

# Ethernet Extender over Coaxial Cable for Long Distance Transmission Pair VDL5130

#### 1 Introductions

- Transmission distance is 600M by using RG-6/U coaxial cable
- No need to change the installation system, plug and play. Friendly use!
- Using only one coaxial cable, you can connect one viewer at local side with 4 senders at remote side.
- Connect the 100M Cat5/ Cat6 cable on each local & remote side, and the total transmission distance can be extend to 800M
- IEEE802.3at. Power over Ethernet Plus (PoE+) provides up to 30Watts to remote side, and use POE isolated power output. Each sender DC output is 4W~30W compliance with the 802.3af~802.3at standard.
- Power supplied under the Safe-DC mode: Module Auto detection, short circuit production, open circuit protection and overload protection
- Transmit the high definition image IP signal and can be used in computer network or any digital network application
- Network interface: Ethernet 10Base-T/100Base-TX and Auto MDI/MDI-X
- Symmetrical transmission compliance with the Ethernet standard, and duplex throughput: 200Mbps
- TVS/GDT\*(surge absorber/arrester) is installed in the BNC socket at both ends of the coaxial cable.



Fig. 1 Picture of VDL5130 Sets

#### 2 Performance

Coaxial Cable Length & Throughput	
100m	100Mbps
100~600m	100Mbps
600m	100Mbps
**800m 80Mbps	
*Throughput was tested by LU Side	

Coaxial Cable Length & PoE Power Output	
100m 45W	
100~600m	45~30W
600m	30W
**800m 22W	
*Power output is total amount for 4 senders ***800m is for reference	

- 1. RG-6/U 18AWG is widely used across the market but using better coaxial cable RG-11/U will have better performance.
- 2. IEEE802.3at. Power over Ethernet Plus (PoE+) provides up to 30Watts. There are two types and 5 classes. Power rating: 4Watt ~ 30Watt.
- 3. Data Throughout is duplex. Upload: 100Mbps/ Download: 100Mbps.





Fig. 2 Remote- Sender (RU) Local- Viewer (LU)

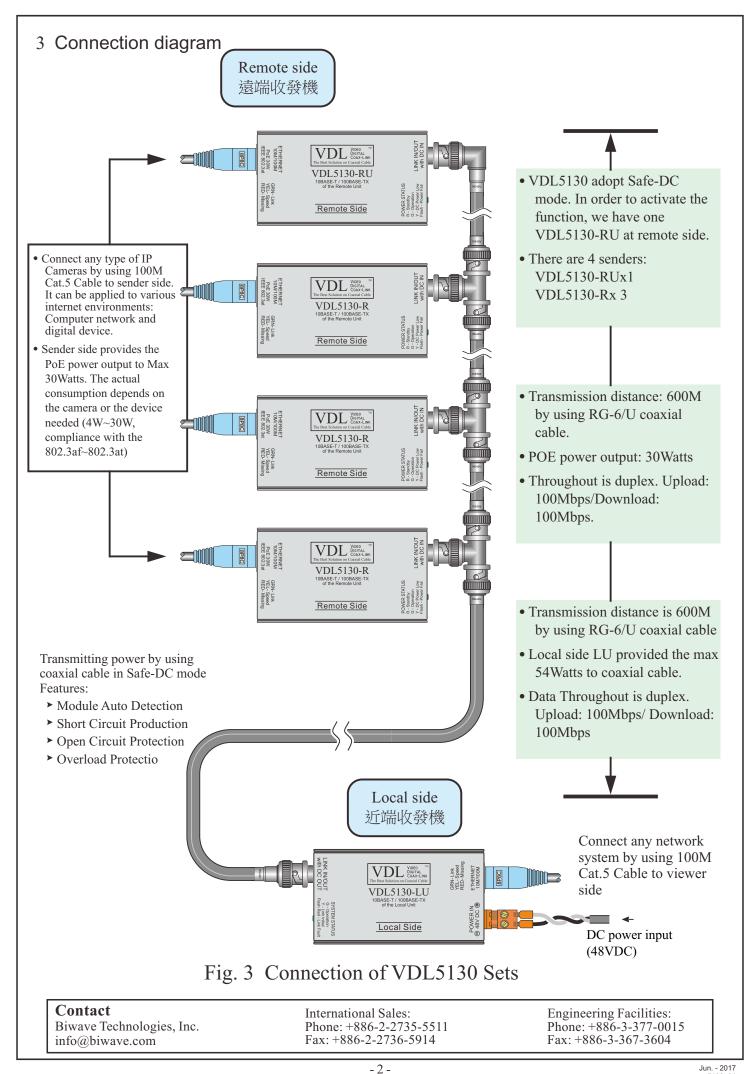
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<sup>\*</sup> TVS is Transient Voltage Suppressors

<sup>\*</sup> GDT is Gas Discharge Arrester Tube



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### 4 Specification

### Remote- Unit (RU) / VDL5130-RU Remote- Unit (RU) / VDL5130-R

Electrical Specifications (VDL5130-RU, -R)	
Ethernet	Ethernet RJ45
Network Interface	10Base-T/100Base-TX Auto MDI/MDI-X
BNC port Link OUT/IN with DC IN	Link Signal : 2 to 28MHz
	DC IN: +45V to +76V
Throughput	100Mbps
PoE Power Output	DC 55V/30W. meet IEEE802.3at, support Type 1(15.4W) and Type 2(30W)

Connector Specifications (VDL5130-RU, -R)	
Ethernet RJ45 connector, 8P8C	
Link OUT/IN with DC IN	BNC 75 ohms female socket

Physical Specifications (VDL5130-RU, -R)		
Unit Dimensions (L x W x H): 90mm x 50mm x 25mm		
Weight	145 grams	

Environmental Specifications (VDL5130-RU, -R)	
Operating -10 to 50°C (14 to 122°F), Ventilated	
Relative Humidity	20% to 90%, non-condensing

# 5 DC Power Supply

Unless otherwise noted, units are in mm.

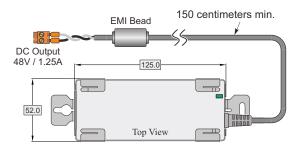


Fig. 4 DC Power Adapter

### Local- Unit (LU) / VDL5130-LU

Electrical Specifications (VDL5130-LU)	
Ethernet	Ethernet RJ45
Network Interface	10Base-T/100Base-TX Auto MDI/MDI-X
BNC port Link OUT/IN with DC OUT	Link Signal : 2 to 28MHz
	DC OUT: +76V
Throughput	100Mbps
Power Supply	DC 48V ± 5%, 1.25Amps Max.

Connector Specifications (VDL5130-LU)		
Ethernet	RJ45 connector, 8P8C	
Link OUT/IN with DC OUT	BNC 75 ohms female socket	
Power In	2 Pin, Pluggable Terminal Block 5.0mm Pitch	

Physical Specifications (VDL5130-LU)		
Unit Dimensions	(L x W x H): 90mm x 50mm x 25mm	
Weight 155 grams		

Environmental Specifications (VDL5130-LU)		
Operating Temperature	-10 to 50°C (14 to 122°F), Ventilated	
Relative Humidity	20% to 90%, non-condensing	

### Supplier Part Number: GS60A48

Electric Specifications:
AC Input: 100 ~ 240V AC
Output: 48V DC, 1.25 Amps
Power Rating: 60 watts

### Physical Specifications:

Weight: 270 grams Weight with two holding brackets: 306 grams

#### **Environmental Specifications:**

Operating Temperature: 0 to 45°C (32 to 113°F)
Relative Humidity: 20 to 90 percent, non-condensing
Storage Temperature: -45 to 85°C (-49 to 185°F)

## Biwave Technologies offers the Best CCTV Solutions over Coaxial Cable.

### Contact

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