

## CLEER FAMILY ADAPTER OPTIONS

### EC Adapter Options

There are three media converter options available to pair with the CLEER family of switches to extend PoE over Coax. The EC-Link and EC Link+ are single endpoint solutions and the EC4 enables 4 IP endpoints from a single long run Coax cable.

#### EC-Link



#### EC-Link+



#### EC4



	EC-Link	EC-Link+	EC4
<b>Power</b>	<ul style="list-style-type: none"> <li>Maximum 30W, delivered on 2-pairs (spare pairs)</li> <li>Local power option</li> <li>Does not negotiate power requirements with IP device</li> <li>Device must be IEEE 802.3 af/at compliant</li> </ul>	<ul style="list-style-type: none"> <li>Maximum 50W (If locally powered and 30W if power provided from switch) delivered on 4 pairs</li> <li>Local power option</li> <li>Adapter is IEEE 802.3af/at compliant and will negotiate power requirements with IP device</li> </ul>	<ul style="list-style-type: none"> <li>Receives and delivers PoE power (up to 30w) from EC10, CLEER24 or EC-Base</li> <li>EC4 enables IEEE 802.3 AF/AT compliant IP endpoints</li> <li>Can be locally powered (optional) and deliver up to 50 watts per port with a maximum overall power budget of 165W</li> </ul>
<b>Casing</b>	Plastic	Metal	Plastic
<b>EN 50121-4 Standard</b>	Yes – approved to operate in a railway/subway environment		

### EC Adapters Technical Specifications

Model Number	EC-Link	EC-Link+	EC4
<b>Part Number</b>	NV-ECLK	NV-ECLK-PLS	NV-EC-04
<b>Dimensions</b>	8.8cm x 3.2cm x 2.1cm (LxWxH); 3.46" x 1.23" x 0.83" (LxWxH)	10.09cm x 5.03cm x 2.57cm (LxWxH); 3.97" x 1.98" x 1.01" (LxWxH)	11cm x 7cm x 2.5cm (LxWxH); 4.3" x 2.75" x 0.98" (LxWxH)
<b>Weight</b>	42g (1.48oz.)	108g (3.81oz.)	96g (3.38oz.)
<b>Interface: Network Infrastructure side (CLEER)</b>	1 BNC port: Coax cable (RG59, RG6, RG11)	1 BNC port: Coax cable (RG59, RG6, RG11)	1 BNC port: Coax cable (RG59, RG6, RG11)
<b>Line Speed</b>	10/100Mbps full duplex	10/100Mbps full duplex	100Mbps full duplex
<b>Interface: IEEE Side (IP Device)</b>	1 RJ45 port; device must be IEEE 802.3 af/at compliant	1 RJ45 port; adapter is IEEE 802.3af/at compliant and will negotiate power requirements with IP end device.	4 RJ45 ports: devices must be IEEE 802.3 af/at compliant
<b>Power Supply</b>	PoE from the CLEER / EC switch or from EC-Base, maximum 30W (over 2-pairs)	Maximum 50W from CLEER / EC switch (If locally powered and 30W if power provided from switch) delivered on 4 pairs.	PoE from the CLEER / EC switch or external power supply; maximum 50W (over 4-pairs) each port
<b>DC IN</b>	Optional (sold separately) 48V – 56VDC via an external AC/DC Power Adapter with phoenix connector (IEC Class II isolated only) NOTE 1: Local power supply used must have its output isolated from Earth potential. NOTE 2: If voltage of local power supply is lower than the power voltage provided from the PoE switch, then power on the PoE switch should be turned off.	Optional (sold separately) 48V – 56VDC via an external AC/DC Power Adapter (IEC Class II isolated only) with barrel connector NOTE 1: Local power supply used must have its output isolated from Earth potential. NOTE 2: If voltage of local power supply is lower than the power voltage provided from the PoE switch, then power on the PoE switch should be turned off.	Optional (sold separately) 48V – 56VDC via an external AC/DC Power Adapter (IEC Class II isolated only) with barrel connector NOTE 1: Local power supply used must have its output isolated from Earth potential. NOTE 2: If voltage of local power supply is lower than the power voltage provided from the PoE switch, then power on the PoE switch should be turned off.
<b>Power Consumption</b>	0.9W	1.1W	1W
<b>Operating Temperature</b>	-58°F to +158°F (-50°C to +70°C) Tests conducted against international safety standard at maximum ambient temperatures of 50°C	-58°F to +158°F (-50°C to +70°C) Tests conducted against international safety standard at maximum ambient temperatures of 60°C at 30W and 55°C at 50W	-58°F to +158°F (-50°C to +70°C) Tests conducted against international safety standard at maximum ambient temperatures of 50°C
<b>Mean Time Before Failure (MTBF)</b>	20+ years	20+ years	20+ years
<b>Humidity</b>	10% to 95% (non-condensing) at 35° C	10% to 95% (non-condensing) at 35° C	10% to 95% (non-condensing) at 35° C

### EC Adapters Compliance and Agency Approval

<b>EMC</b>	Emissions: FCC Part 15, ICES-003, EN 55032:2012, EN 50121-4:2015 Class A (EC4) Class B (EC-Link and EC-Link+) Immunity: EN 55024:2010, EN 50121-4:2015
<b>Safety</b>	UL 60950-1 2nd Ed 2014-10-14, CAN/CSA C22.2 No. 60950-1-07 2nd Ed 2014-10 IEC 62368-1:2014, EN 62368-1:2014, AS/NZS 62368.1:2018
<b>Environment</b>	RoHS Directives 2011/65 and 2015/863