# 10M/100M Ethernet Transmission for
# IP Network Camera Connection

# PoE solution extend VDL4020 capabilities

Current IP camera security system installation uses standard Cat-6 as the link cable, transmiting only up to 100 meters far. Now our VDL4020 offers a more convenient and reliable solution for IP Network cameras. It transmits IP signals up to 800 meters to the Local side and also supplies DC power simply through one coaxial cable and PoE powering IP camera, PoE can be achieved SNMP management capabilities.

1. Look upon VDL4020-R (Sender) as PSE and IP cameras as PD.
2. PoE integrates data and power on the same wires
3. Simplified installation work, saves time and money.
4. Complies with IEEE802.3af, class 0 (include 1-4)

### Specification of VDL4020-R Sender

| Electrical Specifications (4020-RU) | |
| --- | --- |
| Ethernet | 10/100Mbps Ethernet standard |
| Link OUT/IN with DC IN | Link Signal: Downlink 18MHz (output signal) |
| | Downlink Signal Bandwidth: 8.5MHz |
| | DC IN: +28V to +48V |
| Downlink Throughput | 28Mbps |
| Power Output | PoE Power, DC 48V, 15.4W, Meets IEEE802.3af, class 0 (include 1-4) |

| Connector Specifications (4020-RU) | |
| --- | --- |
| Ethernet | RJ45 connector |
| Link OUT/IN with DC IN | BNC 75 ohms female socket |

### Specification of VDL4020-L Viewer

| Electrical Specifications (4020-LU) | |
| --- | --- |
| Ethernet | 10/100Mbps Ethernet standard |
| Link OUT/IN with DC OUT | Link Signal: Uplink 39MHz (output signal) |
| | Uplink Signal Bandwidth: 2.5MHz |
| | DC OUT: +47V |
| Uplink Throughput | 4Mbps |
| DC Power Input | DC 48V ± 8%, 1.25Amps max |

| Connector Specifications (4020-LU) | |
| --- | --- |
| Ethernet | RJ45 connector |
| Link OUT/IN with DC OUT | BNC 75 ohms female socket |
| DC Power Input | 2 Pin PTB*, 5.0mm Pitch |

(* PTB= Pluggable Terminal Block)



Fig. 1  VDL4020 RU / LU, and Power Adaptor

# Features

- IP addresses and other setups are not required. Protocol Free.
- Supports all types of (HD) IP cameras.
- An endurable coaxial cable (RG-6/U) rather than a LAN cable (Cat-6) is used for transmission.
- Sends DC power (Safe-DC mode) and duplex (bi-directional) IP signals through a single coaxial cable.
- Network Connection: Ethernet 10M/100M, RJ45 (8P8C) connector.
- More than 800 meters of transmission distance from Local Unit to Remote Unit. ( RG-6/U, 5C-2V or equivalent coaxial cables are recommended).
- Thick or heavy duty coaxial cables increase the transmission distance to be more than 1,000 meters.
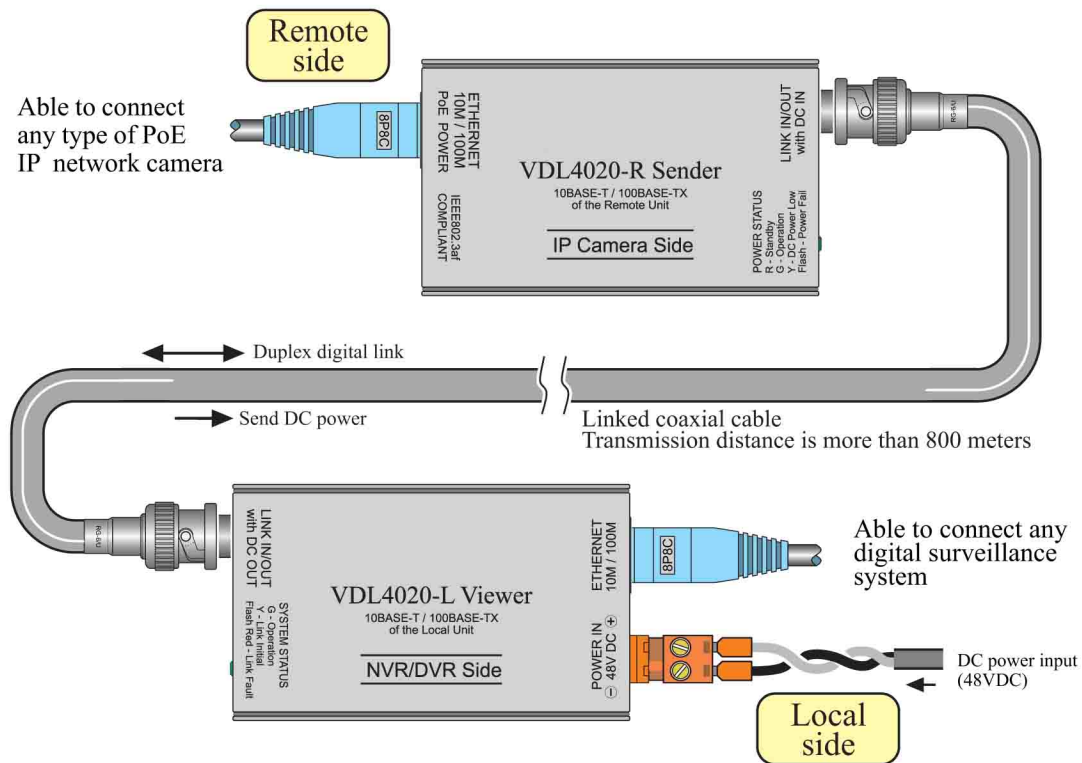


## Fig. 2  VDL4020 Connection Diagrams

### Specification of VDL4020-R Sender

| Physical Specifications (4020-RU) | |
|---|---|
| Unit Dimensions | (L x W x H): 84mm x 50mm x 25mm |
| Weight | 135 grams |

| Environmental Specifications (4020-RU) | |
|---|---|
| Operating Temperature | -10 to 50°C (14 to 122°F) |
| Relative Humidity | 20% to 90%, non-condensing |

### Specification of VDL4020-L Viewer

| Physical Specifications (4020-LU) | |
|---|---|
| Unit Dimensions | (L x W x H): 84mm x 50mm x 25mm |
| Weight | 98 grams |

| Environmental Specifications (4020-LU) | |
|---|---|
| Operating Temperature | -10 to 40°C (14 to 104°F) |
| Relative Humidity | 20% to 90%, non-condensing |