## MODEL: EOCCPK Ethernet Power Over Coaxial Master/Slave Transceiver

# **Description:**

The **EOCCPK** is designed to extend IP Ethernet transmission and forward power over coaxial cable to IP POE cameras. The **EOCCPK** has a transmission distance up to 600m/1968ft (RG6) and is extremely simple to use. Status LEDs indicate power and link connectivity/activity for RJ45 ports.

#### **Features:**

No PC required, plug & play design reduces the cables and power distribution cost Transmits IP camera signals or other 10/100 Base-T Full Duplex IP devices over coaxial cable Injects power over an existing coaxial cable to IP POE cameras Up to 600 Meter transmission distance when using RG6 cable / 1640ft. using RG59 cable Built-in 6KV surge protection at BNC and 4KV at RJ45 ports

#### SPECIFICATIONS:

| MODEL   | ЕОССРК   |  |  |  |
|---|--|--|--|--|
| Extender Interface                                      |  |  |  |  |
| Connector Type  | 1x BNC   |  |  |  |
| Cable Type  | 75-ohm RG59, RG6, or RG11 video-grade coaxial cable  |  |  |  |
| Max. Transmission Distance                              | 600m (1968ft.) for RG6 coaxial cable / 500m (1640ft.) for RG59   |  |  |  |
| Ethernet Interface                                      |  |  |  |  |
| Connector Type  | 1x RJ-45 with LEDs on Connector  |  |  |  |
| Cable Type  | Straight through or cross-over Cat5/Cat6 Cable, Auto MDI/MDIX  |  |  |  |
| Rate  | IEEE 802.3x, Auto-Detection for 10/100Base-T and full/half duplex  |  |  |  |
| Output Voltage  | IEEE 802.3af/at PSE@ RJ45 Port   |  |  |  |
| Control & Indicators                                    |  |  |  |  |
| Color LED Indicator for Coaxial<br>Data Signal Strength | Green: GOOD (Link speed > 60 Mbps)  Amber: MEDIUM (Link speed 20~60Mbps)  Red: BAD (Link speed < 20Mbps)  OFF: NO LINK |  |  |  |
| Yellow LED (On RJ45)                                    | Power On   |  |  |  |
| Green LED (On RJ45)                                     | Link/Act.  |  |  |  |

|                            | Reset / Pairing (Join or Leave Network Group) |                              |                          |  |  |  |
|----------------------------|---|------------------------------|--------------------------|--|--|--|
| Pairing Push Button        | Push  | LED                          | Description              |  |  |  |
|                            | Duration                                      | Status                       |                          |  |  |  |
|                            | 1 – 3 sec                                     | Red Blink                    | Join/Host Network Group  |  |  |  |
|                            | 5 – 8 sec                                     | Amber Blink                  | Leave Network Group      |  |  |  |
|                            |   | Once -> OFF                  |                          |  |  |  |
|                            | 12 - 30 sec                                   | OFF -> Amber                 | Reset to Default Network |  |  |  |
|                            |   | Blink Once                   | Group                    |  |  |  |
|                            |   |                              |                          |  |  |  |
| Power                      |   |                              |                          |  |  |  |
| Input Operating Voltage    | DC 56V / 65W (Included)                       |                              |                          |  |  |  |
| Power Consumption          | 1.5W (w/o power forwarding)                   |                              |                          |  |  |  |
| Mechanical & Environmental |   |                              |                          |  |  |  |
| Weight                     | 176g (6.2 oz)                                 |                              |                          |  |  |  |
| Dimensions (W × L × H)     | 38 x120 x 33mm (1.5"x4.7"x1.3")               |                              |                          |  |  |  |
| Operation Temperature      |   | -20C ~ +60°C (-4°F ~ 140°F)  |                          |  |  |  |
| Storage Temperature        |   | -30°C ~ 80°C (-22°F ~ 176°F) |                          |  |  |  |
| Humidity                   | 20% to 85% RH. (non-condensing)               |                              |                          |  |  |  |

- 1. All EOCCPK are paired to the same network group by factory default, they can be installed directly with no need for pairing again.
- 2. The transmission system consists of one transceiver at NVR side and one transceiver that connects to IP cameras or other IP devices.
- 3. When using two or more transmission systems at the NVR or Control room if there is no cross-talk between the two systems then there is no need to perform the pairing process.
- 4. To **join** another network group, must **leave** current group first, then do the group **join**.

### Transmission Distance with Power Delivered:

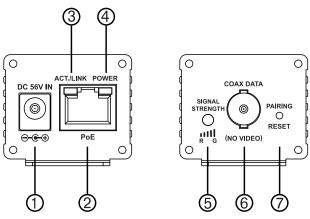
| Power Delivered      | Not using<br>PoE output               | 5.5W | 7W   | 9W   | 12W  | 17W  |  |  |
|----------------------|---------------------------------------|------|------|------|------|------|--|--|
| Power Source         | Maximum Coax RG6. Data Link Distance  |      |      |      |      |      |  |  |
|                      | 2000m                                 | 600m | 500m | 400m | 300m | 200m |  |  |
| 56VDC Power Supplied | Maximum Coax RG59. Data Link Distance |      |      |      |      |      |  |  |
|                      | 1800m                                 | 500m | 450m | 350m | 250m | 150m |  |  |

## **Packing**

| 1. EOCCPK Transceiver         |    |
|-------------------------------|----|
| 2. User Manual                | ×1 |
| 3. Wall Mount Hardware Kit    | ×2 |
| 4. DC 56V / 65W Power Adaptor | ×1 |



#### PANEL DESCRIPTIONS:



- 1. DC56V IN: Power Supply DC56V/65W (Included).
- 2. PoE: Ethernet Interface (10/100Mbps for full duplexer), for PoE Output to camera
- 3. ACT./LINK: Data Link for indication LED
- 4. POWER: Power On for indication LED
- 5. SIGNAL STRENGTH: G(Green):GOOD

A(Amber):MEDIUM

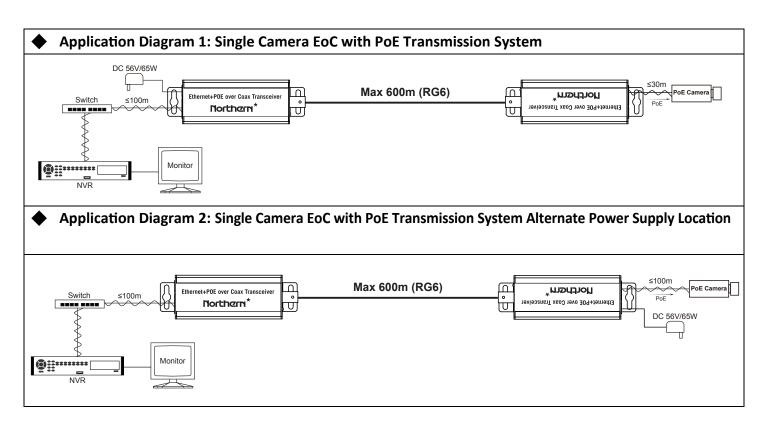
R(Red):BAD

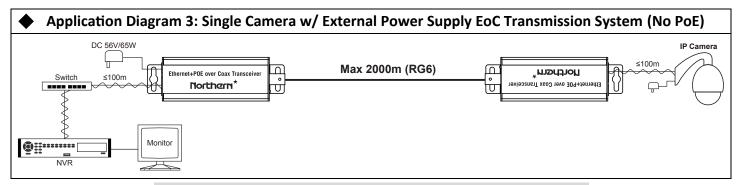
OFF: NO LINK

- 6. COAX DATA: Coaxial Transmission with High Voltage
- 7. PAIRING/RESET: PAIRING for network group join/leave / RESET for factory default network group

#### **CONNECTION DIAGRAM:**

Notice: Cable quality, camera bandwidth used and power supply noise can cause actual distances which may not match the diagram below.





## Before starting the pairing process, please check the notice below

- 1) If only setup one transmission system at NVR or control room side there is no need to do pairing process.
- 2) When using two or more transmission systems at the NVR or Control room if there is no cross-talk between the two systems then there is no need to perform the pairing process.

### **EoC Transmission System Network Group Pairing Instructions**

# **Step 1: Setup EoC Transmission System**

Connect all the coaxial, cat. 5e cables between transceivers, setup cameras and NVR then power supplied to the system that one of the application diagrams.  $\circ$ 

COAX DATA

**©** 

## Step 2: Host/Master Side Leaving Current Network Group

On the transceiver at NVR side, using a straightened paper-clip push the small button for 5 ~ 8 seconds, the LED color will turn AMBER blink once then turn OFF.

# Step 3: Host/Master Side Create an New Network Group

On the transceiver at NVR side, using a straightened paper-clip to push the small button for 1 ~ 3 **seconds**, the LED color will turn **RED** and start blinking.

#### Step 4: Slave Side Transceiver Leaving Current Network Group

On the transceiver at the Remote side (close to IP camera/device), using a straightened paper-clip to push the small button for 5 ~ 8 seconds, the LED color will turn AMBER blink once then turn OFF.

### **Step 5: Slave Side Transceiver Joining New Network Group**

EOC transceivers at Remote side (close to IP camera/device, using a straightened paper-clip to push the small button for 1 ~ 3 seconds, the LED color will begin blinking RED. The transceivers will find each other and starting the transmission.

### **In Pairing Process Notice**

- 1) In joining or leaving process, if you are not sure that joining or leaving has been successful, you can RESET the transceiver (press the push button 12 to 30 seconds), and repeat above steps.
- 2) After re-applying power or RESETING the transceiver, please wait for the color LED to start blinking Amber once then turn GREEN, this means the power on reset finished and you can now start the pairing process.
- 3) If the transceiver is in LEAVE to JOIN state (color LED blinking RED), it must join new network group within 2 minutes or it will revert to a LEAVE state again. CE F®

