

# IMPULSE



## HIGHLIGHTS

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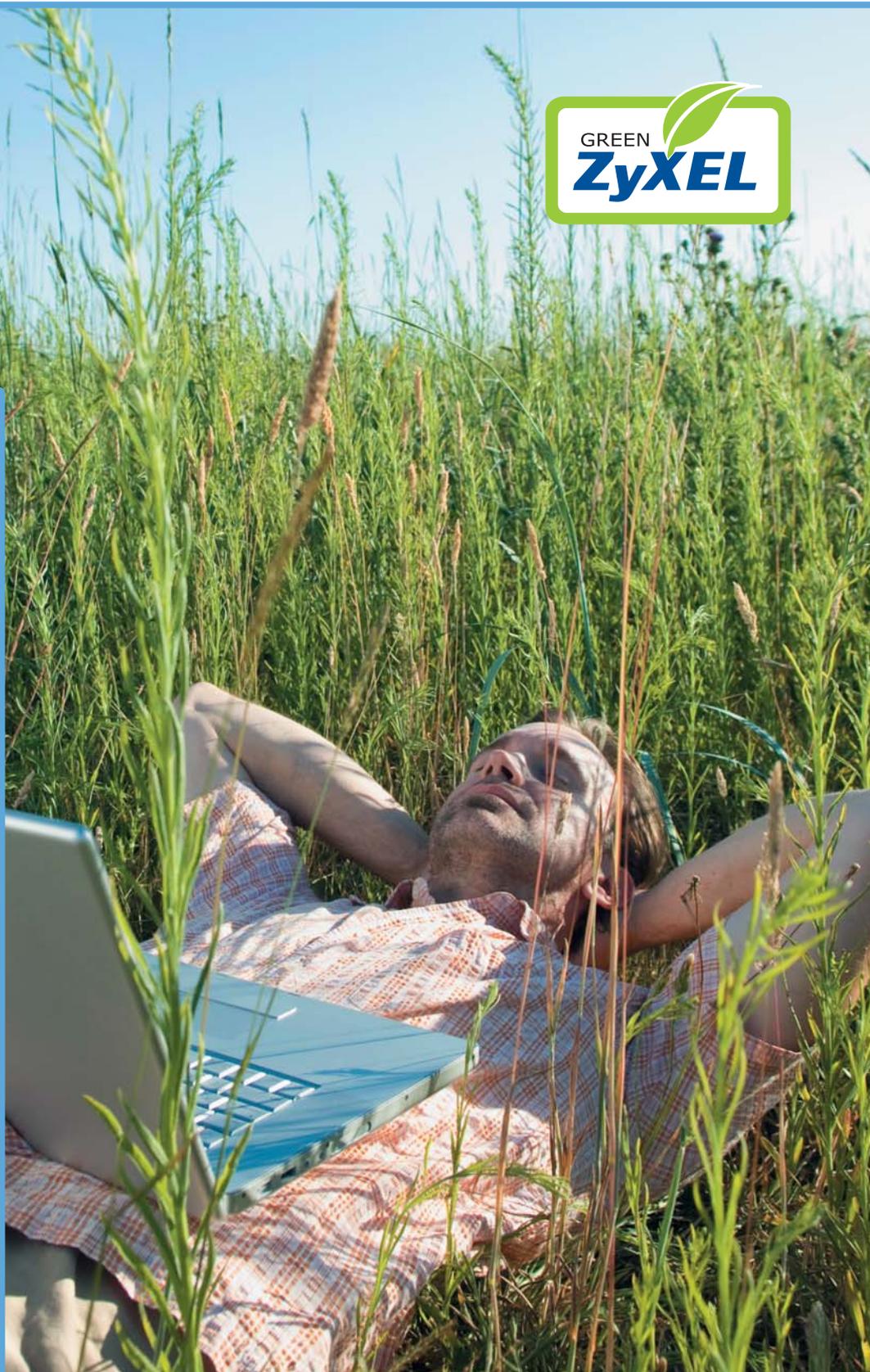
**Digital Multimedia Streamer**  
Enjoying video, photos and  
music in the living room.  
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Controls up to 24 access  
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## Digital Multimedia Streamer in HD

The new ZyXEL DMA-2500 brings digital home entertainment to the living room. Equipped with high definition technology and a wide range of supported formats, the media adapter transfers photos, films and music to the television and the stereo, thereby providing HD digital entertainment in the home network. In this connection, the DMA-2500 has triggered a new era in digital home entertainment. The digital media adapter ideally supplements home networks and whips up high-resolution images and films onto television screens and music onto stereo systems. The data source is the home PC or a network storage unit, such as the NSA-220 Plus.

### High Definition

Although most new television sets are "HD-ready" (720p) or "full HD" (1080p), many households still require a relevant signal source. With the DMA-2500, high definition is finding its way into home living rooms. The ZyXEL media adapter supports HDMI and SPDIF connections. Through the HDMI (High Definition Multimedia Interface), a direct digital connection to the television transfers audio and video signals at a resolution of 1,080p maximum using one cable. The SPDIF transfers audio signals from the digital media adapter to the AV receiver and produces high-quality surround sound.

### Network Connections

The ZyXEL DMA-2500 is easily connected to an existing network using an Ethernet cable. Wireless 802.11n connection is also possible using an optional NWD-211AN or NWD-270N WLAN USB client. Thanks to the integrated DLNA 1.5 support, data stored in a network, such as the NSA-220 Plus, is easily accessed. The same applies to files stored in a network PC. The USB connection allows a USB stick or an external hard disk to be used as a data source.



### FEATURES

#### ZyXEL DMA-2500

#### Digital Media Streamer

- Video playback to HDMI, 720p, 1080i & 1080p
- Audio playback to SPDIF & analogue Cinch
- Power consumption: operation 6.5W, stand-by 0.1W
- Video formats: avi, wmv, mpg, iso, ifo, mp4, asf, tp, ts, m2ts, mov(H.264), mkv, vob, mka
- Codecs: MPEG 1/2/4 SD/HD, AVI, H.264 HD, WMV9, VCI, Divx/Xvid, AVC
- Audio formats: MP3, MPEG 2 AAC, MPEG 4 AAC, AC3, MPEG 1 Layer 1 & 2, PCM, WMA, WMA Pro, OGG, WAV, FLAC, DTS pass-through
- USB port for WLAN or USB stick / hard disk

**ZyXEL DMA-2500**  
Digital Media Streamer

**Video Codecs**

The ZyXEL DMA-2500 supports all the important media formats for music, images and videos on the computer. Users therefore have access to digital content in their living rooms. Data formats no longer need to be transformed using a lot of effort. Besides the many standard formats, such as avi, wmv and mpg, the mkv Matroska container format is certainly one of the most important.

An increasing number of H.264 compressed, high-resolution video films are now available in mkv format. Furthermore, ISO files and DVD directories are recognised, which provide access to DVD menu structures and sub-titles.

**Audio and Photo Playback**

The audio codec feature meets the requirements of discerning music lovers. MP3, MPEG1/2/4,

WMA, WAV, OGG and FLAC (Free Lossless Audio Codec) do not leave any questions unanswered. Digital images can be played back individually or as a slide show in many different formats. The DMA's powerful CPU quickly displays file overviews and images without any time lag.

 **Local information:** [www.zyxel.com/Europe/Impulse](http://www.zyxel.com/Europe/Impulse)



## The Perfect Data Source for Photos, Videos and Music

The NSA-220 Plus network storage appliance demonstrates its true strengths as a home server in combination with the DMA-2500 digital media adapter allowing for photos, videos and music to be stored and accessed on the NSA without ever turning on the PC. The DLNA standard (Digital Living Network Alliance) ensures inter-operation of various appliances, thereby making Plug & Play with ZyXEL in the home network not only a buzzword but a reality.

**The Dream Team: DMA-2500 & NSA-220 Plus**

The ZyXEL NSA-220 Plus network storage appliance presented in the last issue of "IMPULSE" has a proven track record and has won various awards. It offers a high-performance, user-friendly storage and back-up solution for users who want to store and access their photo collection, videos and music files centrally and transfer them to the television set or the stereo in the sitting room whenever they want. Integrated RAID disk configuration and mirroring prevents unwanted data loss. Since the data is stored on the NSA and not on the computer, the PC does not need to be switched on all the time, which leads to additional energy savings.

**New NSA-220 Plus Features**

The new auto upload service supports storing photographic images on Flickr and videos on YouTube. The files are automatically uploaded from a pre-defined directory onto the relevant server. A wide range of content can be downloaded using the BitTorrent P2P network. Downloads can be configured in advance allowing for automatic storage onto the NAS without a network PC being in operation. A pop-up notifies the user that new information is available.

 **Local information:** [www.zyxel.com/Europe/Impulse](http://www.zyxel.com/Europe/Impulse)

**INFO**

**Home Network**

ZyXEL has publicised a detailed brochure on Broadband Digital Living to acquaint you with everything around the subject of home networks. To download, go to [www.zyxel.com/Europe/Impulse](http://www.zyxel.com/Europe/Impulse)

# Home Router including WLAN On/Off

The WLAN firewall router ZyXEL NBG-419N is ideally suited for multimedia networks in family households. Manufactured according to WLAN standard 802.11n, it is equipped to meet sophisticated multimedia specifications. One highlight is a physical switch to deactivate the wireless function.

### Wireless On/Off Switch

Misgivings about electro-smog are present in many households. The wireless on/off switch now makes it possible to turn the wireless LAN on or off, as desired. As an added extra, a scheduler allows the user to define desired operating times in only a few steps through the Web GUI. A further plus is the added security ensuring that a switched-off WLAN cannot be accessed.



**ZyXEL NBG-419N**  
WLAN Firewall Router

### WLAN 802.11n V2.0

The current version of the WLAN standard 802.11n theoretically allows a data transfer rate of up to 300Mbps. However, in practice, speeds of over 100Mbps (close to that of Fast Ethernet) are attained. The WPA/WPA2 encryption ensures secure data transfer to all WLAN clients.

### Wi-Fi Protected Set-up

The WPA/WPA2 feature guarantees secure data transfer between the router and the WLAN client. The wireless router supports WPS: this way, by pushing the button between the router and the client, a PIN code for authentication is automatically generated. Even without any expert knowledge, a secure wireless network for data transfer can be established easily.

### New Web GUI

The new Web GUI is one important feature of the NBG-419N. With its fast function navigation the user-friendly interface allows an easy configuration and setup of the home router. It provides the "Easy Mode" for navigating functions, basic setup tasks and a comprehensive network map. With the "Easy Mode" which simplifies system configuration tasks, users can enable or disable frequent setup options such as game engine, power saving, content filtering and bandwidth management with just one click.

### Router and Switch

The wireless router ZyXEL NBG-419N is easily connected to any existing internet access point through the WAN port. Its four Fast Ethernet interfaces cover the requirements of many multimedia users. The integrated Stateful Packet Inspection firewall increases security against



**Highlight feature of NBG-419N:**  
Wireless ON/OFF button

## FEATURES

### ZyXEL NBG-419N

#### WLAN Firewall Router 802.11n

- WLAN on/off switch and scheduler
- WPA/WPA2 security
- Push-button Wi-Fi Protected Setup (WPS)
- New Web GUI
- Vista certified
- VPN pass-through (IPSec, PPTP, L2TP)
- 6 WLAN transmission rates

access from the outside. With Media Bandwidth Management it is possible to optimally use the existing internet bandwidth range for sophisticated services, such as VoIP and video streaming.

**Local information:** [www.zyxel.com/Europe/Impulse](http://www.zyxel.com/Europe/Impulse)

## POWERLINE

# Ultra-compact Powerline HomePlug

With the new ZyXEL PLA-401 V3, your home network is very easy to install. Just plug the two PLAs into the electrical sockets, connect one of the PLAs to your PC and the other to your internet router. An added benefit is the Powerline HomePlug's power-saving mode and overall low power consumption.

## FEATURES

### ZyXEL PLA-401 V3

#### Powerline adapter HomePlug AV 200

- Data transfer rate up to 200Mbps
- Support of multiple applications with QoS
- Multi-coloured LED identifies traffic quality over Powerline network
- Plug and Play for easy installation
- 128 bit AES encryption with key management for secure Powerline communication
- Eco-friendly product with low power consumption and power-saving mode

### Data Transmission Rates of 200Mbps

ZyXEL's Powerline series is an access extension solution to completely network a household with existing power lines. Equipped with advanced HomePlug AV technology, the ZyXEL PLA-401 V3 transmits data at a rate of up to 200Mbps. The Powerline adapter allows access to the internet using the home power lines already installed.

### High Definition Video Streams

The integrated, advanced QoS features of the HomePlug AV series are ideal for users who use Triple Play multimedia services, such as high-quality digital video streams, high-speed internet access as well as VoIP services.



**ZyXEL PLA-401 V3**  
Powerline-Adapter HomePlug AV 200

### 128 Bit AES Encryption with Key Management

Thanks to 128 bit AES encryption with key management the ZyXEL PLA-401 V3 ensures secure Powerline communication including internet access and network resources. Users may sit back to enjoy fast internet surfing and secure file transfer.

**Local information:** [www.zyxel.com/Europe/Impulse](http://www.zyxel.com/Europe/Impulse)

# ZyXEL Power over Ethernet (PoE) Solution

The deployment of PoE as a solution enables businesses to reduce network complexity, providing a superior standard-based approach (IEEE 802.3af) to networking. It helps enterprises to reduce installation time and costs when connecting devices such as wireless access points, VoIP phones and CCTV IP surveillance cameras.

## Lower Installation Costs and Time

ZyXEL PoE switches can work with other PoE standard-based devices such as wireless access points, VoIP phones and CCTV IP surveillance cameras without the need for separate power supplies as the Ethernet switch provides the necessary power. Consequently, the installation is much easier without the need for new installations of electrical power sources both externally for CCTV cameras and internally in the ceiling for wireless access points.

## Flexible and Scalable Solutions

PoE devices can be easily installed and relocated without any need for additional AC power wiring. This is very important for network devices like wireless access points, VoIP phones and IP surveillance cameras, which may be installed in places where a power socket is not convenient or available. Furthermore, by deploying PoE devices in the network the management becomes easier: If a device needs to be switched off or reset, the switch can directly switch it off or reset it.

When the network becomes more complex and further network devices are added, it is easy to integrate more switches and simply plug in an RJ-45 Ethernet connector. The switch automatically detects PoE-compliant devices and offers the appropriate power level in a safe and easy way. ZyXEL PoE products offer flexible, scalable PoE solutions addressing the requirements of SME business networks.

## Intelligent PoE

Today, the main drawback of deploying PoE switches is the power supply detecting mechanism: No matter what the real power consumption status of the device is, the switch typically reserves 15.4W

## ZyXEL GS1500-24P

Web Managed Layer-2-Switch 10/100/1000



even if a powered device actually only requires a much lower amount of power of 6W.

ZyXEL's intelligent PoE provides 7W/15.4W with auto-detection. When power consumption of a connected device is detected with less than 7W, ZyXEL's intelligent PoE will automatically reserve 7W instead of 15.4W. For instance, if the power consumption of each power device is 7W (the average of IP phones and wireless access points is 5 to 7W), the ZyXEL PoE switch providing a total of 200W will support as many as 28 devices (200W/7W). The intelligence increases the potential amount of connected devices and delivers a better ROI for businesses.

## INFO

### Gigabit PoE LAN Switches

The latest ZyXEL PoE switches combine the functionality of high-speed Gigabit networking with the simplicity of Power over Ethernet (PoE) in one device. The GS1500-24P is equipped with 24 PoE ports and power budget and is ideally suited for SMB.

## Industry Standards Compliance and Investment Protection

ZyXEL PoE products all comply with the IEEE 802.3af standard and offer interoperability and compatibility with other standard-based PoE devices. The IEEE 802.3af PoE standard is an extension of the IEEE 802.3 10BASE-T 802.3u, 100BASE-TX and IEEE 802.3ab Gigabit Ethernet over copper standards.

Local information: [www.zyxel.com/Europe/Impulse](http://www.zyxel.com/Europe/Impulse)

## Overview PoE Switches



	GS1500-24P <span style="color:red">NEW</span>	ES-2108PWR	ES-2024PWR	ES-3124PWR	MS-7206
10/100Base-TX PoE	-	8	24	24	-
10/100/1000Based-T	-	-	-	2	Max.192
10/100/1000Base-T PoE	24	-	-	-	Max.192
Open SFP slot (GbE)	-	-	-	-	Max. 96
10G extend slot	-	-	-	-	Max. 8*
Dual personality ports	4	1	2	2	-
Switch fabric speed,Gbps	56	5.6	8.8	12.8	Max. 384
Forwarding Rate (Throughput, Mpps)	41.67	2.7	6.6	9.6	285
MAC address table	16K	8k	8K	16k	16K
Total PoE Output (Watt)	185	123.2	185	396.6	2956.8**
	Fixed Port Switch				Modular Switch

\* Future release \*\* 4 x external PoE PSU MP-7202 (optional)

# Hybrid Access Point for 802.11a/b/g/n

ZyXEL is introducing the new NWA-3166 business hybrid access point including 802.11a/b/g/n. As a wireless controller, it offers centralised management of up to 24 managed client access points (AP). Since it supports the standard IEEE 802.11n (Draft 2.0), zones with low radio coverage can be accessed more easily.

## Up to 100Mbps Throughput

Up to now, such throughput rates could only be achieved using Ethernet connections. The MIMO technology employs several antennas for transfer and thanks to reflections reaches a higher throughput. This allows improved wireless LAN coverage and thereby minimises so-called "dead spots".

## WLAN a/b/g/n (Draft 2.0)

The ZyXEL NWA-3166 is certified according to the latest WLAN standard IEEE 802.11n (Draft 2.0). In addition, it can be operated in 11a mode. That is why the access point ensures a high level of investment protection. The range of possibilities is endless and reaches from VoIP telephony and hot spots to industrial process automation.

## 802.11a, b, g or n?

The ZyXEL NWA-3166 hybrid access point operates in the 2.4 or 5GHz frequency range. This of course poses the question of which technology is optimal. With a single AP, ZyXEL not only offers 802.11n but also 11a/b/g in the one unit. The right choice depends on the configuration. If the configuration based on closely installed access points is complex, then implementing an 11a or g is recommended. Configuring the cells on 802.11n can be more complex since up to two neighbouring tunnels need to be used. In this connection, 802.11n is more suitable for high data transfer rates, especially in the 5GHz range. While the ZyXEL NWA-3166 is equipped with embedded omni-directional antennas, external antennas can be attached to the ZyXEL NWA-3100, 3160 and 35x0 models.

## Hybrid Access Point

The ZyXEL NWA-3166 can be implemented in stand-alone AP architecture or as a controller-



**ZyXEL NWA-3166**  
Hybrid Wireless Access Point



managed solution for other NWA series units. Up to 24 managed access points are supported (ZyXEL NWA-3160, NWA-35x0 and NWA-3166). As a result, this model provides a scalable and inexpensive alternative to traditional and expensive controller systems. Besides controller management, the ZyXEL NWA-3166 can also be implemented as a stand-alone AP. Client APs allow full flexibility in configuration according to relevant functions from the controller. Communication with the client APs is effected via secure tunnels using CAPWAP protocols.

is no longer required. In addition, Quality of Service along with a pre-defined VoIP profile are available together with guest access and the option of Layer 2 isolation. Up to 16 virtual wireless networks (multi SSID) combined with VLAN tagging (802.11Q) enable the simultaneous connectivity of several user groups using only one access point. Furthermore, the ZyXEL NWA-3166 also features an internal or external RADIUS authentication function.

**Local information:** [www.zyxel.com/Europe/Impulse](http://www.zyxel.com/Europe/Impulse)

## Advanced Features

Thanks to wireless PoE (Power over Ethernet) support, power from conspicuous wall plugs

## FEATURES

### ZyXEL NWA-3166

#### Hybrid wireless access point

- WLAN 802.11a/b/g/n dual band
- PoE support
- Centralised management of up to 24 client APs in controller mode
- Wi-Fi certified WMM and WPA2 encryption
- Secure and extensive communication configuration possibilities
- Multi SSID including pre-defined VoIP and guest profiles
- Made of fire-resistant LSOH material

The screenshot shows the ZyXEL controller interface with a sidebar menu on the left containing options like STATUS, MGMT MODE, CONTROLLER PROFILE EDIT, ROGUE AP, VLAN, SYSTEM IP, REMOTE MGMT, AUTH. SERVER, CERTIFICATES, LOGS, MAINTENANCE, and LOGOUT. The main content area is titled 'CONTROLLER' and has tabs for 'AP Lists' and 'Configuration'. Under 'Configuration', there are two sections: 'Managed Access Points List' and 'Un-Managed Access Points List'. The 'Managed Access Points List' contains a table with columns for Index, Select, IP, MAC Address, Model, Description, and Status. It lists three managed APs. Below the table are 'Edit' and 'Delete' buttons. The 'Un-Managed Access Points List' section is currently empty and has an 'Add' button. At the bottom, there is an 'Automatic Refresh Interval' set to 10 seconds and a 'Refresh' button.

Index	Select	IP	MAC Address	Model	Description	Status
1	<input type="checkbox"/>	127.0.0.1	00:23:F8:0B:41:46	NWA-3166 802.11a/g/n	AP-LOCAL	
2	<input type="checkbox"/>	192.168.1.34	00:23:F8:09:54:63	NWA-3160 802.11a/g	AP-0023F8095463	
3	<input type="checkbox"/>	192.168.1.33	00:19:CB:36:E5:C6	NWA-3500 802.11a/g	AP-0019CB36E5C6	

NWA-3166 in controller mode equipped with two client access points

# Strategic Alliance Between ZyXEL and Extricom

ZyXEL now offers Extricom's wireless controller systems to be used in conjunction with the ZyXEL product range to expand business opportunities for WLAN deployment with simpler design and maintenance, predictable throughput and continuous mobility. Extricom's unique channel blanket architecture simplifies the installation of access points (APs) and places wireless intelligence in a central switch which coordinates the actions of all the APs. It makes it possible to leverage any wireless application anywhere to meet core requirements for vertical markets such as healthcare, warehousing and education.

## Synergy for Alliance Between ZyXEL and Extricom

ZyXEL's complete product portfolio and Extricom's wireless controller systems can offer a more comprehensive enterprise solution (network infrastructure, security, mobility, convergence) to meet real customer needs. The synergy between ZyXEL and Extricom is quite obvious. ZyXEL offers enterprise solutions chosen by over 400,000 European companies. Extricom is well-known as a manufacturer of high-performance wireless LAN technology and has developed a unique channel blanket architecture to satisfy the requirements in the healthcare, warehousing and education industries. The combination of ZyXEL's enterprise solutions and Extricom's wireless controller systems can help businesses to increase network efficiency, offer guaranteed service and tap their business potential.

## Expansive Mobility for Verticals

Market Leading WLAN Solutions Provide Expansive Mobility and Predictable Network Capacity. Extricom's unique channel blanket technology truly delivers continuous mobility and predictable capacity to meet the core requirements of several verticals which need Wi-Fi mobility. Other vendors' Wi-Fi cell-based technology struggles to provide expansive mobility for verticals such as healthcare, warehousing and education.

- **Education:** Extricom's wireless infrastructure delivers the coverage, capacity and performance needed by schools when students move around.
- **Warehousing/manufacturing:** The difficult radio frequency and challenging coverage requirements of warehouses and factories are not an obstacle for the Extricom wireless solution.
- **Healthcare:** Extricom's wireless LAN mobilises patient care, allowing caregivers to make quicker, better informed decisions while offering Internet connectivity to recovering patients.

## Technical Information

### (Cell Planning vs. Channel Blanket)

In the field of retail or warehousing, the physical layout and shelf contents in stores and distribution centres are constantly changing. When a wireless network system is installed, the system must remain immune to such a dynamic environment.

- **Cell planning:** When the environment changes, the IT manager must constantly readjust and

## Extricom EXSW-1200

WLAN-Switch (Controller) 802.11a/g



optimise cell planning and channelisation to ensure availability of the wireless LAN.

- **Channel blanket:** The channel blanket architecture enables each radio channel to be used everywhere from every access point to create large blankets for continuous coverage. This approach enhances all aspects of wireless performance – coverage, throughput, capacity, QoS and mobility.

## Extricom Overview

Extricom is a designer and manufacturer of high-performance wireless LAN (WLAN) infrastructures for enterprises, enabling converged triple play of data, video streaming and voice over WLAN (VoWLAN). Extricom's wireless LAN enables enterprises to build a high-performance and reliable WLAN infrastructure which is as dependable as the wired network.

 **Local information:** [www.zyxel.com/Europe/Impulse](http://www.zyxel.com/Europe/Impulse)



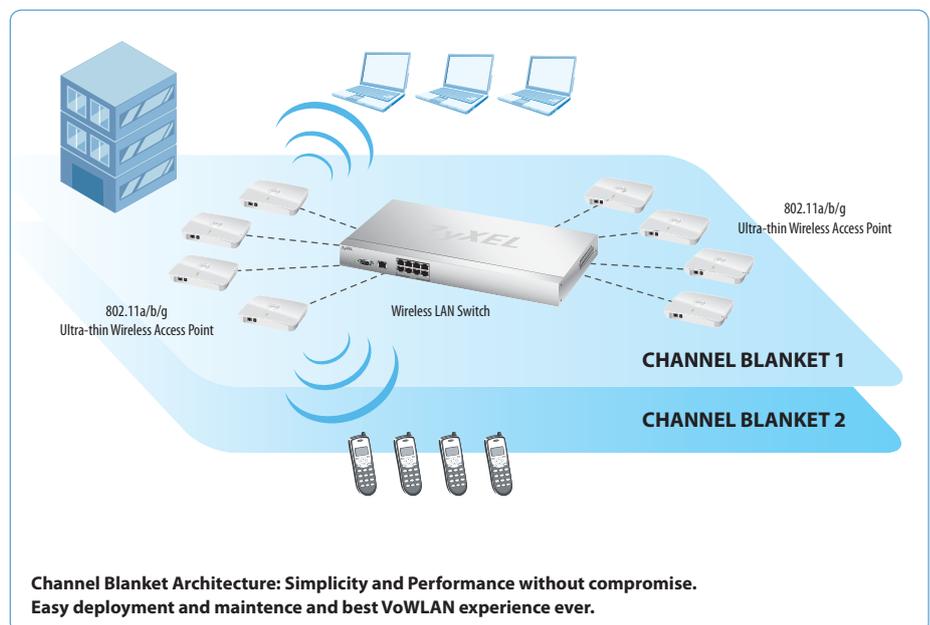
## Extricom EXSW-2400

WLAN-Switch (Controller) 802.11a/g

### INFO

#### Extricom Wireless LAN Controller Systems

The wireless LAN switches EXSW-1200 / 2400 provide Fast Ethernet connectivity for up to 12 and 24 Extricom ultra-thin access points respectively. The Extricom interference-free wireless LAN system provides flexibility, high performance and simplicity for convergent data as well as voice (VoWLAN) and video communication for overall wireless LAN applications in enterprises.



# ZyXEL presents ZyWALL USG Flagship

ZyXEL has launched the ZyWALL USG 2000, a firewall appliance for enterprise networks. Besides highest performance and security levels, the ZyWALL USG flagship shines with fibreglass connection, freely configurable Gigabit ports and a high level of availability thanks to internal power supplies with separate power flows as well as complete security features. The ZyWALL USG 2000 offers 2,000 IPSec VPN tunnels as well as up to 750 SSL VPN tunnels and convinces through a high performance level and the possibility to use it as a VPN concentrator. Where fibreglass connections already exist, for example in a ring configuration between different buildings, the two MiniGBIC slots can be linked accordingly. In total, it provides eight freely configurable Gigabit ports.

### Firewall with Fibreglass Connection

The ZyWALL USG 2000 has two combo ports (10/100/1000BaseT or MiniGBIC slots) and thus can be connected directly using fibreglass. These two ports are not dedicated to any zones in the standard configuration. Different transceivers (SFPs) can be used to connect to devices with different types of fibre-optic connectors.

### SEM-DUAL

The security extension module SEM-DUAL unleashes the full horse power of the USG 2000 platform with a mighty VPN and UTM performance. Both VPN and UTM speed can be boosted up to 400Mbps (HTTP, IPSec, large packets). Expanding the SSL tunnels is accomplished using password licences at an extra charge (5 SSL tunnels are included by default).

### High Availability

Two separate internal power supplies enable you to connect the ZyWALL USG 2000 to various phases or to a USV. An acoustic alarm goes off whenever a power supply is defective. In case a power supply becomes defective, it can be replaced while the second power supply continues to run the ZyWALL USG 2000 with enough power. From the WAN side, it is possible to link several ISP connections redundantly to guarantee internet availability in case of a provider failure. Using a second identical ZyWALL USG enables high hardware availability in the active/passive mode. The configuration is then automatically synchronised. In case the active firewall fails, then the backup takes over the gateway function.

### Gateway Anti-virus

To protect the network from viruses, Trojans and spyware, the administrator can choose between ZyXEL Anti-virus or Kaspersky Anti-virus. The service on the gateway is an ideal supplement to local anti-virus protection, which inspects the FTP, HTTP, SMTP, POP3 and IMAP4 protocols.

### Intrusion Detection and Prevention

Over 2,000 signatures protect against attacks by worms, Trojans, backdoors, etc. and recognise the most common instant messaging and peer-to-peer applications, which usually are not or only restrictively tolerated in a business network. While an anti-virus function blocks infection, the IDP will block an already active bug or attack.

 Local information: [www.zyxel.com/Europe/Impulse](http://www.zyxel.com/Europe/Impulse)

## FEATURES

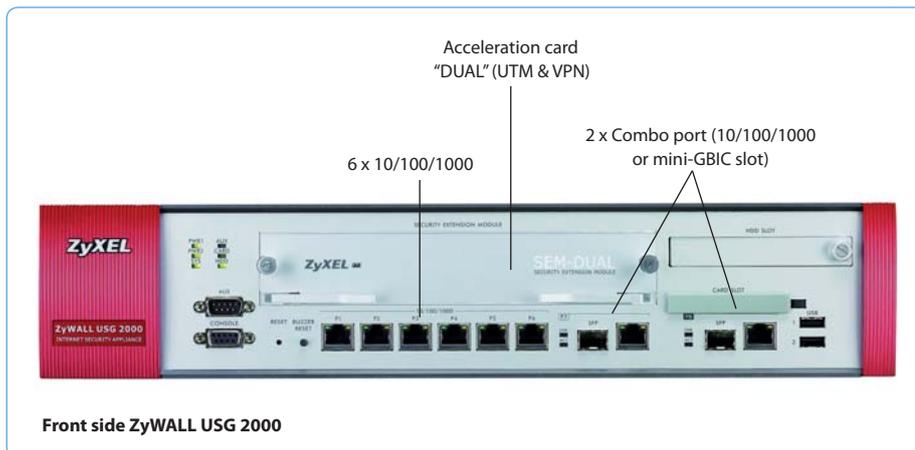
### ZyWALL USG 2000

- USG firewall for larger company networks
- Data throughput firewall: 2,000Mbps\*
- Data throughput IPSec VPN: 400Mbps\*
- Data throughput UTM: 400Mbps\*
- Max. 1,000,000 NAT sessions
- Max. 2,000\* IPSec tunnels
- 5 / max. 750\* SSL tunnels
- 8 x 10/100/1000BaseT port
- 2 MiniGBIC slots (shared)
- IDP/AV/AS/CF service option
- Freely configurable on a zone-specific basis
- 5 years warranty

\* Includes SEM-DUAL

## ZyXEL USG 2000

Unified Security Gateway



Front side ZyWALL USG 2000

# Get up to 25% off for a Complete ZyWALL USG UTM Bundle

Starting at the beginning of September, ZyXEL launches an attractive trade-in promotion. Resellers trading in their old firewall can benefit from a discount of up to 25% on a new generation ZyWALL USG appliance plus a complete UTM service bundle. The offer includes all ZyXEL USG models (ZyWALL USG 100, USG 200, USG 300, USG 1000 and USG 2000) and will be valid from 1st September 2009 to 31st March 2010.



### Switch to the New Generation

The challenge faced by today's information security and IT professionals, no matter what the size of the business, is how to keep the company network protected in the face of multiple simultaneous security hazards. At the same time, they are under pressure to reduce costs, increase employee productivity and avoid buying single point products so that the security environment is manageable and under control. The new generation USG series offers an ideal comprehensive UTM solution to meet these challenges.

bundle with a one-year licence for Kaspersky Anti-virus, IDP and content filter. According to the chosen USG firewall model, resellers benefit from a discount of up to 25% when purchasing a promotion bundle.

### Why Change Now?

With the advantages inherited from the previous ZyWALL UTM family, which include anti-virus, IDP, anti-spam, firewall, VPN, load balancing, bandwidth management and content filtering, the new generation ZyWALL USG series provides pivotal benefits:

- Robust hardware platform with built-in SecurASIC hardware engine
- Comprehensive UTM protection with AV, IDP, anti-spam and content filter
- Hybrid VPN solution with IPSec/SSL/L2TP in one box
- Flexible access control including management of various types of IM/P2P applications
- Free anti-spam solution on board
- Increased network connectivity with multi-ISP links, 3G, wireless support, load balancing and high availability feature

Eligible products for the trade-in offer are all comparable ZyWALL firewall/VPN security appliances or competitive firewall/VPN appliances from Astaro, Cisco, Fortinet, Juniper/Netscreen, Symantec, SonicWALL, 3Com and Netgear (ProSafe™ range only).

**Local information:** [www.zyxel.com/Europe/Impulse](http://www.zyxel.com/Europe/Impulse)  
For the exact launch date of the trade-in campaign in your country, please contact your local distributor!

DISCOUNT	
USG 100	→ 20%
USG 200	→ 20%
USG 300	→ 25%
USG 1000	→ 25%
USG 2000	→ 25%

### Trade-in and Get up to 25% off

The new ZyXEL trade-in offer includes a full UTM



### Overview ZyWALL USG Firewalls



	ZyXEL ZyWALL USG 100	ZyXEL ZyWALL USG 200	ZyXEL ZyWALL USG 300	ZyXEL ZyWALL USG 1000	ZyXEL ZyWALL USG 2000
Max. IPSec tunnels	50	100	200	1,000	2,000*
SSL tunnels	2 / max. 5	2 / max. 10	2 / max. 25	5 / max. 250	5 / max. 750*
Max. NAT sessions	20,000	40,000	60,000	500,000	1,000,000
Data throughput firewall (Mbps)	100	150	200	350	2,000
Data throughput IPSec VPN (Mbps)	50	75	100	150	400 Mbps*
Data throughput UTM (Mbps)	24	24	48	100	400 Mbps*
10/100/1000BaseT ports	2 x WAN; 5 x LAN/DMZ	2 x WAN; 4 x LAN/DMZ; 1 x OPT	7	5	8
Mini-GBIC slots	-	-	-	-	2 (shared)
Zone-specific configuration	predefined	predefined	configurable	configurable	configurable
Warranty (no. of years)	5	5	5	5	8
	<b>Entry-Level</b>	<b>Mid-Range</b>		<b>High-End</b>	

\* Includes SEM-DUAL

# Free Wireless Network Access at Outdoor Centre

The FDF Scouts Outdoor Centre Sletten, on the lakes of Silkeborg, now offers FDF scouts and guests access to a wireless network anywhere within the large natural resort by using ZyXEL's xDSL broadband modems. An effective and stable network was established, providing wireless Internet access to all areas of the outdoor centre including the centre office, houses, cabins and camp sites. Furthermore, the new wireless network infrastructure provides a high level of security and a backup for data storage.

## The Challenge

The FDF Outdoor Centre Sletten covers a geographically very large and beautiful natural resort in the forests of Central Jutland. There has been a phone connection for a long time between the centre office Applefarm and the many cabins and camp sites via copper cables, but an increasing demand for access to information from both FDF and the Internet necessitated that an effective data network was established.

FDF scouts' and other guests' needs for network access from notebooks and smart phones further demanded wireless network access. Far-reaching wireless access points accompanied by weatherproof antennas had to be established at all the connectivity points. To keep track of the access to the network and gain the possibility of charging for network access, FDF Outdoor Centre Sletten wanted to be able to register the users and print out passwords for personal access to the wireless network. Finally, the entire network had to be connected to the Internet through a firewall and an xDSL router, there was a need for a number of Fast Ethernet switches for wired connections and they wanted a possibility for easy and fast backup of important data.

## The Solution

With consultation and technical support from the IT company Solutio ApS in Silkeborg, FDF Outdoor Centre Sletten chose to establish the connections between the centre office Applefarm and the locations in the area through ZyXEL Prestige 791R xDSL routers, which were connected in couples through existing copper cables.

Furthermore, ZyXEL ZyAIR G-3000H business wireless access points designed to work together

with a ZyXEL VSG-1200 Vantage service gateway and ZyXEL thermal printers were installed on the location. The gateway handles the access to the wireless network in a way that with the same login name printed for the user on the thermal printer, the user gains access to the wireless network in the entire area. ZyXEL NWA-3100 and NWA-3500 wireless access points were also installed. Radio coverage has been increased in multiple places by installing ZyXEL EXT-108 outdoor antennas and EXT-105 indoor antennas which provide a larger coverage area.

At the centre office Applefarm all the connections from xDSL routers are united in a ZyXEL ES-2024 switch which is connected to the Internet through a ZyXEL ZyWALL 35 firewall and ADSL connections.

To secure simple backup a ZyXEL NSA-220 NAS unit (Network Attached Storage) was installed. The NAS automatically mirrors important data which is then transferred to a geographically remote location for extra security.

In addition to the supply of Internet access, the network is now effective and stable enough to be used for management and control of electricity

## TESTIMONIAL

**Peter Jeppesen, Centre Manager for FDF Outdoor Centre Sletten**

"The scouts of today demand more than singing by the camp fire and exciting activities, they also want the opportunity to get online. Here they solve assignments together and also have the possibility of contacting their friends through social networks, email and instant messaging. We have around 50,000 sleeping guests each year and we can tell that the demands to facilities and service have grown during the last couple of years."

and ventilation in houses and cabins throughout the area. The management is centralised in a system which gives the possibility to check whether everything is running as it is supposed to.

## The EU Data Retention Directive

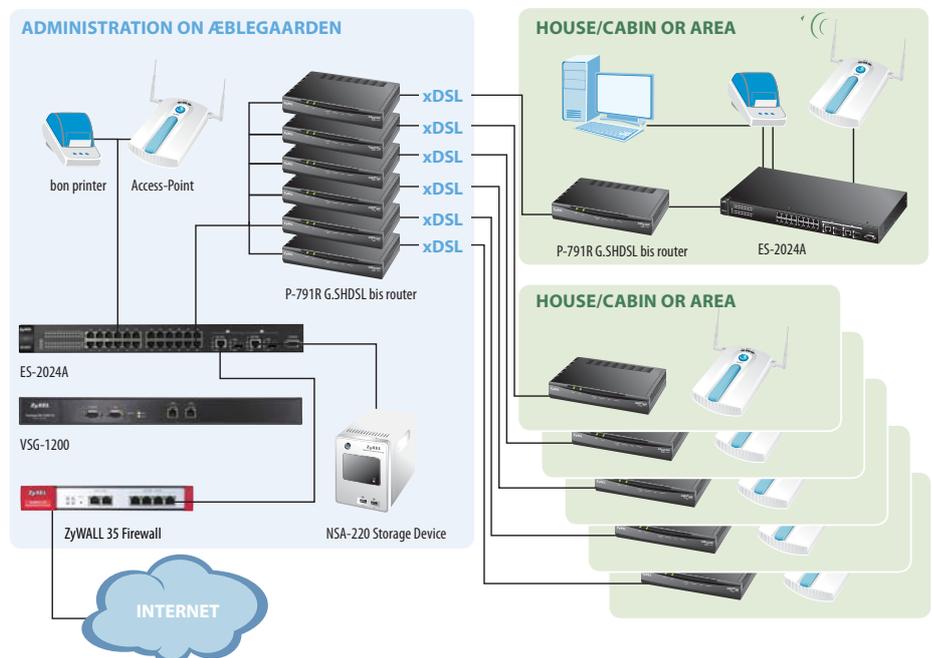
On 15th March 2006 the EU formally adopted Directive 2006/24/EC, which in short requires communication providers including Hotspot owners to register and store communication data. Many countries amongst others UK and Denmark have already implemented the directive. Data is to be stored between 6 to 24 months depending on local legislation and is to be made available with a judicial warrant in case of serious crime or acts of terror. All member countries have to adopt the directive at the latest during 2009.

 **Local information:** [www.zyxel.com/Europe/Impulse](http://www.zyxel.com/Europe/Impulse)

## INFO

### G-4100v2 ZL.4 Firmware Update

With the ZL.4 firmware update, the G-4100v2 gets even more features. One is the ability to send session traces directly to a Syslog server, greatly enhancing the logging capabilities. It simplifies the setup necessary for complying with the EU Data Retention Directive. The new firmware also increases wireless security by adding WPA2 with AES encryption. ZyXEL offers free firmware updates for all of its products.



# How to Save Costs With Green IT

Reducing energy consumption and related green efforts can save costs, however there are still many enterprises which hesitate to employ them because of two main challenges: First trade-offs between performance and being green and lacking green networking solutions from core to edge. ZyXEL's SME green networking solution provides comprehensive environment-savvy network architectures to improve energy efficiency and performance and reduce costs. It also helps enterprises to gain competitive advantage and retain environmental sustainability.

## Green from Core to Edge

ZyXEL's SME green networking solution is the best green practice from core to edge. It creates win-win results with comprehensive network architecture plans.

### Core Network

High performance and low latency are required in core networks. Enterprise-class switches must offer zero-loss throughput and low latency to be serious contenders for corporate networks. Enterprises also need to rein in their energy costs to keep costs in check. It should emphasise energy efficiency for enterprises.

- ZyXEL's modular switch MS-7206 delivers wirespeed throughput with very low levels of latency using 192GbE ports, and it shows little variability in power consumption when handling variable traffic loads.
- The ZyWALL Unified Security Gateway series provides high performance with green functions like the integrated space cooling feature.

### Edge Network

The devices in edge networks are usually generic and massively deployed. The use of massive devices has a considerable influence on the power consumption of networks. ZyXEL's LAN switches, wireless access points and IP phones have a lower power consumption resulting in significant cost savings.

## Green IT Features

- Fans play an important role in energy consumption since they are the key to heat dissipation. ZyXEL's LAN switches feature auto-temperature detection and three fan speeds (quick, normal, stop). When the ambient temperature is low, the switches enter the stop mode to prevent wasting power in unnecessary cooling.
- ZyXEL's intelligent PoE provides 7W/15.4W with auto-detection. When the power consumption of an attached device is less than 7W, ZyXEL's intelligent PoE will reserve 7W instead of 15.4W. For instance, if the power consumption of each

power device is 7W (the average of IP phones and wireless access points is 5 to 7W), the ZyXEL PoE switch providing a total of 200W supports as many as 28 devices (200W/7W).

- With ZyXEL's IP telephony systems employees working in home offices can access business telephone services such as voice mail and conference calls, which can in turn reduce the number of business trips. It is convenient for enterprises to introduce green, new ways of communication.

## Environmental Sustainability

ZyXEL has obtained certifications for meeting ISO 9001, TL 9000, ISO 14001 and QC 08000 standards. To uphold its role as a responsible corporate citizen, ZyXEL strives to maintain minimal raw material consumption, maximum pollution prevention and efficient risk management by following the PDCA workflow. ZyXEL promotes environmental and professional safety with an integrated and effective monitoring system, a system under constant improvement, to meet every possible need.

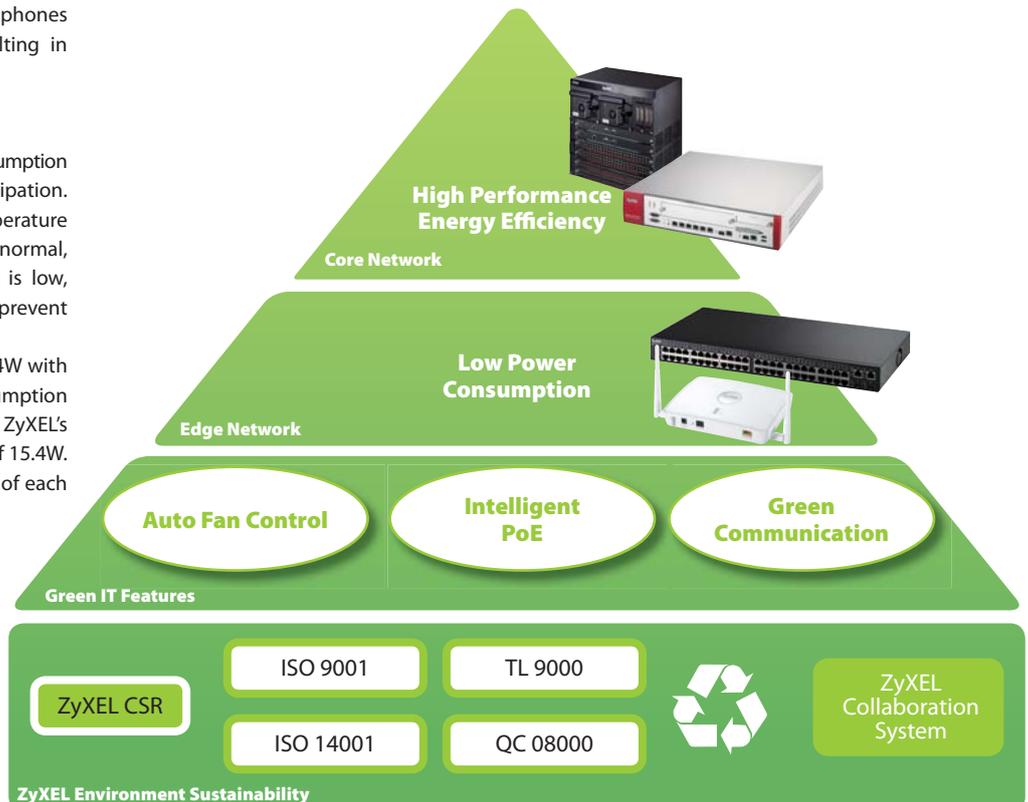
ZyXEL does not only make its operations fully comply with the three EU directives – WEEE



(Waste Electronics and Electrical Equipment), RoHS (Restriction of Hazardous Substances) and the recent EuP (Eco-Design Requirements for Energy Using Products) – but also enforces the policy when working with suppliers. In order to implement the "green management" standard, ZyXEL's management has built up a unique "Green Collaboration System" to monitor all "cradle to grave" stages such as material supply, manufacturing, assembly, transportation and the use and decommission of its products for environmental care.

To learn more about ZyXEL's SME green networking solution, please visit:  
<http://www.zyxel.com/web/green/>

Local information: [www.zyxel.com/Europe/Impulse](http://www.zyxel.com/Europe/Impulse)





# Connecting the Future with ZYXEL Products

This year ZyXEL is celebrating the 20th anniversary of its foundation. During the past 20 years, ZyXEL has used its innovative products to win partnerships with customers and build network infrastructures worldwide. Networking technology is changing the way people work, live, communicate and play. ZyXEL's innovative technologies and solutions will play a big part in this change and will confidently face the challenges of the future.

Aimed at achieving a leading position in advanced and innovative networking technology in the world and with core values that emphasise innovation and customer satisfaction, ZyXEL has evolved from a small modem development team of four engineers in 1989 to become one of the global leaders in broadband networking with more than 3,200 employees and 32 offices worldwide.

This 20th anniversary logo implies corporate values including cooperation and courage, factors that have contributed to ZyXEL's success over the past 20 years. With an eye on the years to come, ZyXEL's "Connecting the Future" catchphrase for

its 20th anniversary also embodies the company's determination to continue moving forward.

Celebrate 20 years of networking history and win ZyXEL's latest products by searching for the oldest one!

 **Please check:**  
[www.zyxel.com/web/zy20\\_competition.php](http://www.zyxel.com/web/zy20_competition.php)



## Wisdom from the Great Nature – Lessons from Flying Geese

ZyXEL's 20th anniversary logo is inspired by the flying formation of migrating geese.

### Lesson 1:

When the environment changes, the elder geese will lead the team to the next destination. They leverage the power from each other, thus they arrive at the next destination faster and more easily.

### Lesson 2:

When any goose leaves the team by accident, flying alone is much more difficult than flying together. Team members will find out and bring the missing one back to the team.

### Lesson 3:

When the leader becomes tired, some other goose will back-up so the team will not slow down.

### Lesson 4:

The last goose always "honks" to encourage the whole team to move forward. Not only the leader but all members in the team are important.

- 2008** — ZyXEL wins Sprint's XOHM project, the first worldwide commercial WiMAX deployment
- 2007** — ZyXEL is ranked as Taiwan's first "Green Enterprise", second best in Asia
- 2007** — For seven consecutive years (2001~2007), Embarq (Sprint) awards ZyXEL with the "Supplier-Partner Award of Excellence" title and ZyXEL's branches are established in **Benelux, Turkey and Pakistan**
- 2006** — Major customer acquisition: Viettel and ZyXEL's branches are established in **Costa Rica, Thailand, India, Malaysia and Singapore**
- 2005** — Major customer acquisition: CAT and ZyXEL's branches are established in **Poland, Russia, Hungary, Kazakhstan and Ukraine**
- 2004** — Major customer acquisition: Time Warner and ZyXEL's **French, Spanish, Czech, UK branches and China Wuxi park** are established
- 2003** — Major customer acquisition: FPT Telecom, TRUE Telecom and ZyXEL's **Finnish subsidiary** is established
- 2002** — Major customer acquisition: Telenor, Deutsche Telekom, Swisscom
- 2001** — Major customer acquisition: **Telefonica** and ZyXEL's **Chinese subsidiary** is established in Shanghai
- 2000** — Major customer acquisition: CHT, COVAD
- 1999** — Major customer acquisition: Sprint (now Embarq) and ZyXEL's **German, Norwegian and Swedish** branches are established
- 1999** — ZyXEL enters the **broadband arena** and releases Prestige 641, the world's first PPPoE ADSL router
- 1997** — Major customer acquisition: Bell Atlantic (now Verizon)
- 1996** — ZyXEL's first overseas subsidiary is established in the **United States**
- 1994** — ZyXEL modems win a tender for the Central Election Commission of the Russian Federation
- 1992** — ZyXEL announces its first product, U-1496, the world's **first integrated voice/fax/modem**
- 1989** — ZyXEL was **founded** by Dr. Shun-I Chu in Taiwan

## IMPRESSUM

For more (local) information please visit our website: [www.zyxel.com/Europe/Impulse](http://www.zyxel.com/Europe/Impulse).  
 Feedback and enquiries: [sales@zyxel.eu](mailto:sales@zyxel.eu), [support@zyxel.eu](mailto:support@zyxel.eu), [marketing@zyxel.eu](mailto:marketing@zyxel.eu).  
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 Valid from 1st August to 31st October 2009.