

# 3WIRE NETWORK SYSTEM

## Ethernet Adapter

Triteka's 3WR-500  
3Wire Ethernet Adapter



### TAKING ADVANTAGE OF ALL THE HOME WIRES

#### LAN Extension through existing Coaxial, Telephone and Power Outlets

Triteka's 3Wire network system is an IP distribution solution allowing your house to be completely networked using the existing coax, telephone and electrical powerline wires. Simply connect the 3WR-500 3Wire Ethernet Adapter to an existing telephone and coaxial outlets, power up the unit and it transforms the existing powerlines, telephone, and coaxial cables into a house-wide network with no need for additional wiring. It's the easiest way to extend the network connection from your home broadband router to every outlet in the house.

#### Data Rates of Up to 500 Mbps

Thanks to the advanced Patented Technology, the 3Wire Network System is capable of transmitting data rates of up to 500 Mbps. It allows you to share network resources and enjoy Internet access through secure high-speed data connection over the house wiring already in place.

#### High Speed and QoS for High Definition Video

The inherent advanced QoS features empower the 3Wire Network System to become ideal access tools for service providers to deliver "triple-play" multimedia services such as high definition IPTV, high-speed Internet access, and voice services.

#### Advanced 128-bit AES Security

With the 128-bit Data Encryption Security (AES) feature, the 3Wire Network System provides secure network connection for Internet access and network resource sharing. Just enjoy fast Internet surfing experience and secure file transfer.

### FEATURES

- Turns any coax, phone and power outlet into a network connection
- Co-exists with DBS, CATV, SATV, xDSL, PSTN and other services
- Delivers up to 350 Mbps over coax, up to 300 Mbps over phonenumber and up to 250 Mbps over powerline
- Symmetric Network Speeds (Upstream rate equals Downstream rate)
- Simple plug-N-play installation
- Supports unicast and IGMP managed multicast HDTV IP transmission
- Built-in QoS, enabling smooth video streaming and lag-free gaming
- Network Protection with Advanced 128-bit AES Security
- Noise immunity
- Operates over poor infrastructure (coax, splitters, etc.)
- Frequency Band coverage between 2-68 MHz
- Supports up to (32) 3Wire Ethernet adapters on one home network
- Homeplug AV+ connectivity

### APPLICATIONS

- HD & SD IPTV Distribution
- Multi-room DVR
- Higher data rate broadband Networking
- Shared internet access
- Video streaming and transfer
- Expanding the coverage of wireless LANs
- Voice over IP (VoIP)
- PC file and application sharing
- Network and online gaming
- Security Cameras

## IP CONVERGE SOLUTIONS

# 3WIRE NETWORK SYSTEM

## Ethernet Adapter



### SPECIFICATIONS

#### PHYSICAL CHARACTERISTICS

<b>POWER</b>	<ul style="list-style-type: none"> <li>Internal power supply</li> <li>Input: 100 – 240 VAC 50-60MHz</li> </ul>
<b>PHYSICAL SIZE</b>	<ul style="list-style-type: none"> <li>18.8cm(L), 13.3cm(W), 3.3cm(H)</li> </ul>
<b>WEIGHT</b>	<ul style="list-style-type: none"> <li>175 grams</li> </ul>
<b>INTERFACE</b>	<ul style="list-style-type: none"> <li>1 LAN, 1 GigE Base-T , RJ-45 port</li> <li>1 LAN, 500 Mbps, RJ-11 port</li> <li>1 LAN, 500 Mbps, Female F-connector</li> <li>4 LAN, 1 GigE Base-T, RJ-45 ports (optional)</li> </ul>
<b>LED DISPLAY</b>	<ul style="list-style-type: none"> <li>POWER</li> <li>LINK</li> <li>LAN</li> <li>LAN 1-4 (optional with model -4L &amp; -WL)</li> <li>WLAN (optional with model-WL)</li> </ul>
<b>ENVIRONMENTAL CONDITIONS</b>	<ul style="list-style-type: none"> <li>Operating Temperature: 32°F (0°C) – 104°F (40°C)</li> <li>Storing Temperature: -40°F (-40°C) – 158°F (70°C)</li> <li>Operating humidity: 95% max non-condensing</li> </ul>

#### RF SYSTEM PERFORMANCE

<b>DATA TRAFFIC</b>	<ul style="list-style-type: none"> <li>Half Duplex</li> </ul>
<b>MEDIA ACCESS CONTROL</b>	<ul style="list-style-type: none"> <li>CSMA/CA with ACK</li> </ul>
<b>COAX IMPEDANCE</b>	<ul style="list-style-type: none"> <li>75 Ohm</li> </ul>
<b>DYNAMIC RANGE</b>	<ul style="list-style-type: none"> <li>90 dB</li> </ul>
<b>OPERATION RANGE</b>	<ul style="list-style-type: none"> <li>up to 1000 ft (300 meters) over coax</li> <li>up to 300 ft (100 meters) over twisted pair</li> <li>up to 300 ft (100 meters) over powerline</li> </ul>
<b>FREQUENCY BAND</b>	<ul style="list-style-type: none"> <li>2 - 28 MHz (3WR-200 Series)</li> <li>2 - 68 MHz (3WR-500 Series)</li> </ul>
<b>RF OUTPUT LEVEL</b>	<ul style="list-style-type: none"> <li>110 dBμV max.</li> </ul>
<b>STANDARDS</b>	<ul style="list-style-type: none"> <li>IEEE 802.3, HomePlug AV+ (500Mbps)</li> </ul>
<b>NO. ADAPTER UNITS</b>	<ul style="list-style-type: none"> <li>Supports up to (32) 3Wire Ethernet adapters</li> </ul>

#### PERFORMANCE & SUPPORTED CONFIGURATIONS

<b>TARGET UDP THROUGHPUT</b>	<ul style="list-style-type: none"> <li>up to 350 Mbps sustainable throughput</li> </ul>
<b>SIMULTANEOUS VIDEO</b>	<ul style="list-style-type: none"> <li>35 MPEG-4 HDTV IPTV streams (10 Mbps data rate)</li> <li>70 MPEG-2 SD IPTV streams (5 Mbps data rate)</li> </ul>

#### TRAFFIC MANAGEMENT & QUALITY OF SERVICE

<b>CLASSES OF SERVICE</b>	<ul style="list-style-type: none"> <li>ToS, CoS and IP Port Number Packet Classifiers</li> </ul>
<b>HARDWARE QUEUES</b>	<ul style="list-style-type: none"> <li>supports up to 4 queues per port</li> </ul>
<b>AUTOMATIC TRAFFIC CLASSIFICATION</b>	<ul style="list-style-type: none"> <li>Automatic type of service tagging for multicast video packets</li> </ul>

#### MANAGEMENT

<b>CONFIGURATION</b>	<ul style="list-style-type: none"> <li>Web Based user interface</li> <li>TR-069</li> </ul>
<b>LOGIN</b>	<ul style="list-style-type: none"> <li>User</li> <li>Admin</li> </ul>

#### MULTICAST VIDEO IPTV

<b>IGMP SNOOPING</b>	<ul style="list-style-type: none"> <li>Enhanced IPv4 IGMPv1-3 snooping to improve the performance of streaming media and other bandwidth-intensive IP multicast applications.</li> <li>Supports IGMP managed multicast sessions</li> <li>Supports IPv6 and MLDv1-2 snooping</li> <li>Multicast to multiple unicast support CSMA</li> </ul>
<b>MULTICAST OPTIMIZATION</b>	<ul style="list-style-type: none"> <li>Direct Multicast IPTV packets to each Ethernet adapter within the designated multicast group using the optimum data rate and adapter unit selection</li> <li>Automatic classification into video queues</li> <li>Ensures reliable transmission of multicast video packets</li> </ul>

### 3WR-500 - LEDs & CONNECTORS



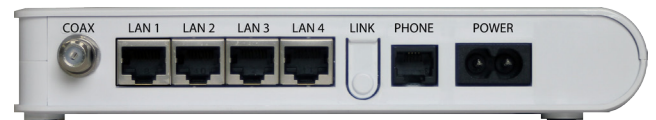
<b>POWER</b>	<b>LINK</b>	<b>LAN 1-4*</b>	<b>WLAN**</b>
ON if Adapter is powered on. FLASHING if Adapter is in energy saving mode.	ON if Adapter #2 is detected. FLASHING if network activity is detected.	On if LAN port is connected to an IP client device. FLASHING if Data is being transferred over the port.	ON if WiFi is operational. FLASHING if network activity is detected.

\* LAN 1,2,3 & 4 are available with Models -4L & -WL \*\*WLAN is available with Model -WL



<b>COAX</b>	<b>LAN 1</b>	<b>PHONE</b>	<b>POWER</b>
To connect to the TV's RF wall outlet	To connect to the modem or router/IP Client Device	To connect to the Telephone RJ-11 wall outlet	To connect to the electrical outlet

### 3WR-500-4L - CONNECTORS



<b>COAX</b>	<b>LAN 1-4</b>	<b>PHONE</b>	<b>POWER</b>
To connect to the TV's RF wall outlet	To connect to the modem or router/IP Client Device	To connect to the Telephone RJ-11 wall outlet	To connect to the electrical outlet

#### PRODUCT ORDERING INFORMATION

MODEL	DESCRIPTION
3WR-500	with (1) GigE LAN port
3WR-500-4L	with built-in (4) GigE LAN ports
3WR-500-WL	with built-in 802.11n + (4) GigE LAN
3WR-500-AP	with built-in 802.11n AP

#### PLEASE NOTE:

When ordering you must specify the destination region by indicating -US -EU -UN or -JP following the model number.

# IP CONVERGENCE SOLUTIONS