

## WoCX - WLAN over COAX

### Overview



WoCX system is divided into two subsystems

CNA (Community Networking Application)

LHN (Local Home Networking)


Both systems based on the patent pending WoCX (WLAN over COAX) technology that utilizes the coaxial infrastructure for IP networking.

The CNA is a bi-directional symmetrical networking system, designed to work on a bi-directional environment of splitters and amplifiers, which make it the ideal solution for IP distribution in campuses, hotels, hospitals and buildings.

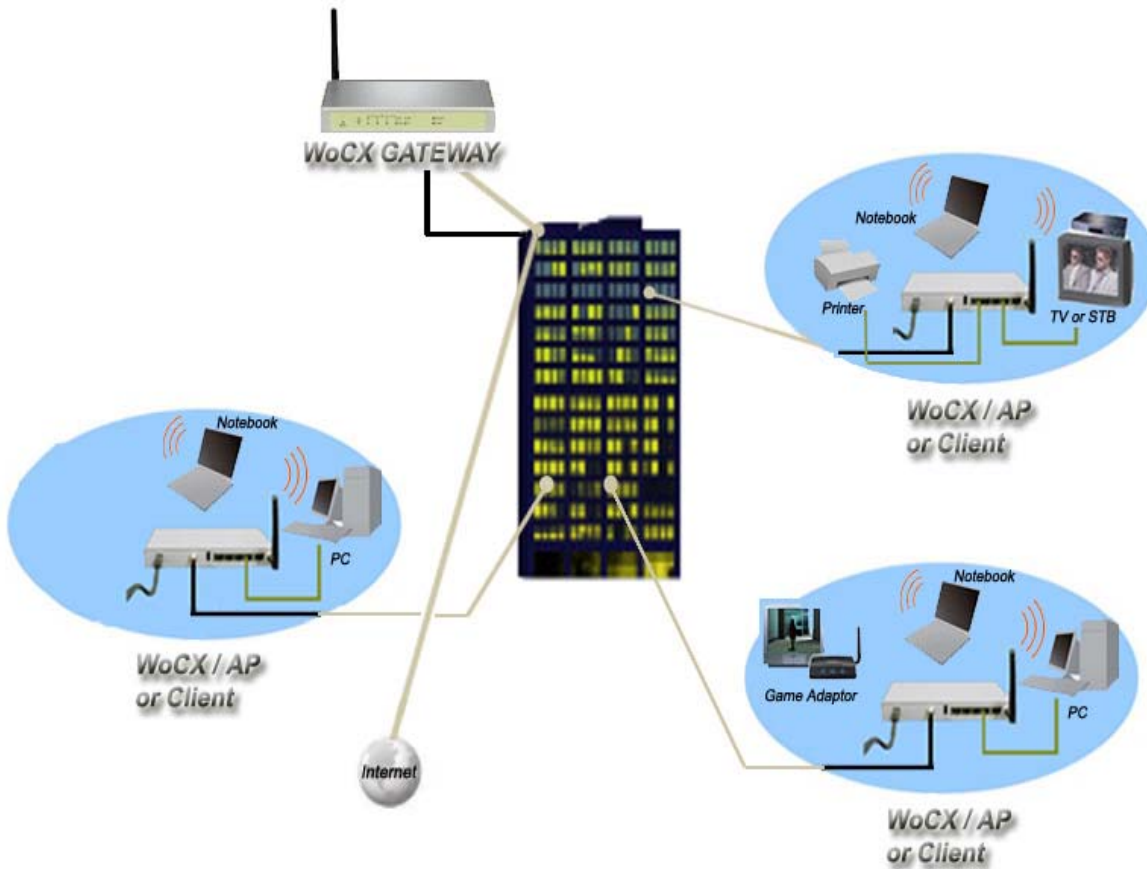
The LHN design to work at in home complex coaxial environment of splitters in multipath method this solution is ideal for in home IP distribution especially for video application

The Big advantage of WoCX, besides being a cost effective broadband system, is the fact that the networking mechanism is based on the WLAN standard (802.11x), capable of deploy a wireless network in the end user's point, and is configured and controlled as a regular WLAN device.

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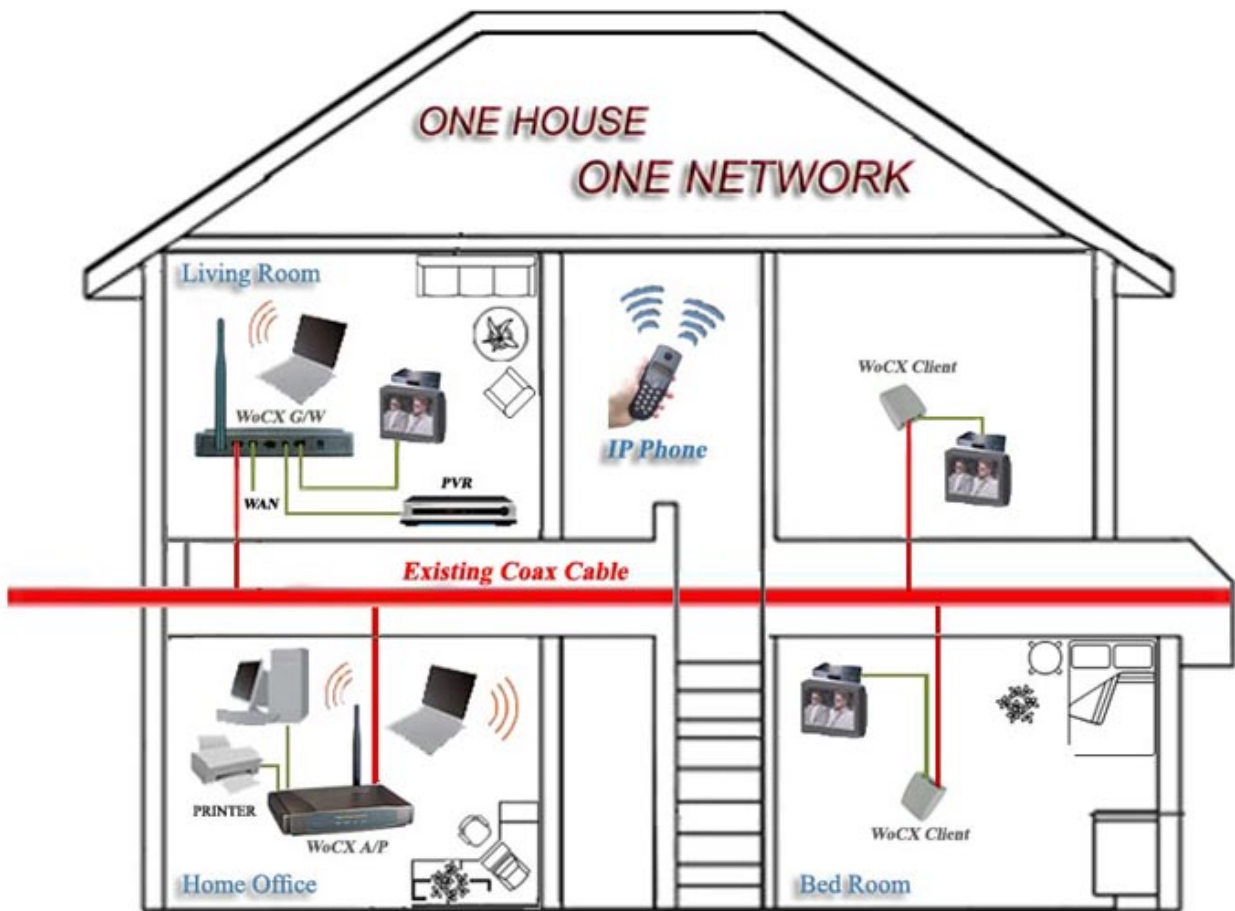
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# Building Application



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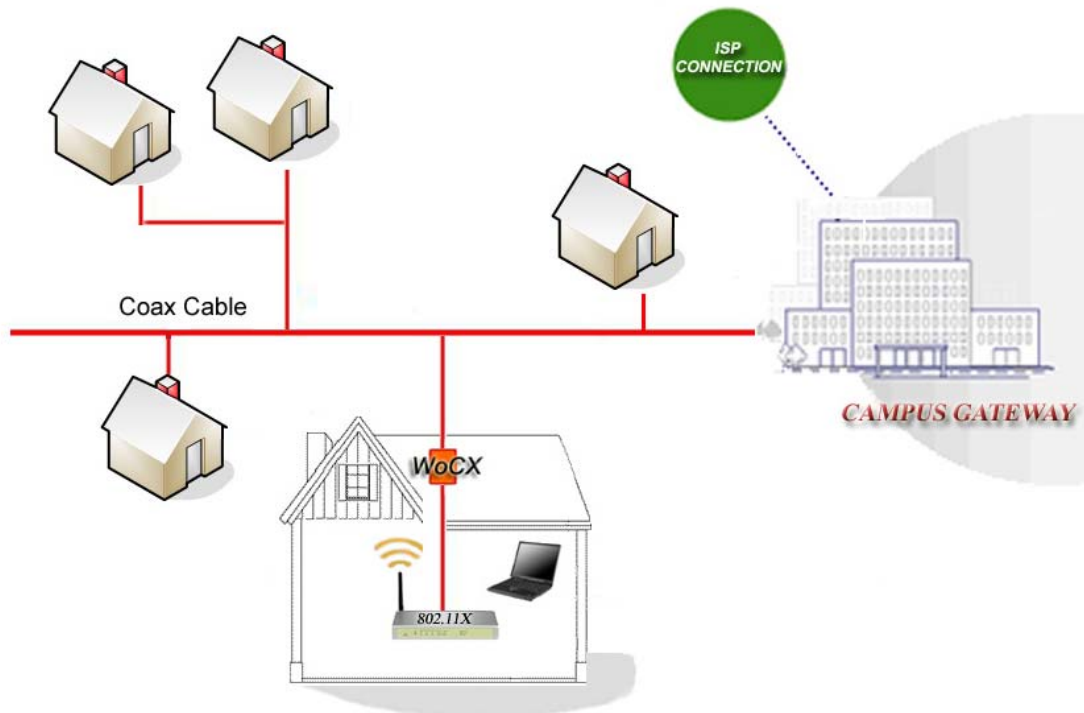


Your house has all the needs for carrying IP HDTV  
transmission from any room to any other room (Peer to Peer connection)

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# Campus Application



## CNA System Significant Advantages > > > > >

- Saves installation costs through use of existing coax
- Works on all TV networks including non-upgraded: 550,750 and 860MHz and above networks, and also over unidirectional networks.
- Operates over poor infrastructure (coax, splitters, etc).
- 50db Dynamic range, wherever the TV operate - CNA operates.
- Lights-up the dark unused frequency spectrum, e.g. the 5-32 MHz and 42-54 MHz spectrum, Above CATV and below satellite
- Co-exists with CATV, DOCSIS, DBS satellite and other services
- Enables complete control
- Symmetrical network (upstream rate equals downstream rate)
- Wired and wireless system.

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## Technical Data



<b>WoCX Systems</b>	Supports up to 16 subscribers per one AP
	Full Duplex data traffic
<b>RF Specifications</b>	Coax Impedance: 75 Ohm
	Up to 500m distance between units (LHN) And 5000m between units (CNA)
<b>Upstream parameters</b>	Frequency range: agile 5 – 60MHz configurable*
	Max. output RF level: 100 dB $\mu$ V
<b>Downstream/RF parameters</b>	Frequency range: agile 750 – 950MHz configurable *
	Max. output RF level: 100 dB $\mu$ V
<b>Interfaces</b>	WAN: One 10/100BaseT RG45 female connector
	LAN: Female F-connector/ Wi Fi

\* RF frequency is factory set to any 200MHz requested frequency band.


## Wireless Specifications



### (D-LINK DWL – 2100AP)


<b>Standards</b>	IEEE 802.11g IEEE 802.11b IEEE 802.11 IEEE 802.3 IEEE 802.3u
<b>Device Management</b>	Web-Based – Internet Explorer v6 or later; Netscape Navigator v6 or later; or other Java- enabled browsers.
	SNMP v.3

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<b>Wireless Distribution System</b>	AP Client
	P t P Bridge
	P t MP Bridge
	Repeater
<b>Security</b>	64, 128, 152-bit WEP
	802.1X (EAP-MD5, EAP-TLS, EAP-TTLS and EAP-PEAP)
	WPA —Wi-Fi Protected Access
	MAC Address Access Control (WPA-TKIP and WPA-AES)
<b>Media Access Control</b>	CSMA/CA with ACK
<b>Wireless Frequency Range</b>	2.4GHz to 2.4835GHz
<b>Wireless Signal Range*</b>	Indoors: Up to 328 ft (100 meters)
	Outdoors: Up to 1312 ft (400 meters)
<b>Modulation Technology</b>	Orthogonal Frequency Division Multiplexing (OFDM)
	Complementary Code Keying (CCK)
	DQPSK
	DBPSK
<b>Wireless Transmit Power</b>	15dBm (32mW) $\pm$ 2dB (Control TX power level from full, 50%, 25%, 125% and min.)
<b>Receiver Sensitivity*</b>	54Mbps OFDM, 10% PER, -66dBm)
	48Mbps OFDM, 10% PER, -71dBm
	36Mbps OFDM, 10% PER, -76dBm
	24Mbps OFDM, 10% PER, -80dBm
	18Mbps OFDM, 10% PER, -83dBm
	12Mbps OFDM, 10% PER, -85dBm
	11Mbps CCK, 8% PER, -83dBm
	9Mbps OFDM, 10% PER, -86dBm
	6Mbps OFDM, 10% PER, -87dBm
	2Mbps QPSK, 8% PER, -89dBm
<b>External Antenna Type</b>	1.0dB Dipole with reverse SMA connector
<b>LEDs</b>	Power
	LAN (10/100)
	WLAN (Wireless Connection)

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<b>Temperature</b>	Operating: 32°F to 140°F (0°C to 40°C)
	Storing: 4°F to 149°F (-20°C to 65°C)
<b>Humidity</b>	95% maximum (non-condensing)
<b>Power Input</b>	Ext. Power Supply DC 5V, 2.0A
<b>Safety &amp; Emissions</b>	FCC
	UL
	VCCI
	CSA
	EN
<b>Dimensions</b>	L = 5.6 inches (142mm) W = 4.3 inches (109mm) H = 1.2 inches (31mm)
<b>Weight</b>	250g
<b>Warranty</b>	1 Year

\* Maximum wireless signal rate derived from IEEE Standard 802.11g specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental factors will adversely affect wireless signal range.

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