

EPoC-V2 series

Long Range PoE over Coax Products



AETEK EPoC-V2 series of PoE over Coax Extender is designed to extend IP Ethernet transmission and inject power over an Coax cable for distance up to 1,200m (3,937ft) to PoE IP camera, PoE Wireless AP and any 802.3bt/at/af complied powered device (PD).

The EPoC-V2 Series consists of a TX and RX set which can work in pair without any power adapter and anywhere on your network infrastructure.

Features

- Long-range IP data & PoE over Coaxial cables
- Delivers up to 16 watts@1,200m(3,937ft) for a PoE IP camera
- Supports peer-to-peer, daisy-chain, and failover Ringtopologies
- Support IEEE 802.3bt/at/af PoE or 48-56VDC Input (XE11-110-RX-V2 only)
- Eliminates the need for intermediate Ethernet switches & power supplies for long-range deployment
- Plug-and-Play connection
- 802.3 bt/at/af PoE Output
- Support IEEE 802.3 bt/at/af PoE Output and Output Voltage Booster (XE22-110-TX-V2 only)
- IP67 rated, IK10 vandal proof (XE22-110-TX-V2 only)

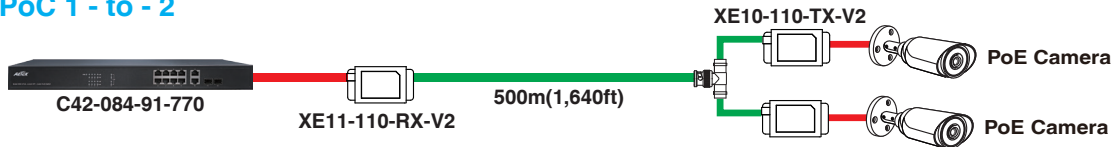
Applications

EPoC 1 - to - 1



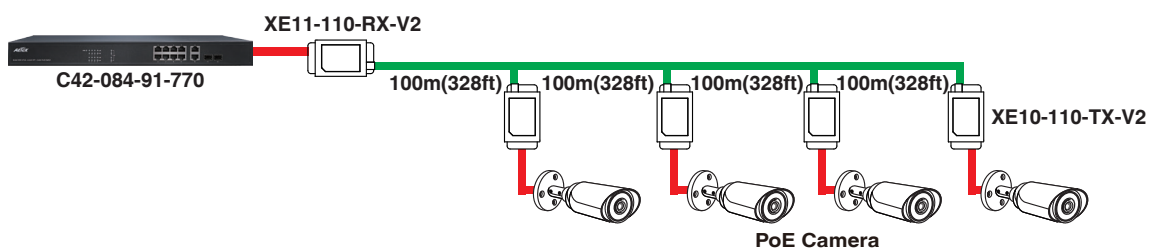
PoE Budget : 8.3W @ 1,200m / 3,937ft over RG6
Total Camera bandwidth < 100Mbps

EPoC 1 - to - 2



PoE Budget : 24.8W @ 500m / 1,640ft over RG6
Total Camera bandwidth < 100Mbps

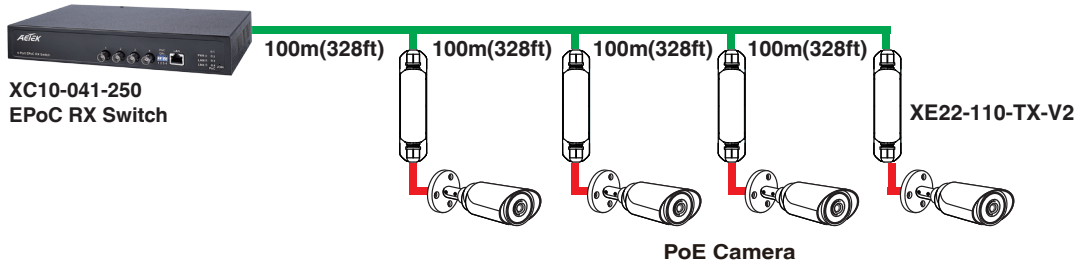
EPoC Daisy-chain



— PoE (Data + Power)
— Coax (Data + Power)

PoE Budget : 8W @ 400m / 1,312ft over RG6
Total Camera bandwidth < 100Mbps

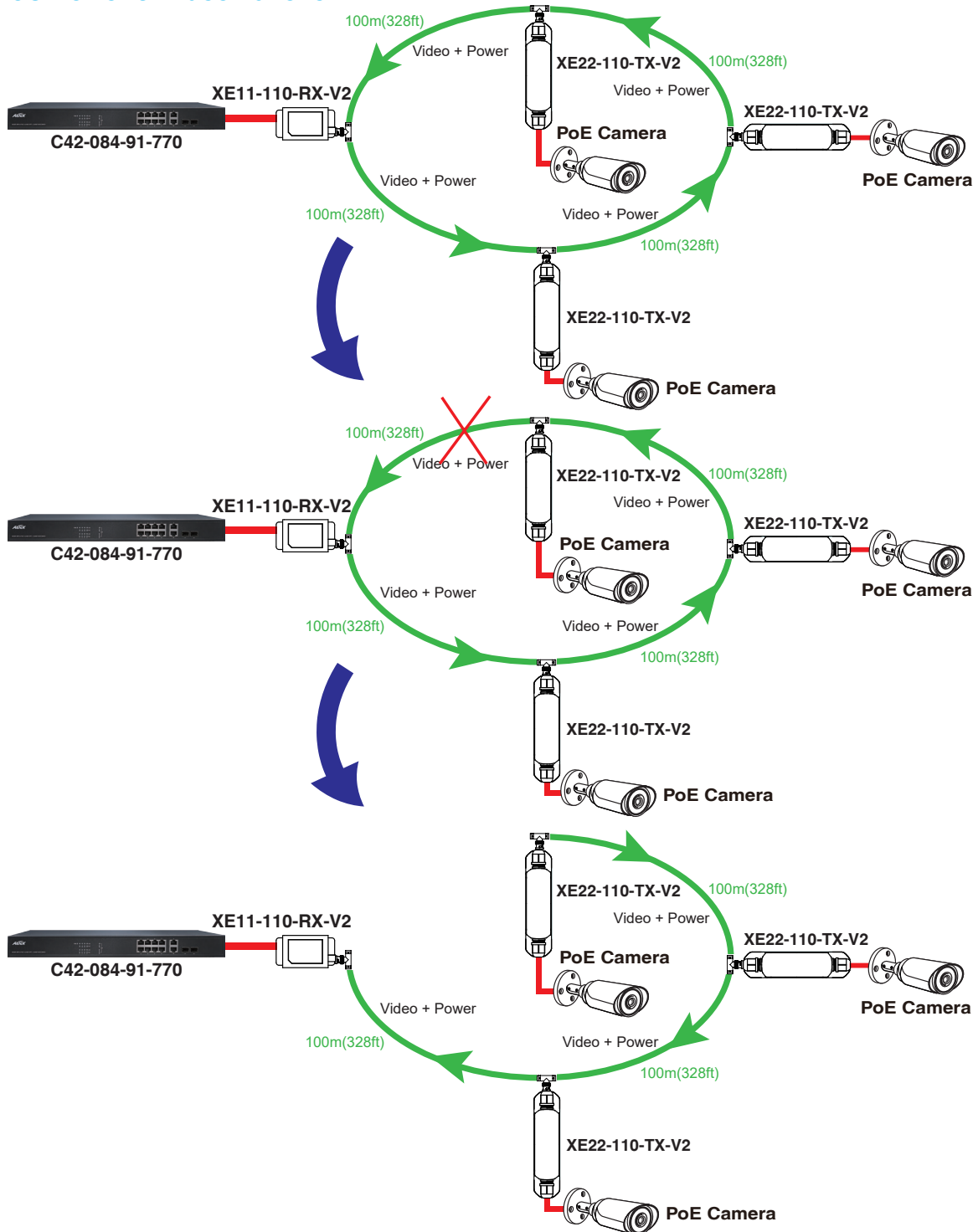
EPoC Daisy-chain



— PoE (Data + Power)
 — Coax (Data + Power)

PoE Budget : 8W@400m / 1,312ft over RG6
 Total Camera bandwidth < 100Mbps

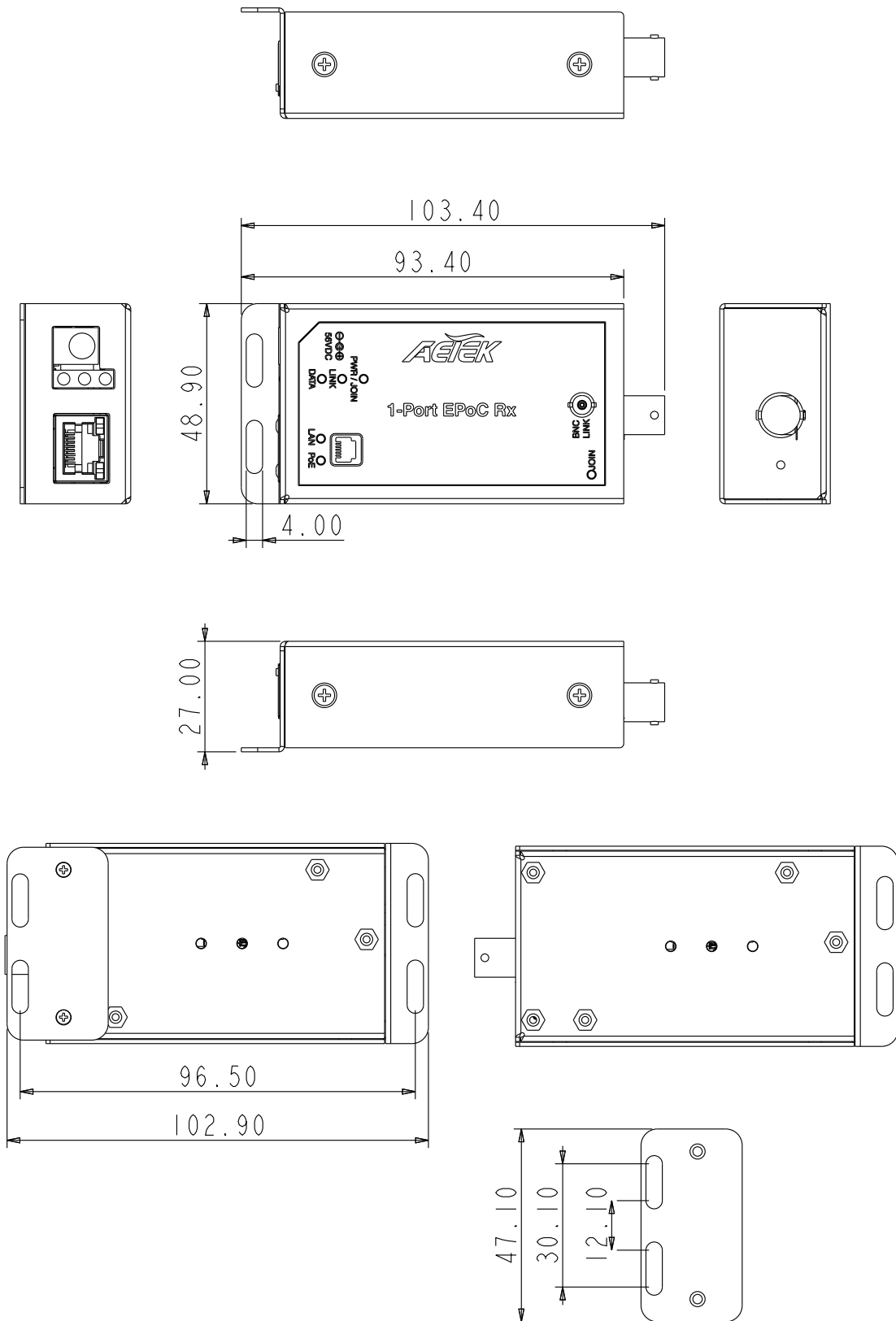
EPoC Power & Video Failover



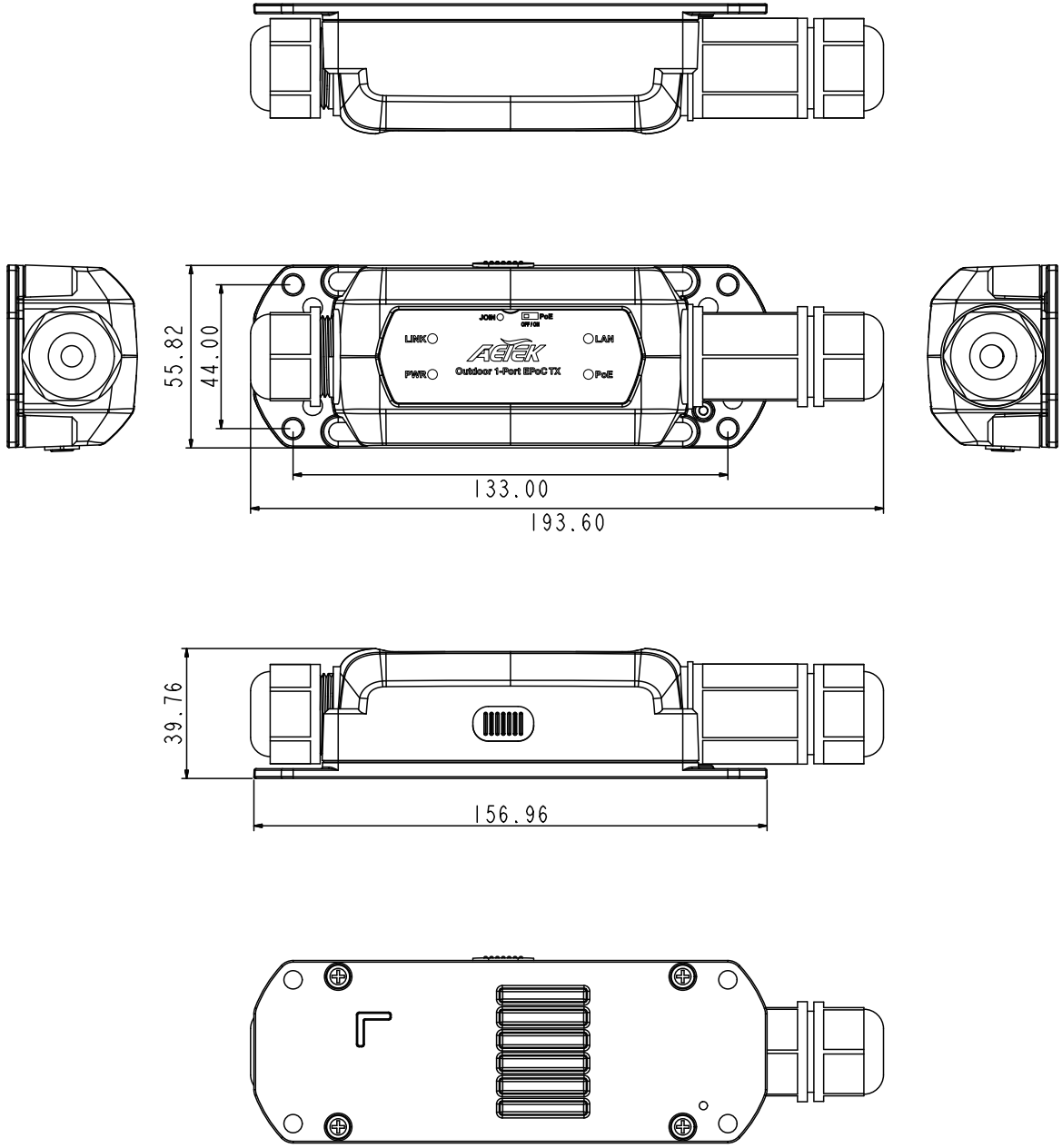
— PoE (Data + Power)
 — Coax (Data + Power)

PoE Budget : 8W@400m / 1,312ft over RG6
 Total Camera bandwidth < 100Mbps

XE11-110-RX-V2



XE22-110-TX-V2



Specifications

	XE11-110-RX-V2	XE10-110-TX-V2	XE22-110-TX-V2
Interface / Distance			
Coaxial BNC	75 ohm BNC x1	75 ohm BNC x1	75 ohm BNC x1
10/100 Mbps Ethernet	PoE PD RJ45 x1	PoE PSE RJ45 x1	PoE PSE RJ45 x1
Transmission mode	Receiver RX mode	Transmitter TX mode	Transmitter TX mode
Maximum TX quantity	7	--	--
MAX.(Power+Data) Distance	100Mbps, 9.7W@1,200m(3,937ft) 100Mbps@2,400m(7,874ft) Data only Cable reference: RG6 Coax	100Mbps, 9.7W@1,200m(3,937ft) 100Mbps@2,400m(7,874ft) Data only Cable reference: RG6 Coax	100Mbps, 9.7W@1,200m(3,937ft) 100Mbps@2,400m(7,874ft) Data only Cable reference: RG6 Coax
Cable Type	75 ohm RG59/RG6/RG11 Coax	75 ohm RG59/RG6/RG11 Coax	75 ohm RG59/RG6/RG11 Coax
Bandwidth	100 Mbps	100 Mbps	100 Mbps
Data Rate	Coaxial cable : up to 100 Mbps asymmetrical to full range Ethernet cable : 100 Base-TX Full Duplex	Coaxial cable : up to 100 Mbps asymmetrical to full range Ethernet cable : 100 Base-TX Full Duplex	Coaxial cable : up to 100 Mbps asymmetrical to full range Ethernet cable : 100 Base-TX Full Duplex
Power			
Input Power	Support 30W/60W/90W PoE DC power jack: 56VDC	EPoC@50~56VDC DC power jack: 56VDC	EPoC@50~56VDC
Output Power	--	IEEE 802.3bt PoE++ PSE IEEE 802.3at PoE+ PSE IEEE 802.3af PoE PSE	IEEE 802.3bt PoE++ PSE IEEE 802.3at PoE+ PSE IEEE 802.3af PoE PSE Voltage Booster
Power Supply	Optional : Input: 100-240VAC Output: 65W@56VDC or 120W@56VDC Power Adapter 60W/90W PoE Injector 60W/90W PoE Switch	Optional : Input: 100-240VAC Output: 65W@56VDC or 120W@56VDC Power Adapter	--
Unit Power Consumption	2 watts	2 watts	2 watts
EPoC Surge Protection	Optional extra surge protector : SD-301	Optional extra surge protector : SD-301	6KV
ESD	Contact ±4 KV, Air ±8 KV	Contact ±4 KV, Air ±8 KV	Contact ±4 KV, Air ±8 KV
Mechanical			
Dimensions (LxWxH)	103.4 x 48.9 x 27.0 mm (4.07 x 1.93 x 1.06 in)	86.6 x 47.1 x 27.0 mm (3.41 x 1.85 x 1.06 in)	193.6 x 55.8 x 39.76 mm (7.62x2.2x1.56 in)
Weight	0.2 kg (0.44 lb)	0.2 kg (0.44 lb)	0.3 kg (0.66 lb)
Connectors	BNC x1, RJ45 x1, DC Jack x1	"BNC x1, RJ45 x1, DC Jack x1, PoE On/Off Switch x1"	"M25 x1(BNC), M25 x1(RJ45), PoE On/Off Switch x1"
Mounting	Wall mount / Din-rail(optional)	Wall mount / Din-rail(optional)	Wall mount
Casing	Metal	Metal	Aluminum
DIP Switch	--	PoE On/Off switch	PoE On/Off switch
Join Button	1~3 sec.: Link RX and TX 5~8 sec.: Disconnect RX and TX 10~15 sec.: Reset to default	1~3 sec.: Link RX and TX 5~8 sec.: Disconnect RX and TX 10~15 sec.: Reset to default	1~3 sec.: Link RX and TX 5~8 sec.: Disconnect RX and TX 10~15 sec.: Reset to default
Environmental limits			
IP Rating	--	--	IP67
IK Rating	--	--	IK10
Operating Temperature	-20°C ~ 60°C (-28°F ~ 140°F)	-20°C ~ 60°C (-28°F ~ 140°F)	-30°C ~ 60°C (-22°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)
Relative Humidity	5% to 95% non-condensing	5% to 95% non-condensing	5% to 95% non-condensing
Regulatory/ Approvals			
EMC	CE, FCC, VCCI, C-Tick	CE, FCC, VCCI, C-Tick	CE, FCC, VCCI, C-Tick
Safety	EN62368-1	EN62368-1	EN62368-1
MTBF	>50000 hours	>50000 hours	>50000 hours
LEDs			
LAN	Ethernet status	Ethernet status	Ethernet status
PWR	Power status	Power status	Power status
LINK/BNC	EPoC RX and TX connection status	EPoC RX and TX connection status	EPoC RX and TX connection status
POE	PoE status	PoE status	PoE status
DATA	Data transmission status over coax	Data transmission status over coax	--

* Note: When powering the XE11-110-RX-V2 via a PoE Switch, electrical isolation is mandatory between the two devices to prevent direct electrical contact.





Ordering Information

EPoC-V2 RX Adapter			
	XE11-110-RX-V2 <ul style="list-style-type: none"> • One BNC coaxial port & one 10/100Mbps PoE PD port • Supports 30W/60W/90W PoE or 56VDC Input 		
EPoC-V2 TX Adapter Series			
	XE10-110-TX-V2 <ul style="list-style-type: none"> • One BNC coaxial port & one PoE LAN port • 802.3 bt/at/af PoE output • Optional 56VDC Input 		XE22-110-TX-V2 <ul style="list-style-type: none"> • One BNC coaxial port & one PoE LAN port • 802.3 bt/at/af PoE output • IP67/IK10 • Output voltage booster

Optional Accessories

	PA-150-065 <ul style="list-style-type: none"> • 100 ~ 240 VAC input, 56VDC/65W output 		CH-100-V2 <ul style="list-style-type: none"> • 19", 1U 4-bay rack mount chassis • Support 4 set XE11-110-RX-V2 with PA-150-065 power adapter only
	PA-150-120 <ul style="list-style-type: none"> • 100 ~ 240 VAC input, 56VDC/120W output 		CH-110-V2 <ul style="list-style-type: none"> • 19", 1U 8-bay rack mount chassis • Support 8 pcs XE11-110-RX-V2 only
	BNC-Y <ul style="list-style-type: none"> • Y -type BNC Adapter 		BNC-T <ul style="list-style-type: none"> • T -type BNC Adapter
	BNC-YC cable <ul style="list-style-type: none"> • Outdoor Y type BNC Cable 		SD-301 <ul style="list-style-type: none"> • 6KV EPoC Surge Protection • Support XE11-110-RX-V2 only

Related Product

EPoC RX Switch			
	XC10-041-250 <ul style="list-style-type: none"> • 4-port BNC coax ports & 1-port Gigabit LAN port • 6KV surge protection for coax port • 250W power budget • 100-240VAC input 		XC60-084-91-770 <ul style="list-style-type: none"> • Supports NTS • 8-port BNC coaxial ports, 2-port Gigabit RJ45 port, 2-port Gigabit SFP port • 720W power budget • 100-240VAC input
90W bt PoE Switch			
	C42-042-91-380 <ul style="list-style-type: none"> • 4-port Gigabit 90W bt PoE + 2-port Gigabit RJ45 • 380W power budget 		C42-084-91-770 <ul style="list-style-type: none"> • 8-port Gigabit 90W bt PoE + 2-port Gigabit RJ45 + 2-port Gigabit SFP • 770W power budget