

# The 2000Mbps Gigabit Ethernet over UTP Transceiver with PoE

## Product Features

- High data rate - Up to 2 Gbps
- Using Legacy & New UTP cables for AV Device, IP Networking, Game Console and IP Surveillance application
- One Master extender can support up to Multiple Slave extender using UTP 1:2 splitter
- Long range Ethernet data extension over UTP Max. 2,296 feet. (700 Meters)
- Automatic Quality of Service (QoS) features for seamless network streaming
- IEEE 802.3 af/at Compliant PoE for PoE Powered Device(PD), Wi-Fi AP, IP camera, VoiP
- Easy configuration and No IP address & network setup required
- Limited lifetime warranty – OEM/ODM Reference for MTBF Certification
- LED indicator for installation – Power, Link and Data traffic status
- Compact size extender – fits inside most network enclosures



### Multiple input and Multiple output (MIMO)

C4L2000G-TWP-P's Multiple input and Multiple output (MIMO) technology achieves enlargement of peak data throughput and expanded data transmit coverage.

### 1 Master to Multi Slave network topology

C4L2000G Series product support the 1 Master to multi Slaves network topology. Its network topology could support various network topology (Star, BUS, Ring, Mesh and etc.). Also, it reduce the installation costs dramatically.

### Ready for Multi-Dwelling Unit (MDU) installation

C4L2000G-TWP-P have the robust immunity for cross-talk problem. Also, it support the auto-negotiation data throughput features for Multi-Dwelling Unit (MDU) installation site. It helps to prevent the network conflict and critical network errors.

### Fastest Gigabit Speed Copper extender

C4L2000G Series product could support the 2 Gbps (PHY rate) and 957Mbps (UDP Data Throughput) performance. It is the fastest copper extender in the world. And it is ready for the next generation network installation fields.

### IEEE 802.3 af/at 40W PoE+

C4L2000G-TWP-P support the IEEE 802.3 af/at 40Watt PoE+ feature for PoE Powered device(PD), Wi-Fi AP, IP Camera, VoiP and etc. It reduce the wiring cost for power supply at the remote installation sites.

### Small footprint for installation

C4L2000G-TWP-P have a small footprint (40 x 42 x 86 mm, H x W x L ) for device installation. It match with most of enclosures well. Also, It could be installed at narrow installation spaces.

## Product Description

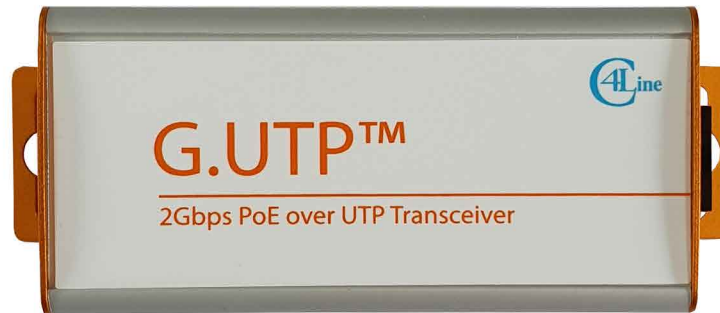
G.UTP™, model C4L2000G-TWP-P is the fastest gigabit IP Ethernet over UTP transceiver. It support up to 2 Gbps data transfer speed for AV Devices, IP Networking, Game Console and IP Surveillance application. Its powerful data streaming technology transports ultra-high speed HD Entertainment networks in Home, Residential Building and large building.

### 2 Gbps Speed

C4L2000G-TWP-P support up to 2 Gbps data transfer performance via UTP cables. So, it could be used for 8K Ultra HD AV streaming service, Game Console, 4K IP Camera surveillance, WiFi 6 (IEEE 802.11ax) Gigabit Wi-Fi backbone network and other Gigabit network infrastructure application.

### Long Distance Data Transfer Coverage

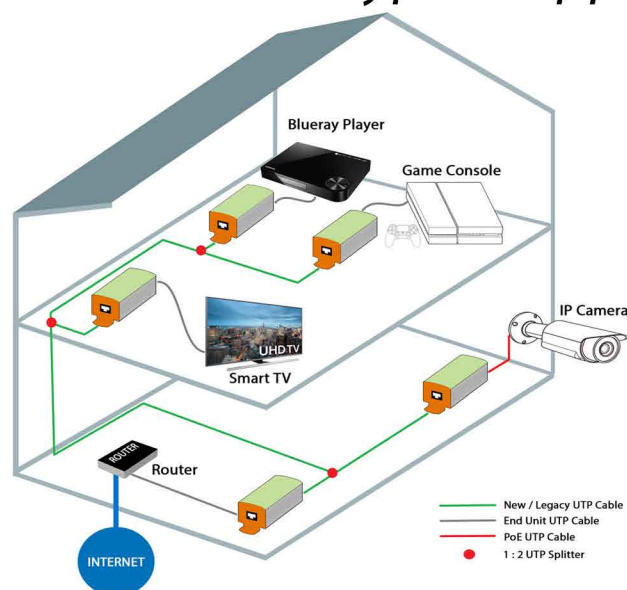
C4L2000G-TWP-P support up to meters distance full-duplex data transfer coverage. It takes a major step of forward in the Gigabit IP extender fields. It transports the Ultra-High Definition content, Mass-Storage information and 8K Streaming service to the remote installation sites without any delay.



Standards	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3x, IEEE 802.3az, IEEE 802.3p, Auto MDI/X ITU-T G.hn Standard (Recommendations G.9960, G.9961, G.9962, G.9963 and G.9964)
Protocols	TDMA, CSMA
Transmission Speeds	Ethernet : 10 / 100 / 1000 Mbps Extended UTP : 2000 Mbps
Modulation	Modulation : OFDM – 4096/1024/256/64-QAM, QPSK, BPSK
Frequency Band	3.5 ~ 190 MHz
Security	128 Bit AES CCMP Encryption
Power Consumption	3 Watts
AC to DC Power Supply	Input AC : 100 ~ 240 VAC, 50 ~ 60 Hz 5V to 56VDC / 1A ~ 1.6A (For PoE Function, please use 48V 0.83A Adapter at least.)
Ethernet Interface	- Connector Type : RJ45 - Speed : 10/100/1000 Base T, half/full duplex, auto-negotiation
PoE Standard	IEEE 802.3 af/at PoE+ 40Watts
Extended Port Interface	- Connector Type : RJ45 - Support Cable : 2Wire, Cat 5., Cat 5E., Cat 6., Cat 6E., Cat 7.
IGMP	- Hardware packet inspection for IPv4 IGMP Snooping and IPv6 MLD - Support IGMP managed multicast sessions - IGMP snooping with multicast to multiple unicast support - IGMP/MLD Address Filtering
LED Indication	- Power : BLUE – Power On - TWP : Green – Link On - PoE : Green – Link On
Mechanical Dimension	40 x 42 x 86 mm, 1.57 x 1.65 x 3.39 in ( H x W x L )
Weight	122 g (0.27 lb.)
Material	Aluminum Extruded
Temperature	- Operating Temperature : 0°C ~ + 70°C ( +32°F ~ +158°F ) - Storage Temperature : -40°C ~ + 70°C ( -40°F ~ + 158°F )
Humidity	10 ~ 90 % Humidity ( non-condensing )
Certifications	CE Class A, FCC

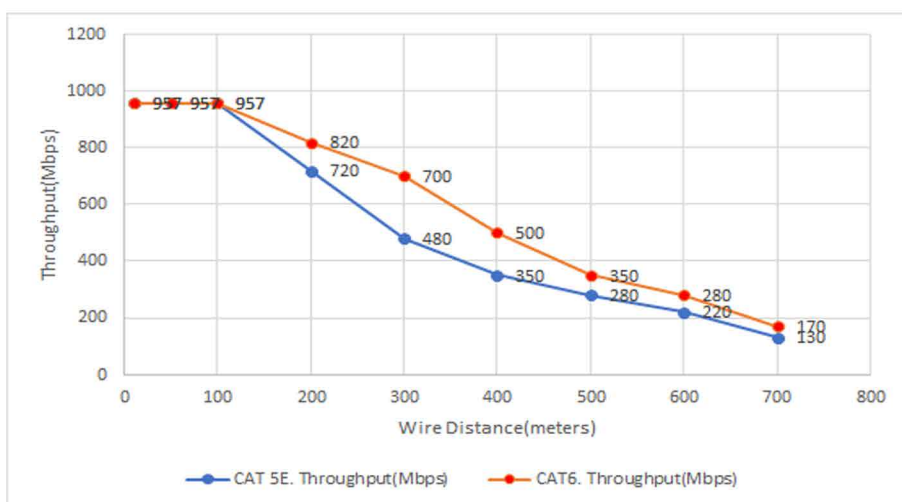


## C4L2000G-TWP-P Typical Application



## C4L2000G-TWP-P Wire Distance & Data Throughput Chart

Wire Distance(meters)	CAT 5E. Throughput(Mbps)	CAT6. Throughput(Mbps)
10	957	957
50	957	957
100	957	957
200	720	820
300	480	700
400	350	500
500	280	350
600	220	280
700	130	170



## C4L2000G-TWP-P Power Distance Chart

Remote PD Power (Watts)	CAT5 Distance (meters)	CAT6 Distance (meters)
5	432	546
10	258	326
15	184	232
20	142	180
25	116	147
30	98	124
35	84	107
40	74	94

