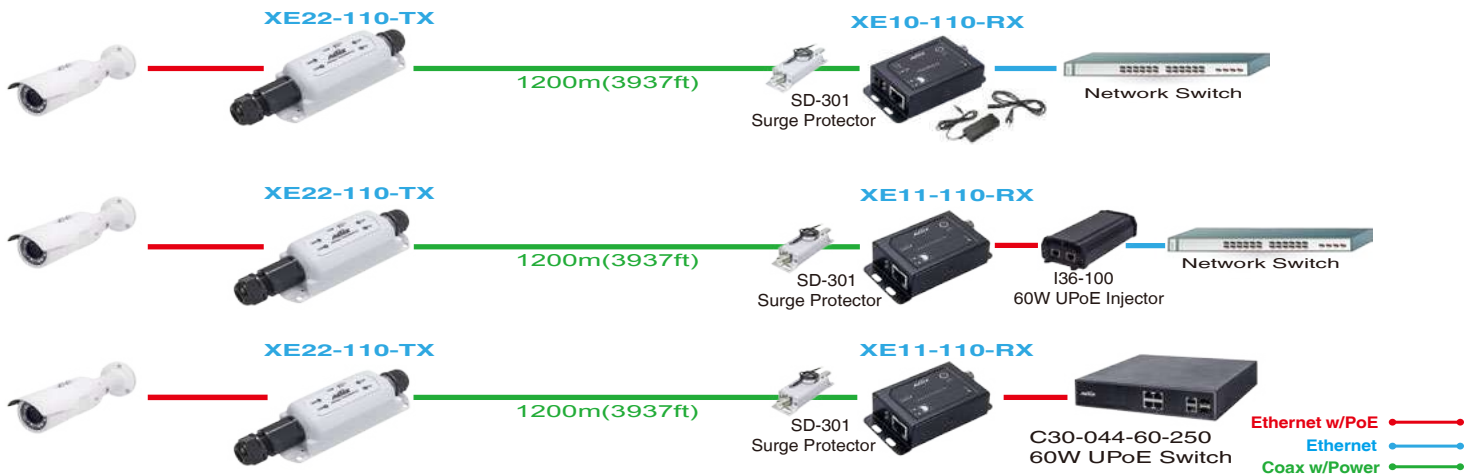


EPoC (Ethernet & Power over Coax) line is a long-reach solution providing Fast Ethernet and PoE over RG6 coaxial cable up to **1200m(3937ft)** for any brand of PoE IP camera. This product line also is often used to upgrade legacy of CCTV to IP surveillance without changing legacy RG59 coaxial cable. Furthermore, outdoor EPoC solution is a rugged and economical alternative to optical fiber. In addition, the power over coax to remote PoE IP camera is more convenient than optical fiber solution.

Indoor EPoC Diagram





Outdoor EPoC Diagram






Features

- Extends Ethernet and PoE beyond 100m(328ft) limitation up to 1200m(3937ft) over RG6 coaxial cable
- Upgrades analog CCTV into IP surveillance supporting long range Ethernet and power over legacy RG59 or new RG6/RG11 coaxial cable
- Wall-mount installation


EPoC RX Series			
	<p>XE10-110-RX</p> <ul style="list-style-type: none"> • XE10-110-RX EPoC adapter(RX) • 65W power adapter@56VDC 		<p>XE11-110-RX</p> <ul style="list-style-type: none"> • XE11-110-RX PoE EPoC adapter(RX) • Supports 30W/60W/95W PoE Input
<p>XE10-110-RX Features</p> <ul style="list-style-type: none"> • One BNC coax port & one Ethernet port • Playing RX mode • Wall-mount installation • PoE pass through coax to remote PoE IP camera • Includes 65W@56VDC power supply • Optional 19" 4-bay rack mount chassis (CH-100) 		<p>XE11-110-RX Features</p> <ul style="list-style-type: none"> • One BNC coax port & one PoE PD port • Playing RX mode • Wall-mount installation • PoE pass through coax to remote PoE IP camera • Eliminates the need for local site power supply • Optional 60W UPoE Injector (I36-100) / 60W UPoE Switch (C30-044-60-250) • Optional 19" 8-bay rack mount chassis (CH-110) 	

Optional Accessories

Accessories			
	<p>CH-100</p> <ul style="list-style-type: none"> • 19", 1U 4-bay rack mount chassis • Works with XE10-110-RX & 65W power adapter 		<p>I36-100</p> <ul style="list-style-type: none"> • 60W UPoE Injector • works with XE11-110-RX
	<p>CH-110</p> <ul style="list-style-type: none"> • 19", 1U 8-bay rack mount chassis • Works with XE11-110-RX 		<p>C30-044-60-250</p> <ul style="list-style-type: none"> • 60W UPoE Switch • works with XE11-110-RX

EPoC RX Adapter Specifications

	XE10-110-RX	XE11-110-RX
Interface/Distance		
75Ω Coaxial BNC	1	1
10/100Mbps Ethernet RJ45	1	1
Transmission mode	RX mode	RX mode
MAX.(Power+Data) Distance	9.7W@1200m(3937 ft)	9.7W@1200m(3937 ft)
Power Specifications		
Power supply	Input: 100-240 VAC Output: 65W@56VDC Power Adapter	Optional I36-100 : 60W UPoE Injector C30-044-60-250 : 60W UPoE Switch
PoE PD	-	v
PoE Pass Through	v	v
Mechanical Specifications		
Dimensions (WxHxD)	85.4 x 47.1 x 23 mm (3.36x1.85x0.91")	85.4 x 47.1 x 23 mm (3.36x1.85x0.91")
Weight	0.2 kg (0.44 lb)	0.26 kg (0.57 lb)
Connectors	BNCx1 , RJ45x1, DC Jackx1	BNCx1 , RJ45x1
Environmental Specifications		
Operating Temperature	-20°C ~ 60°C (-28°F ~ 140°F)	-20°C ~ 60°C (-28°F ~ 140°F)
Storage Temperature	-20°C ~ 85°C (-28°F ~ 185°F)	-20°C ~ 85°C (-28°F ~ 185°F)
Operating Humidity	5% ~ 95% non-condensing	5% ~ 95% non-condensing
Certifications		
EMC	CE, FCC, VCCI, C-Tick	CE, FCC, VCCI, C-Tick
Safety	EN60950-1	EN60950-1

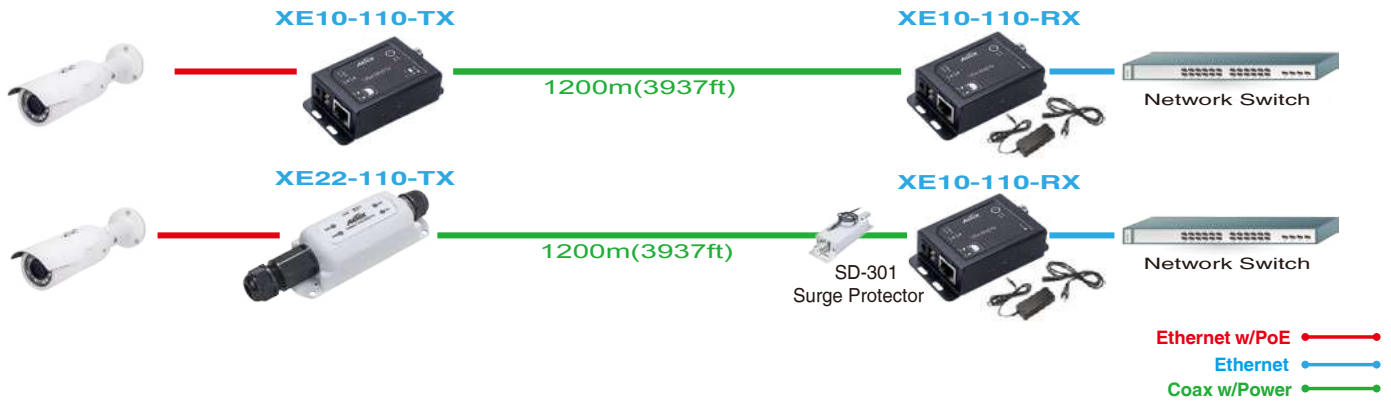
EPoC TX Series			
	XE10-110-TX • 1-to-1 EPoC adapter(TX)		XE12-120-TX • 1-to-2 EPoC adapter(TX)
XE10-110-TX Features <ul style="list-style-type: none"> • One BNC coax port & one PoE PSE port • Playing TX mode • Wall-mount installation • Eliminates the need for power supply beside remote PoE IP camera • Delivers up to 9.7 watts @ 1200m(3937ft) for one PoE IP camera 		XE12-120-TX Features <ul style="list-style-type: none"> • One BNC coax port & two PoE PSE ports • Playing TX mode • Wall-mount installation • Eliminates the need for power supply beside remote PoE IP camera • Delivers up to 25 watts @ 500m(1640ft) shared between two PoE IP cameras 	
	XE22-110-TX • 1-to-1, Outdoor EPoC adapter(TX) with IP66 / IK10 / 6KV Surge protection		XE22-120-TX • 1-to-2, Outdoor EPoC adapter(TX) with IP66 / IK10 / 6KV Surge protection
XE22-110-TX Features <ul style="list-style-type: none"> • One BNC coax port & one PoE PSE port • Outdoor IP66/IK10 • Playing TX mode • Enclosure with wall-mount • 6KV Surge protection • Eliminates the need for power supply beside remote PoE IP camera • Delivers up to 9.7 watts @ 1200m(3937ft) for one PoE IP camera 		XE22-120-TX Features <ul style="list-style-type: none"> • One BNC coax port & two PoE PSE ports • Outdoor IP66/IK10 • Playing TX mode • Enclosure with wall-mount • 6KV Surge protection • Eliminates the need for power supply beside remote PoE IP camera • Delivers up to 25 watts @ 500m(1640ft) shared between two PoE IP cameras 	






EPoC TX Adapter Specifications

	XE10-110-TX	XE12-120-TX	XE22-110-TX	XE22-120-TX
Interface/Distance				
75Ω Coaxial BNC	1	1	1	1
10/100Mbps Ethernet RJ45	1	2	1	2
Transmission mode	TX mode	TX mode	TX mode	TX mode
MAX.(Power+Data) Distance	9.7W@1200m(3937 ft)	Two cameras share 25W@500m(1640 ft)	9.7W@1200m(3937 ft)	Two cameras share 25W@500m(1640 ft)
Power Specifications				
Surge Protection	-	-	6KV	6KV
PoE Pass Through	v	v	v	v
Mechanical Specifications				
Dimensions (WxHxD)	85.4 x 47.1 x 23 mm (3.36x1.85x0.91")	103 x 86.6 x 28.9 mm (4.06x3.41x1.14")	157 x 55.8 x 39.75 mm (6.18x2.2x1.56")	167.5 x 72.8 x 39.8 mm (6.59x2.87x1.57")
Weight	0.2 kg (0.44 lb)	0.26 kg (0.57 lb)	0.3 kg (0.66 lb)	0.36 kg (0.79 lb)
Connectors	BNCx1 , RJ45x1	BNCx1 , RJ45x2	BNCx1 , RJ45x1	BNCx1 , RJ45x2
Environmental Specifications				
Weather Rating	-	-	IP66	IP66
Vandal Proof	-	-	IK10	IK10
Operating Temperature	-20°C ~ 60°C (-28°F ~ 140°F)	-20°C ~ 60°C (-28°F ~ 140°F)	-40°C ~ 60°C (-40°F ~ 140°F)	-40°C ~ 60°C (-40°F ~ 140°F)
Storage Temperature	-20°C ~ 85°C (-28°F ~ 185°F)	-20°C ~ 85°C (-28°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)
Operating Humidity	10% ~ 95% non-condensing	10% ~ 95% non-condensing	10% ~ 95% non-condensing	10% ~ 95% non-condensing
Certifications				
EMC	CE, FCC, VCCI, C-Tick	CE, FCC, VCCI, C-Tick	CE, FCC, VCCI, C-Tick	CE, FCC, VCCI, C-Tick

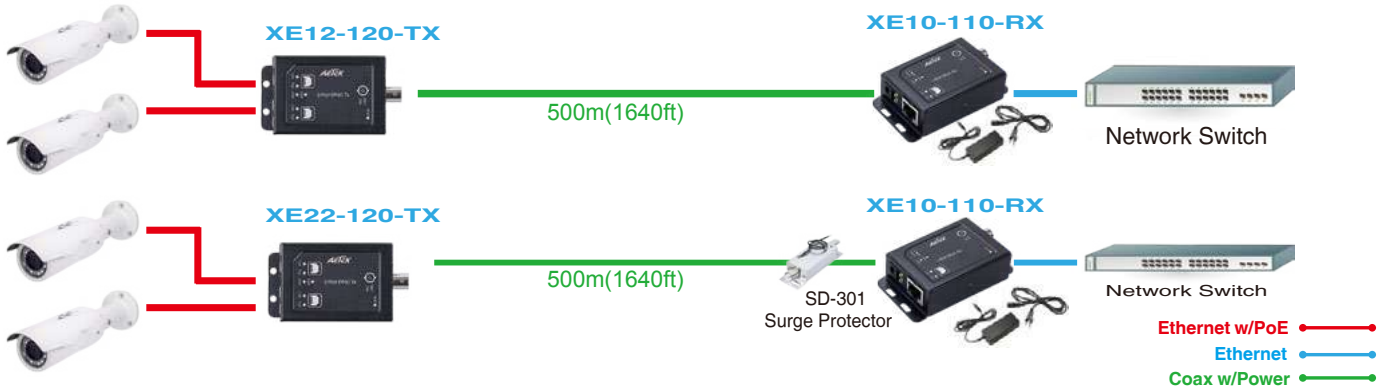
EPoC Extender Solution Guide






1-to-1 EPoC Extender Application (PSU at RX site)



TX	RX	PSU Power Budget	PSU Location	Data Rate	PoE Power Budget at TX end
XE10-110-TX 	XE10-110-RX 	65W@56VDC Power Adapter	RX site	100Mbps@1200m(3937ft) 100Mbps@1000m(3280ft) 100Mbps@800m(2624ft) 100Mbps@500m(1640ft) 100Mbps@300m(984ft)	9.66W @ 1200m(3937ft) 10W @ 1000m(3280ft) 13.1W @ 800m(2624ft) 25.2W @ 500m(1640ft) 34.7W @ 300m(984ft)
XE22-110-TX 	XE10-110-RX  + SD-301 				

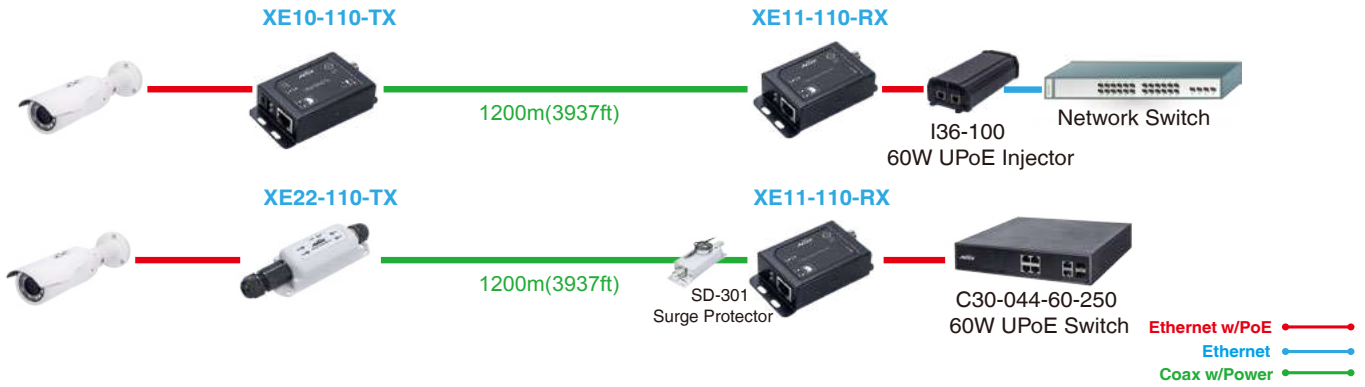
1-to-2 EPoC Extender Application (PSU at RX site)





TX	RX	PSU Power Budget	PSU Location	Data Rate	PoE Power Budget at TX end
XE12-120-TX 	XE10-110-RX 	65W@56VDC Power Adapter	RX site	100Mbps@500m(1640ft) 100Mbps@400m(1312ft) 100Mbps@300m(984ft)	25.2W @ 500m(1640ft) 30W @ 400m(1312ft) 34.7W @ 300m(984ft)
XE22-120-TX 	XE10-110-RX  + SD-301 				

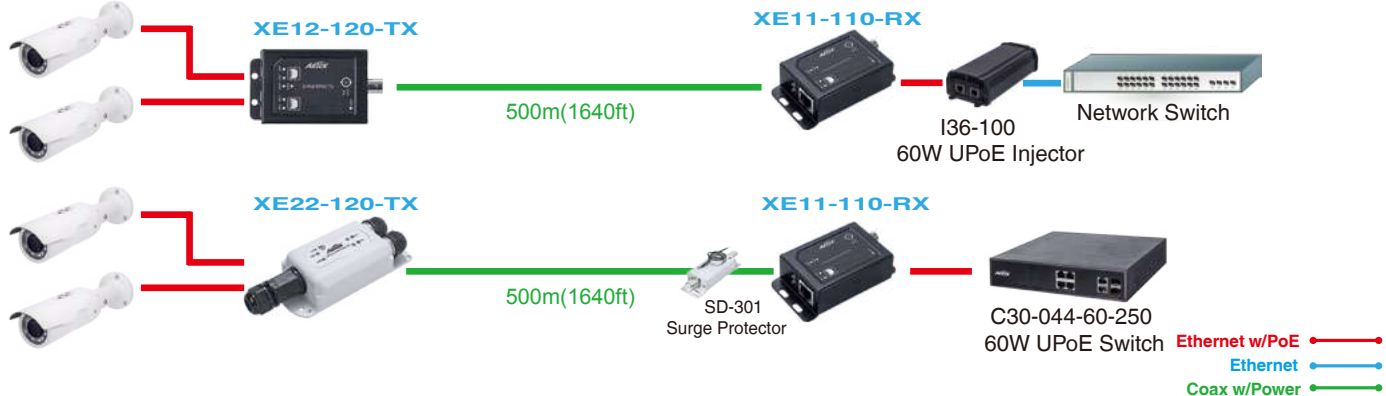
EPoC Extender Solution Guide



1-to-1 EPoC Extender Application (UPoE PSE at RX site)



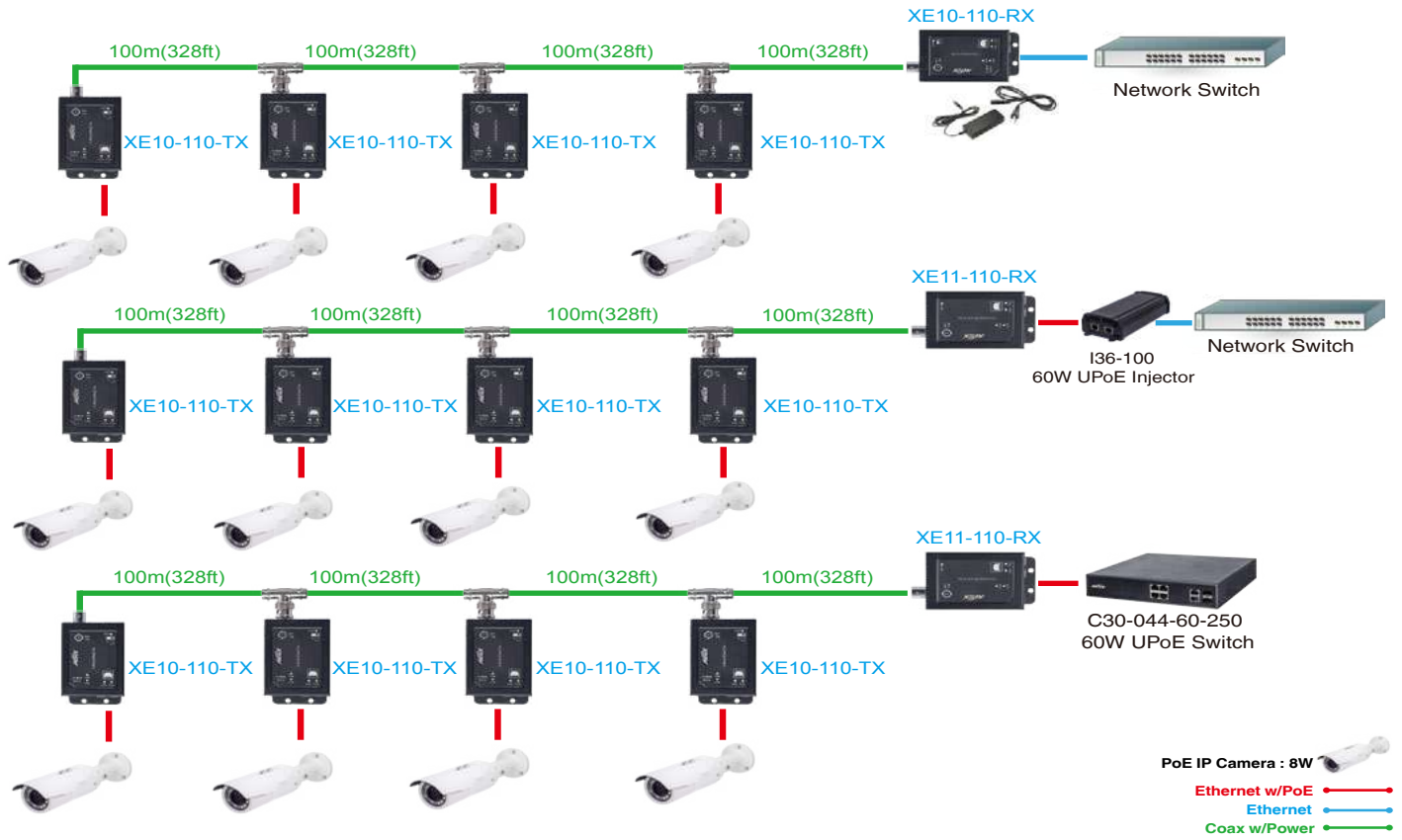
TX	RX	UPoE PSE Power Budget	PSU Location	Data Rate	PoE Power Budget at TX end
XE10-110-TX	XE11-110-RX	I36-100 60W UPoE Injector 	RX site	100Mbps@1200m(3937ft) 100Mbps@1000m(3280ft) 100Mbps@800m(2624ft) 100Mbps@500m(1640ft) 100Mbps@300m(984ft)	9.66W@1200m(3937ft) 10W@1000m(3280ft) 13.1W@800m(2624ft) 25.2W@500m(1640ft) 34.7W@300m(984ft)
XE22-110-TX	XE11-110-RX + SD-301 				

1-to-2 EPoC Extender Application (UPoE PSE at RX site)

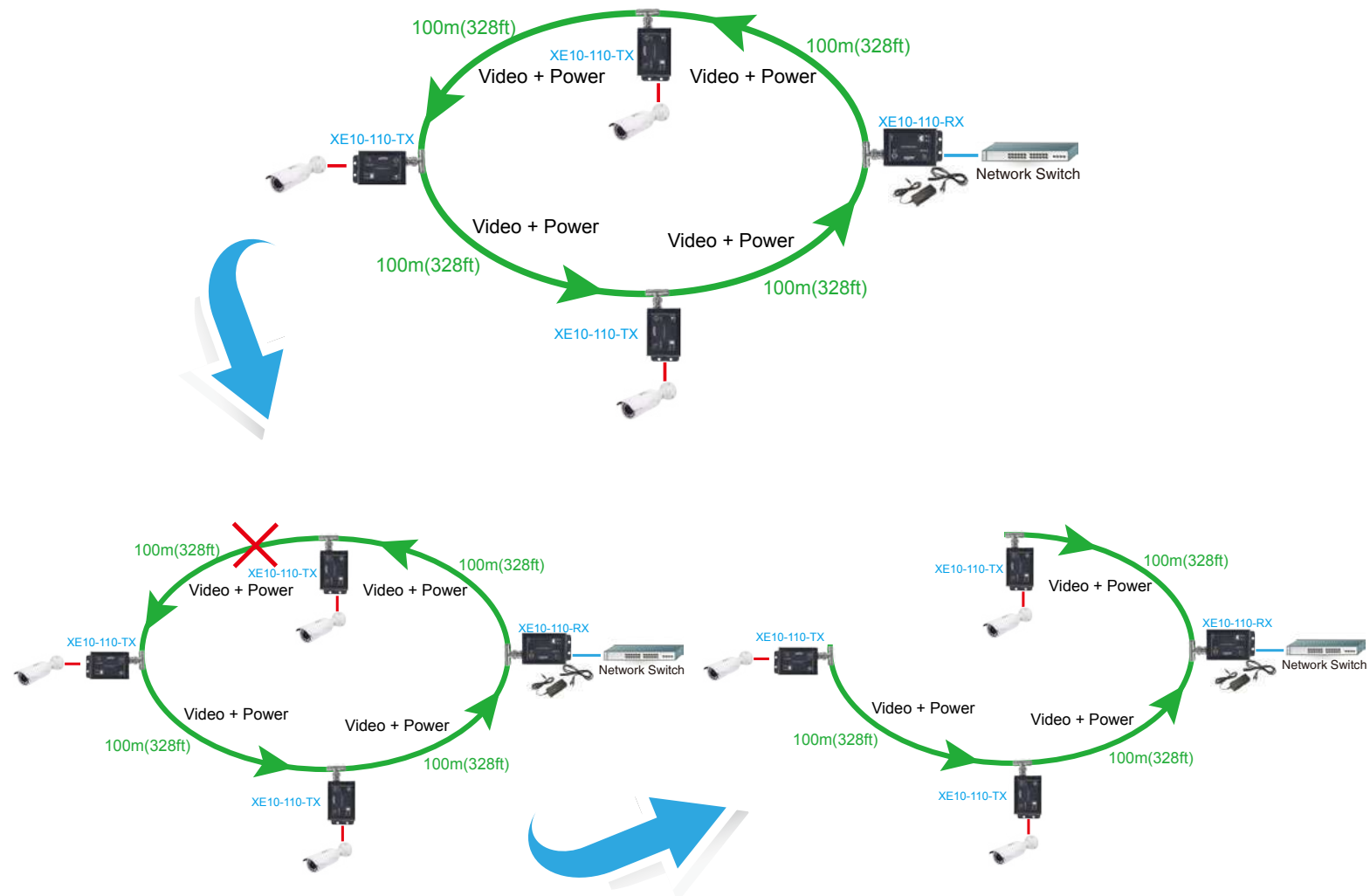


TX	RX	UPoE PSE Power Budget	PSU Location	Data Rate	PoE Power Budget at TX end
XE12-120-TX	XE11-110-RX	I36-100 60W UPoE Injector 	RX site	100Mbps@500m(1640ft) 100Mbps@400m(1312ft) 100Mbps@300m(984ft)	25.2W@500m(1640ft) 30W@400m(1312ft) 34.7W@300m(984ft)
XE22-120-TX	XE11-110-RX + SD-301 				

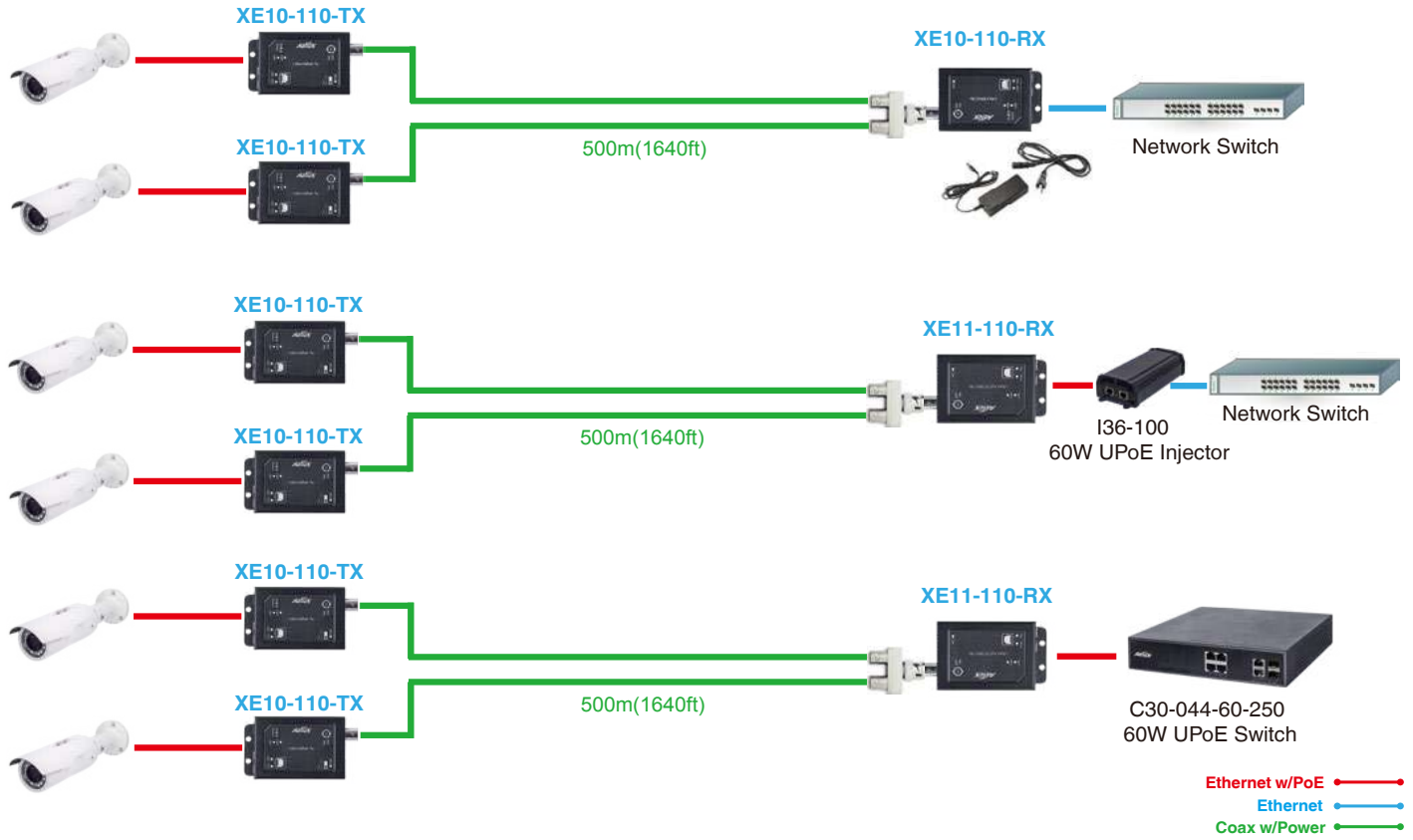
Daisy Chain EPoC Application



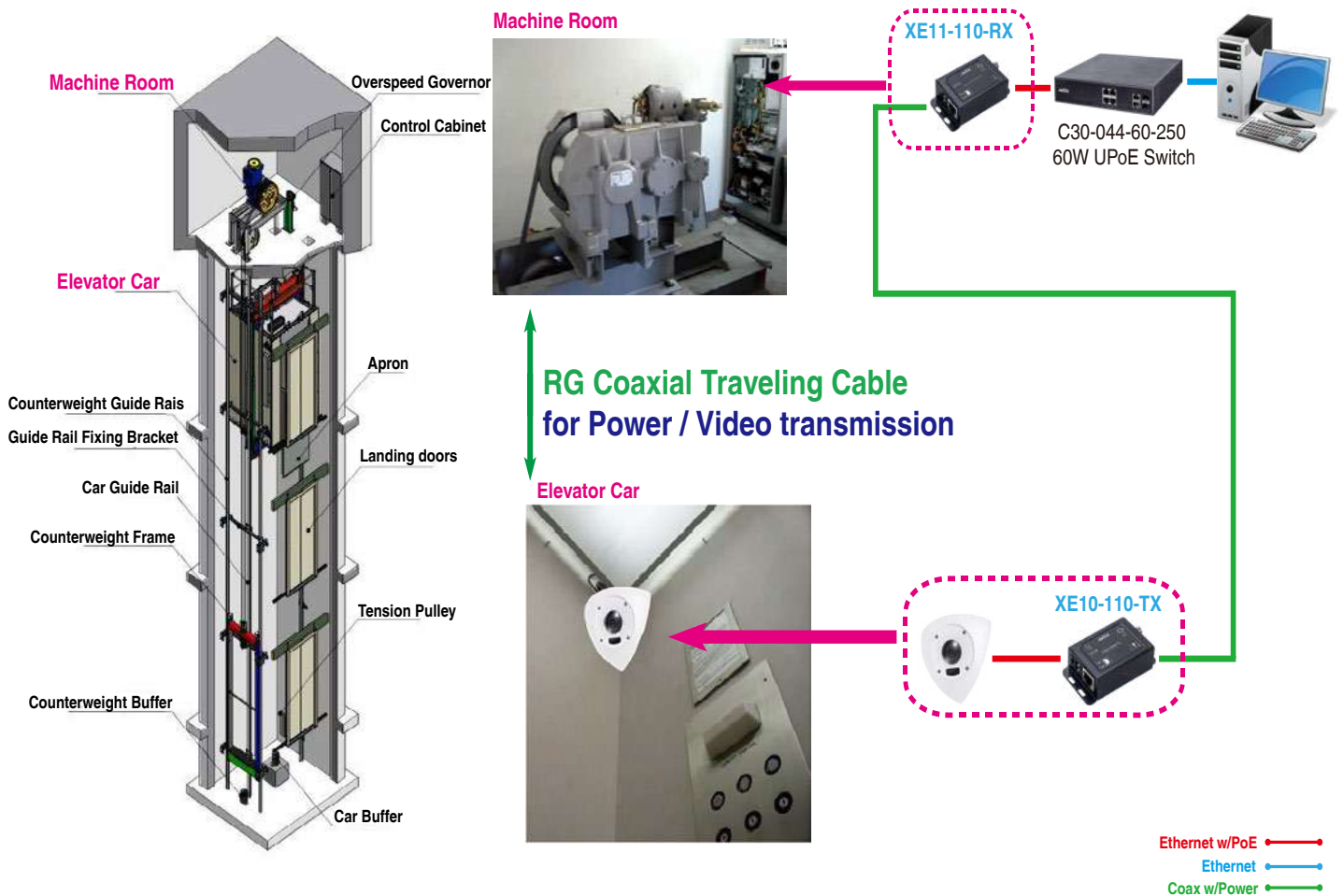
Ring EPoC Application



Splitter EPoC Application



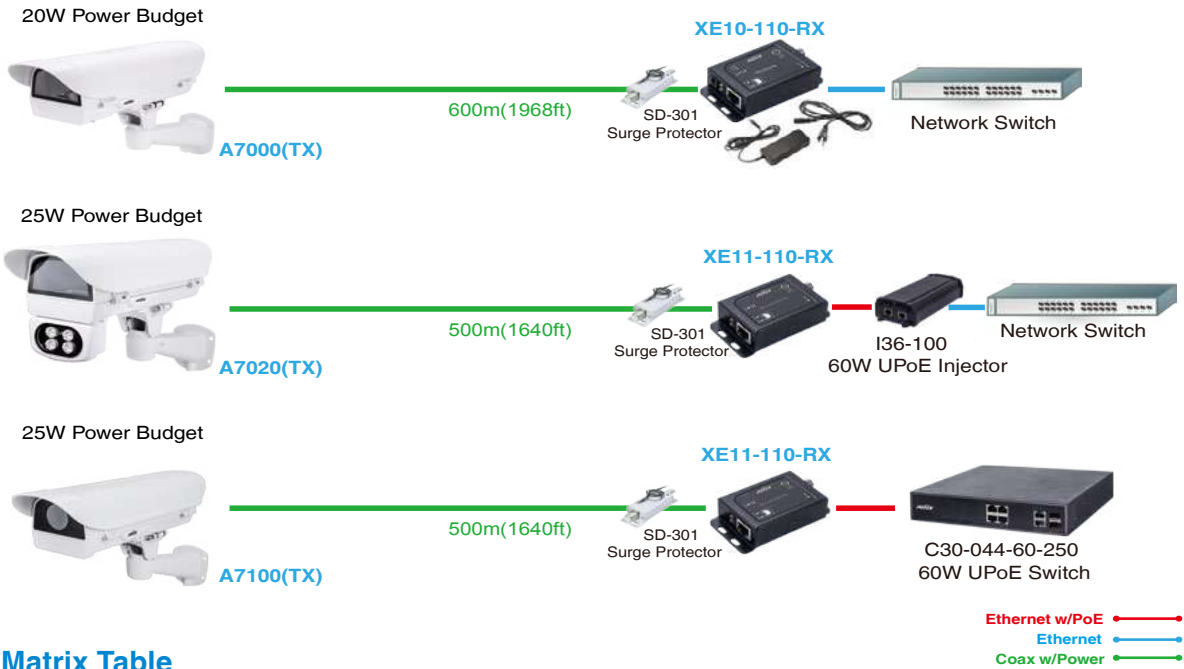
Elevator EPoC Application



Long Range EPoC Camera Housing



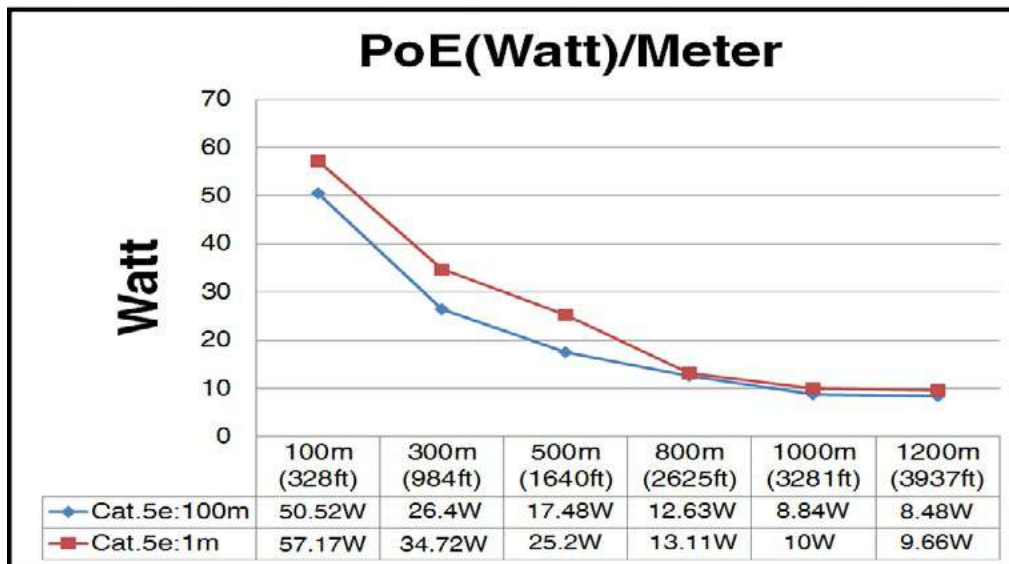
EPoC (Ethernet & Power over Coax) Camera Housing is a long-reach solution providing Fast Ethernet and PoE over coaxial cable up to 20W@600m(1968ft) or 25W@500m(1640ft) for any brand of PoE IP box camera. A70 Camera Housing also is often used to upgrade legacy of CCTV to IP surveillance without changing pre-deployed RG59-U/RG6/RG11 coax. Built-in 6KV surge protection is standard specification in A70 Camera Housing for outdoor environment





A70 Series Matrix Table

	EPoC In	MAX Distance	Output Power Budget	Germanium window	Window Heater	Adjustable Sunshield	Blower	Built-in 6W Fixed IR	6KV Surge Protection	IK10	IP66	IP68
A7000	v	600m(1968ft)	20W	-	v	v	v	-	v	v	-	v
A7020	v	500m(1640ft)	25W	-	v	v	v	50m (164ft)	v	v	v	-
A7100	v	500m(1640ft)	25W	v	-	v	v	-	v	v	-	v

Power / Distance Chart



Part Number

EPoC RX Series			
	XE10-110-RX <ul style="list-style-type: none"> XE10-110 EPoC adapter(RX) 65W@56VDC power adapter 		XE11-110-RX <ul style="list-style-type: none"> XE11-110 PoE EPoC adapter(RX) Supports 30W/60W/95W PoE Input

EPoC TX Series			
	XE10-110-TX <ul style="list-style-type: none"> 1-to-1 EPoC adapter(TX) 		XE12-120-TX <ul style="list-style-type: none"> 1-to-2 EPoC adapter(TX)
	XE22-110-TX <ul style="list-style-type: none"> 1-to-1, Outdoor EPoC adapter(TX) with IP66 / IK10 / 6KV Surge protection 		XE22-120-TX <ul style="list-style-type: none"> 1-to-2, Outdoor EPoC adapter(TX) with IP66 / IK10 / 6KV Surge protection

EPoC TX Enclosure Series			
	A7000 <ul style="list-style-type: none"> EPoC Camera Housing 		A7100 <ul style="list-style-type: none"> EPoC Camera Housing Germanium window
	A7020 <ul style="list-style-type: none"> EPoC Camera Housing with IR illuminator(MAX: 50m) 		

EPoC Kit Series			
	XE10-110 kit A <ul style="list-style-type: none"> XE10-110-TX EPoC adapter x1 XE10-110-RX EPoC adapter x1 65W@56VDC power adapter x1 		XE11-110 kit A <ul style="list-style-type: none"> XE11-110-RX PoE EPoC adapter x1 XE10-110-TX EPoC adapter x1




Accessories

Accessories			
	CH-100 <ul style="list-style-type: none"> 19", 1U 4-bay rack mount chassis Works with XE10-110-RX & 65W power adapter 		I36-100 <ul style="list-style-type: none"> 60W UPoE Injector works with XE11-110-RX
	CH-110 <ul style="list-style-type: none"> 19", 1U 8-bay rack mount chassis Works with XE11-110-RX 		
	SD-301 <ul style="list-style-type: none"> EPoC Surge Protector 6KV Surge Protection 		C30-044-60-250 <ul style="list-style-type: none"> 60W UPoE Switch works with XE11-110-RX

Enclosure Brackets

Wall Mount			Ceiling Mount		Standing Mount
					
BK-100 Wall Mount Bracket	BK-101 Wall Mount Bracket Safety Wire Concealing Cable	BK-102 Wall Mount Bracket Concealing Cable	BK-200 J-type Ceiling Mount Bracket	BK-201 Flexible J-type Ceiling Mount Bracket	BK-300 Standing Mount Bracket

Enclosure Adapters

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

Enclosure Junction Box BNC Adapters

Junction Box	BNC Adapters	
		
JB-100 Junction Box	BNC-T T-Typer BNC Adapter	BNC-Y Y-Typer BNC Adapter