

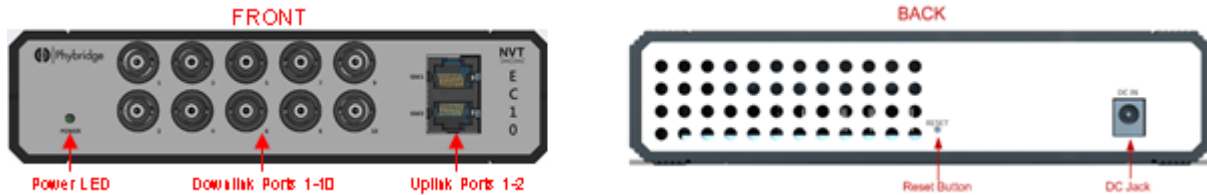
Quick Install Guide

CLEER Switch - Model EC10

Beyond PoE: Delivering Power over Long Reach Ethernet

The CLEER (Coax Leveraged Ethernet Extended Reach) family of data switches delivers Ethernet and Power over Ethernet over Coax cable with multiple times the reach of traditional data switches. With the EC10 switch customers can transform their existing Coax infrastructure for IP camera deployment. For complete details refer to the Hardware Installation Guide at www.phybridge.com

EC10 Switch



EC10 Switch Package Includes:

1. 1 x EC10 unit
2. 1 x AC/DC Power Adapter
3. Quick Install Guide

EC-Link Package (Sold Separately) Includes:

1. 2 x EC-Links



Installation Considerations

Location Requirements

Power - The AC/DC Power Adapter must be placed within 6 feet of an available power source.

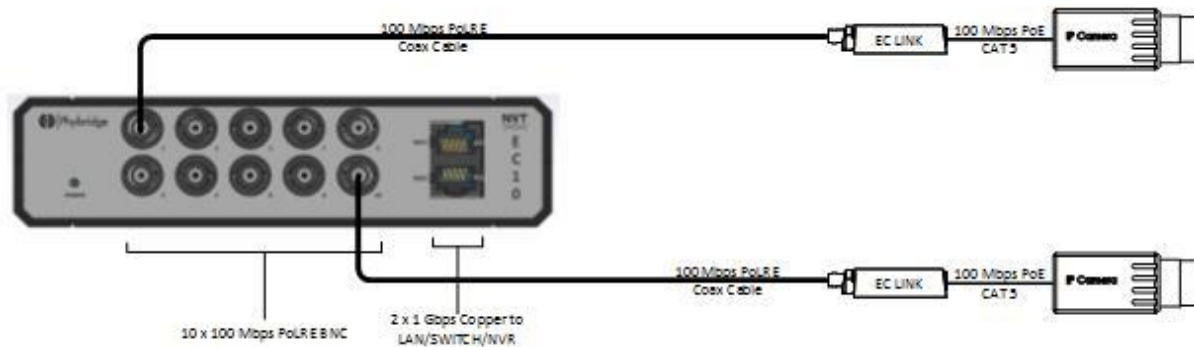
Ventilation - To ensure proper ventilation of the EC10, leave at least 2 inches of unobstructed space on all sides of the unit.

Downlink – The EC-Link adapters should be installed a minimum of 6 feet away from the EC10 switch.

Installation procedures will be trouble-free if you ensure that the following items are available before you begin:

- The CLEER switch model EC10, and all cables and accessories you received in the EC10 package.
- All EC-Link Adapters required for connecting the IP endpoint devices.
- Standard CAT5e copper LAN cables for the uplink trunks (user-supplied).
- Coax cable for the downlink ports (user-supplied).

Hardware Topology and Installation Overview



1. Remove the EC10 switch and all accompanying accessories.
2. Remove all legacy cameras from the Coax cable.
Note: It is extremely important that non-IP, non-PoE cameras are not connected when you power on the EC10.
3. Connect an EC-Link to the Network jack on the IP endpoint and connect the BNC Jack on the EC-Link to one end of the Coax cable.
4. Connect the other end of the Coax cable to BNC connectors on the EC10 switch.
5. Connect the uplink cable from a Gigabit port to the IP PBX or network switch.
Note: This connection also permits inband management over Ethernet.
6. Power up the EC10.
7. For troubleshooting, please refer to the Hardware Installation Guide located at www.phybridge.com.
8. To reset the unit, press the reset button.

Note the following:

All of the above instructions provide basic installation information, necessary for the proper and safe functioning of this equipment. Persons installing or maintaining this product must read all of the safety instructions and the parts of system grounding which are applicable to the system being maintained. Only trained, qualified service personnel shall install or maintain this product.



WARNING: FAILURE TO FOLLOW ALL INSTRUCTIONS MAY RESULT IN IMPROPER EQUIPMENT OPERATION AND/OR RISK OF ELECTRICAL SHOCK.



WARNING: ANY CONNECTION TO AN OUTSIDE PLANT LEAD, AN OFF-PREMISE APPLICATION, OR ANY OTHER EXPOSED PLANT APPLICATION MAY RESULT IN A FIRE OR SHOCK HAZARD, AND/OR DEFECTIVE OPERATION, AND/OR EQUIPMENT DAMAGE.

- Keep these instructions with the equipment.
- Do not attempt to install or service this equipment unless you are skilled in the installation and maintenance of electronic telecommunications equipment and have successfully completed specific training for this equipment.

Technical Support

The **Phybridge Technical Support Group** is available to assist you with product installation, configuration, monitoring and troubleshooting procedures. Should you experience trouble with this

equipment or for repair or warranty information, please contact Phybridge Inc. at **+1 905.901.3633** or support@phybridge.com.



Safety Warnings and Precautions

Access to the interior of this unit shall be made only by a qualified technician.	Der Zugang ins Innere des Gerätes ist nur einem fachlich qualifizierten Techniker gestattet.	Seul un spécialiste doit avoir accès l'appareil.	El servicio de antenamiento y reparación de esta unidad solo puede ser realizado por técnicos autorizados por el fabricante.
To ensure adequate cooling of the equipment, a 2-inch unobstructed space must be provided at the back of the unit.	Um die Kühlung des Gerätes nicht zu beeinträchtigen, ist es notwendig, einen Raum von etwa 5 cm auf der Rückseite des Geräts vorhanden.	Afin de ne pas nuire au processus de refroidissement, il est nécessaire de laisser un espace d'environ 5 cm à l'arrière de l'appareil.	Para garantizar una refrigeración adecuada de la máquina, un 5 cm de espacio libre se proporciona en la parte posterior de la unidad.
To prevent the risk of shock or fire hazard, replace fuse with same type and rating.	Zur Vermeidung der Stromschlag - und Feuergefahr beim Auswechseln Sicherungen des gleichen Typs und der gleichen Nennleistung einsetzen.	Afin d'éviter tout risque d'incendie ou d'électrocution, remplacez les fusibles par des fusibles de même type et de même ampérage.	Para su propia protección, cerciórese de que todas las conexiones eléctricas de los servicios públicos, incluyendo la puesta a tierra, las líneas telefónicas y el sistema de tuberías de agua metálicas internas, si las hubiera, estén conectadas entre sí.

Compliance and Environmental information

All the compliance and environmental information is available on our website www.phybridge.com.

Technical specifications

EC10	
Dimensions	4.5cm x 17.8cm x 12cm (HxWxD) 1.77" x 7.01" x 4.72" (HxWxD)
Weight	0.346 kg (0.763 lbs.)
Interface: Ethernet uplink (Trunk IP)	2 RJ45 ports: 10/100/1000 Base-T autosensing, independent speed selection, Ethernet IEEE 802.3, CAT5e/6 copper cable
Interface: Downlink (PoE and IP to adapter)	10 x BNC Jacks Speed: 100Mb/s (full duplex) PoE power: 25 Watts Max. Maximum distance: 1500' (457M) over RG59 COAX Cable 2000' (609M) over RG6 COAX Cable
Power supply	48 – 56 VDC (55 VDC, 165W power supply included)
Power consumption	3.8W
Power injection (PoE)	48 – 56 VDC Endpoint devices must be compliant with IEEE 802.3af / 802.3at
Operating temperature	-10° C to 50° C
Humidity	10% to 95% (non-condensing) at 35° C

EC-Link	
Dimensions	2.1cm x 3.2cm x 8.8cm (HxWxD); 0.83" x 1.23" x 3.46" (HxWxD)
Weight	33 g (1.16 oz.)
Mounting	Inline between the CAT5 cable (to IP endpoint) and the COAX cable (to CLEER/EC Switch)
Interface Switch side	1 BNC port: COAX cable – RG59, RG11, RG6.
Interface Ethernet side: for IP end point device	1 RJ45 port: 100 Base-T, IEEE 802.3af/at
Power injection (PoE)	DC voltage on RJ45 port: 37V – 55V Endpoint devices must be compliant with IEEE 802.3af/at
DC IN (Screw Terminal)	Optional 48V – 56VDC via an external AC/DC Power Adapter (IEC Class II isolated only)
Power consumption	0.9W
Operating temperature	-50°C to +70°C
Humidity	10% to 95% (non-condensing) at 35° C

Specifications subject to change without notice.