



# ZyWALL USG FLEX 100/100W/200/500/700

## USG FLEX Firewall

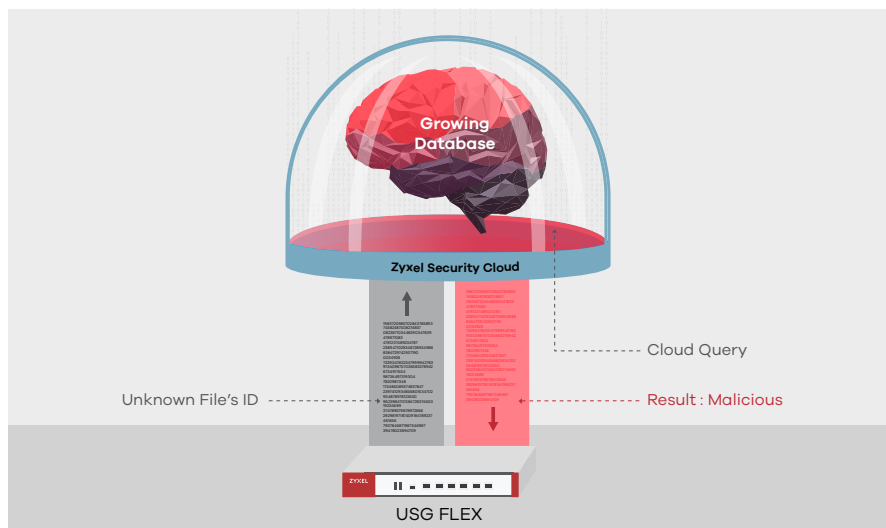
### Precise protection. Flexible subscription.

Introducing the latest USG Series-USG FLEX, delivering higher levels of performance and flexibility! USG FLEX's platform continue its tradition in providing the latest, leading technologies, all while providing a complete suite of security subscription with seamless, scalable gateway connectivity. We want to bring top of the line experience for all business owners!

### Benefits

#### Higher precision detection uncovers threats

ZyXel Security Cloud keeps learning from collecting threat information. USG FLEX series supports advanced Anti-Malware with cloud query express mode which expands billions of signatures. The cloud query with high detection rate helps verify the file hash within seconds.



Precise detection with cloud query express mode



High assurance multi-layered protection



Boosts up to 125% firewall performance and 500% UTM performance



Flexible subscription options for your security needs



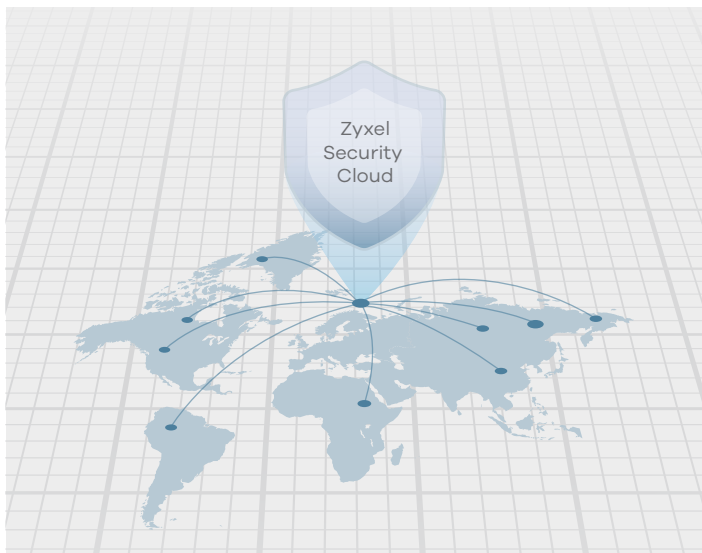
Robust SSL, IPSec and L2TP over IPSec VPN connectivity and VPN high availability (HA)



Enabled hospitality features with hotspot, AP management, and concurrent device upgrades

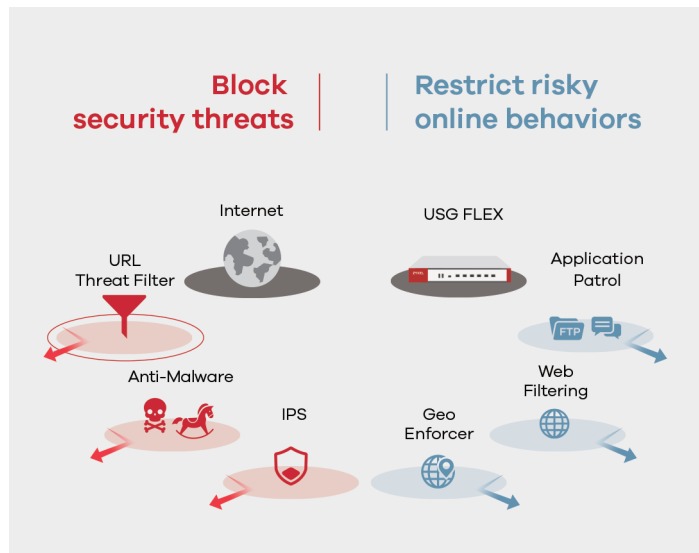
## Best threat intelligence alliance

To ensure your network on getting the best protection, USG FLEX integrates threat intelligence from leading companies and organizations in the cybersecurity field for scaled information about file and real-time threat data. By leveraging a wider malware coverage with multiple-sourced database, this increases the accuracy in threat detection. Web Filtering is also included to safeguard all internet access, especially with CTIRU (Counter-Terrorism Internet Referral Unit) to restrict access to terrorist materials online.



## High assurance multi-layered protection

USG FLEX is designed with multi-layer protection against multiple types of threats from in and out. URL Threat Filter, Anti-Malware, and Intrusion Prevention block external attacks, while Application Patrol and Web Filtering empower you to restrict users' inappropriate application usage or web access. Eliminate blind spots in all the encrypted traffic with SSL inspection with the support for TLS 1.3. All together safeguarding your network without any unattended gaps.



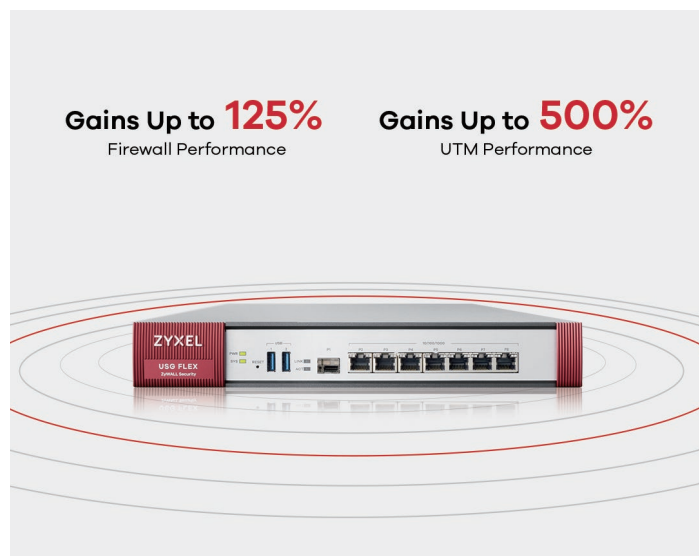
## Flexible subscription for your need

USG FLEX security services turn your firewall into a comprehensive security solution. Add Unified Threat Management (UTM) and Hospitality bundled service to get the protection and connectivity that meet your network needs. You can also choose from a single license whenever you need, such as Web Filtering, Anti-Malware, SecuReporter Premium, and more.



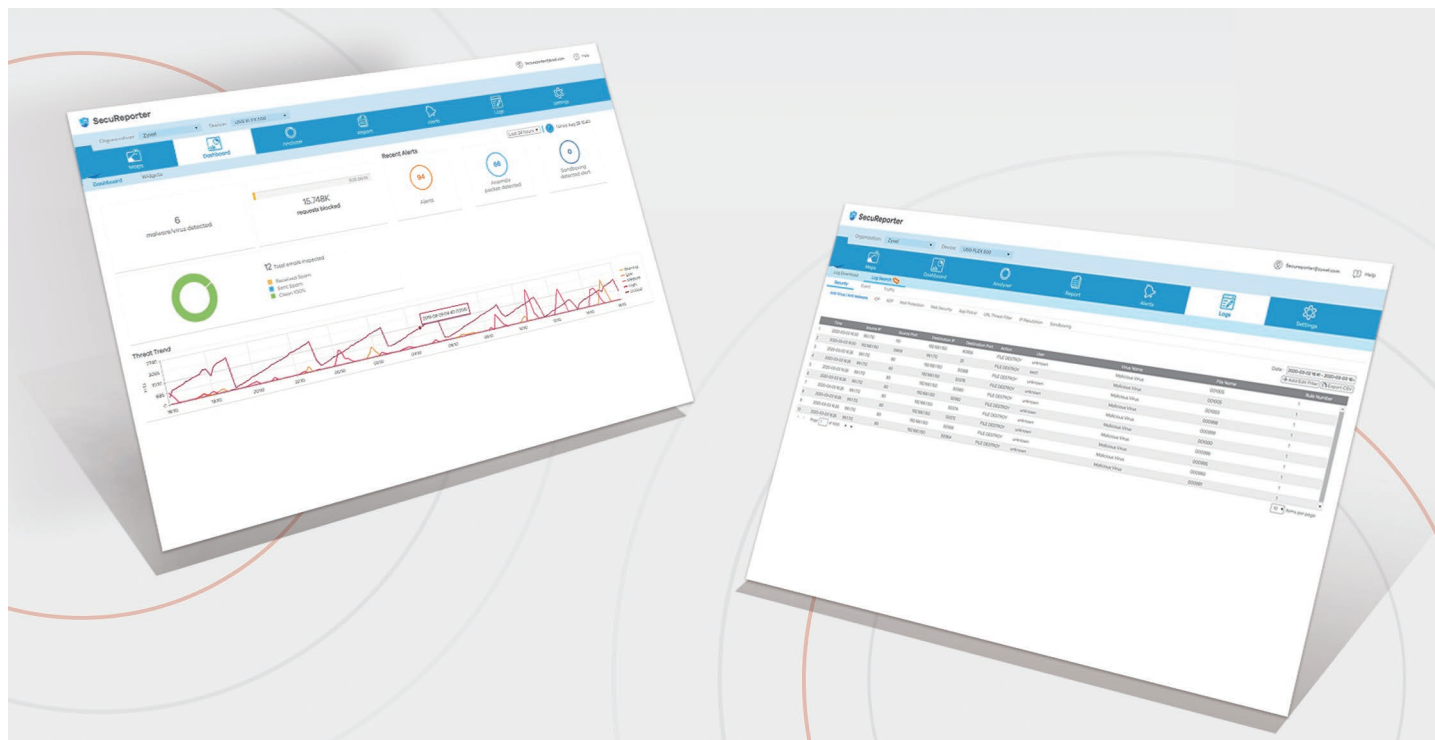
## Performance boost

The newly designed platform gains up to 125% firewall performance. Maximizes UTM performance by minimizing computing power usage and get additional 500% UTM performance with cloud query express mode.



## Analytics report and enhanced insights

USG FLEX series dashboard gives user-friendly traffic summary and threat statistic visuals. Utilize SecuReporter for further threat analysis with correlation feature design, making it easy to proactively trackback network status to prevent the next threat event. Centralized visibility of network activities for you to easily manage multiple clients.

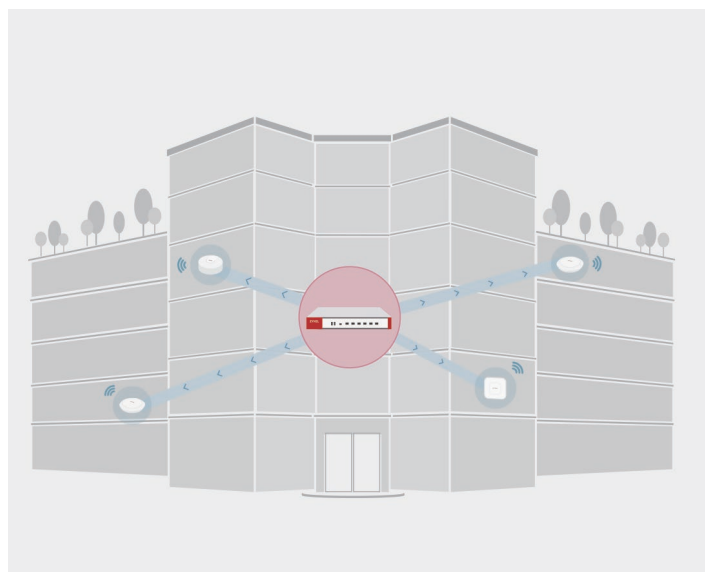


## Comprehensive connectivity

ZyWALL USG FLEX series not only can protect your network, but it also support Hospitality features including Hotspot, AP management with support for WiFi 6 feature, and concurrent device upgrade. You can buy time-based bundle or quantity-based license to optimize your initial investment and maximize the scale in your environment.

## Work remotely and securely

As demands for remote access and work from home has increased, USG FLEX offers IPsec, SSL or L2TP based VPNs to provide flexible secure network options for many of the common operating systems. The Setup Wizard only needs four steps to complete VPN connection easily and quickly. USG FLEX series is also validated by Microsoft Azure and AWS for SMB convenience by using a combination of onsite and cloud-based infrastructure with hybrid networks.



## Hardware Included License

### Hardware Bundled with Licenses

| UTM Security Pack<br>(1Year +30-Day trial) | Hospitality Pack<br>(30-Day trial) |
|--------------------------------------------|------------------------------------|
| Web Filtering                              | Managed AP Service                 |
| IPS(IDP)                                   | Hotspot Management*                |
| Application Patrol                         | Concurrent device                  |
| Anti-Malware                               |                                    |
| Email Security                             |                                    |
| SecuReporter                               |                                    |

### Hardware Only

| UTM Security Pack<br>(30-Day trial) | Hospitality Pack<br>(30-Day trial) |
|-------------------------------------|------------------------------------|
| Web Filtering                       | Managed AP Service                 |
| IPS(IDP)                            | Hotspot Management*                |
| Application Patrol                  | Concurrent device                  |
| Anti-Malware                        |                                    |
| Email Security                      |                                    |
| SecuReporter                        |                                    |

### Renewal License

| UTM Security Pack<br>(1YR/ 2YRS) | Hospitality Pack<br>(1YR/ 2YRS) | Single (À La Carte) License                          |
|----------------------------------|---------------------------------|------------------------------------------------------|
| Web Filtering                    | Managed AP Service              | Web Filtering* <sup>1</sup> (1YR/ 2YRS)              |
| IPS(IDP)                         | Hotspot Management*             | Anti-Malware (1YR/ 2YRS)                             |
| Application Patrol               | Concurrent device               | Managed AP Service<br>(Quantity Based)               |
| Anti-Malware                     |                                 | Hotspot Management<br>(Perpetual)                    |
| Email Security                   |                                 | Concurrent device<br>(Quantity Based* <sup>2</sup> ) |
| SecuReporter Premium             |                                 |                                                      |

\*: Hotspot Management is available on USG FLEX 200/500/700 only

\*1: Will include Email Security license service

\*2: Allowing additional connected clients is available to USG FLEX 500/700 only

| License Service            | Feature                                                                         |
|----------------------------|---------------------------------------------------------------------------------|
| <b>UTM License</b>         |                                                                                 |
| Web Filtering              | Block access to malicious or risky web sites                                    |
| IPS(IDP)                   | Deep-packet inspection against known attacks from Network                       |
| Application Patrol         | Automatically categorize and manage the network application usage               |
| Anti-Malware               | Scan files at the gateway or Zyxel security cloud for malware and other threats |
| Email Security             | Fast detection to block spam/phishing mail with malicious contents              |
| SecuReporter               | Cloud-based intelligent analytics and report                                    |
| <b>Hospitality License</b> |                                                                                 |
| Managed AP Service         | AP auto discovery and provisioning                                              |
| Hotspot Management         | Various Network Access Control                                                  |
| Concurrent device          | Top up allowed number of connected clients                                      |

## Specifications

| Model                                         | USG FLEX 100                                                                      | USG FLEX 100W                                                                     | USG FLEX 200                                                                        |
|-----------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Product photo                                 |  |  |  |
| <b>Hardware Specifications</b>                |                                                                                   |                                                                                   |                                                                                     |
| WiFi Standard                                 | -                                                                                 | 802.11 a/b/g/n/ac                                                                 | -                                                                                   |
| 10/100/1000 Mbps RJ-45 ports                  | 4 x LAN/DMZ, 1 x WAN, 1 x SFP                                                     | 4 x LAN/DMZ, 1 x WAN, 1 x SFP                                                     | 4 x LAN/DMZ, 2 x WAN, 1 x SFP                                                       |
| USB3.0 ports                                  | 1                                                                                 | 1                                                                                 | 2                                                                                   |
| Console port                                  | Yes (RJ-45)                                                                       | Yes (RJ-45)                                                                       | Yes (DB9)                                                                           |
| Rack-mountable                                | -                                                                                 | -                                                                                 | Yes                                                                                 |
| Fanless                                       | Yes                                                                               | Yes                                                                               | Yes                                                                                 |
| <b>System Capacity &amp; Performance*1</b>    |                                                                                   |                                                                                   |                                                                                     |
| SPI firewall throughput (Mbps)*2              | 900                                                                               | 900                                                                               | 1,800                                                                               |
| VPN throughput (Mbps)*3                       | 270                                                                               | 270                                                                               | 450                                                                                 |
| VPN IMIX throughput (Mbps)*3                  | 100                                                                               | 100                                                                               | 160                                                                                 |
| IDP throughput (Mbps)*4                       | 540                                                                               | 540                                                                               | 1,100                                                                               |
| AV throughput (Mbps)*4                        | 360                                                                               | 360                                                                               | 570                                                                                 |
| UTM throughput (AV and IDP)*4                 | 360                                                                               | 360                                                                               | 550                                                                                 |
| Max. TCP concurrent sessions*5                | 300,000                                                                           | 300,000                                                                           | 600,000                                                                             |
| Max. concurrent IPsec VPN tunnels*6           | 40                                                                                | 40                                                                                | 100                                                                                 |
| Concurrent SSL VPN users                      | 30                                                                                | 30                                                                                | 60                                                                                  |
| VLAN interface                                | 8                                                                                 | 8                                                                                 | 16                                                                                  |
| Concurrent devices logins (default/max.)*7*8  | 64                                                                                | 64                                                                                | 200                                                                                 |
| <b>Speedtest Performance</b>                  |                                                                                   |                                                                                   |                                                                                     |
| SPI firewall throughput (Mbps)*11             | 760                                                                               | 760                                                                               | 810                                                                                 |
| <b>WLAN Management</b>                        |                                                                                   |                                                                                   |                                                                                     |
| Managed AP number (default/max.)*7            | 8/24                                                                              | 8/24                                                                              | 8 40                                                                                |
| Recommend max. AP in 1 AP Group               | 10                                                                                | 10                                                                                | 20                                                                                  |
| <b>Security Service</b>                       |                                                                                   |                                                                                   |                                                                                     |
| Anti-Malware*7                                | Yes                                                                               | Yes                                                                               | Yes                                                                                 |
| IPS (IDP)                                     | Yes                                                                               | Yes                                                                               | Yes                                                                                 |
| Application Patrol*7                          | Yes                                                                               | Yes                                                                               | Yes                                                                                 |
| Email Security                                | Yes                                                                               | Yes                                                                               | Yes                                                                                 |
| Web filtering (CF)*7*9                        | Yes                                                                               | Yes                                                                               | Yes                                                                                 |
| SecuReporter Premium*7                        | Yes                                                                               | Yes                                                                               | Yes                                                                                 |
| <b>Key Features</b>                           |                                                                                   |                                                                                   |                                                                                     |
| VPN                                           | IKEv2, IPsec, SSL, L2TP/IPsec                                                     | IKEv2, IPsec, SSL, L2TP/IPsec                                                     | IKEv2, IPsec, SSL, L2TP/IPsec                                                       |
| SSL (HTTPS) inspection                        | Yes                                                                               | Yes                                                                               | Yes                                                                                 |
| 2-Factor Authentication                       | Yes                                                                               | Yes                                                                               | Yes                                                                                 |
| Hotspot Management*7                          | -                                                                                 | -                                                                                 | Yes                                                                                 |
| Ticket printer support*10/Support Q'ty (max.) | -                                                                                 | -                                                                                 | Yes (SP350E)/10                                                                     |
| Microsoft Azure                               | Yes                                                                               | Yes                                                                               | Yes                                                                                 |
| Amazon VPC                                    | Yes                                                                               | Yes                                                                               | Yes                                                                                 |

| Model                              |                             | USG FLEX 100                                                                                                             | USG FLEX 100W                                                                                                            | USG FLEX 200                                                                                   |
|------------------------------------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Power Requirements                 |                             |                                                                                                                          |                                                                                                                          |                                                                                                |
| Power input                        |                             | 12V DC, 2A max.                                                                                                          | 12V DC, 2A max.                                                                                                          | 12V DC, 2.5A max.                                                                              |
| Max. power consumption (Watt Max.) |                             | 12.5                                                                                                                     | 12.5                                                                                                                     | 13.3                                                                                           |
| Heat dissipation (BTU/hr)          |                             | 42.65                                                                                                                    | 42.65                                                                                                                    | 45.38                                                                                          |
| Physical Specifications            |                             |                                                                                                                          |                                                                                                                          |                                                                                                |
| Item                               | Dimensions (WxDxH) (mm/in.) | 216 x 147.3 x 33/<br>8.50 x 5.80 x 1.30                                                                                  | 216 x 147.3 x 33/<br>8.50 x 5.80 x 1.30                                                                                  | 272 x 187 x 36/<br>10.7 x 7.36 x 1.42                                                          |
|                                    | Weight (Kg/lb.)             | 0.85/1.87                                                                                                                | 0.85/1.87                                                                                                                | 1.4/3.09                                                                                       |
| Packing                            | Dimensions (WxDxH) (mm/in.) | 284 x 190 x 100/<br>11.18 x 7.48 x 3.94                                                                                  | 284 x 190 x 100/<br>11.18 x 7.48 x 3.94                                                                                  | 427 x 247 x 73/<br>16.81 x 9.72 x 2.87                                                         |
|                                    | Weight (kg/lb.)             | 1.40/3.09                                                                                                                | 1.40/3.09                                                                                                                | 2.23 (W/O bracket)<br>2.42 (W/ bracket)                                                        |
| Included accessories               |                             | <ul style="list-style-type: none"> <li>• Power adapter</li> <li>• RJ-45 - RS-232 cable for console connection</li> </ul> | <ul style="list-style-type: none"> <li>• Power adapter</li> <li>• RJ-45 - RS-232 cable for console connection</li> </ul> | <ul style="list-style-type: none"> <li>• Power adapter</li> <li>• Rack mounting kit</li> </ul> |
| Environmental Specifications       |                             |                                                                                                                          |                                                                                                                          |                                                                                                |
| Operating                          | Temperature                 | 0°C to 40°C/<br>32°F to 104°F                                                                                            | 0°C to 40°C/<br>32°F to 104°F                                                                                            | 0°C to 40°C/<br>32°F to 104°F                                                                  |
|                                    | Humidity                    | 10% to 90%<br>(non-condensing)                                                                                           | 10% to 90%<br>(non-condensing)                                                                                           | 10% to 90%<br>(non-condensing)                                                                 |
| Storage                            | Temperature                 | -30°C to 70°C/<br>-22°F to 158°F                                                                                         | -30°C to 70°C/<br>-22°F to 158°F                                                                                         | -30°C to 70°C/<br>-22°F to 158°F                                                               |
|                                    | Humidity                    | 10% to 90%<br>(non-condensing)                                                                                           | 10% to 90%<br>(non-condensing)                                                                                           | 10% to 90%<br>(non-condensing)                                                                 |
| MTBF (hr)                          |                             | 989810.8                                                                                                                 | 989810.8                                                                                                                 | 529688.2                                                                                       |
| Certifications                     |                             |                                                                                                                          |                                                                                                                          |                                                                                                |
| EMC                                |                             | FCC Part 15 (Class B),<br>CE EMC (Class B),BSMI                                                                          | FCC Part 15 (Class B),<br>CE EMC (Class B),BSMI                                                                          | FCC Part 15 (Class B),<br>CE EMC (Class B),<br>C-Tick (Class B), BSMI                          |
| Safety                             |                             | LVD (EN60950-1), BSMI                                                                                                    | LVD (EN60950-1), BSMI                                                                                                    | LVD (EN60950-1), BSMI                                                                          |

| Model                                             | USG FLEX 500                                                                      | USG FLEX 700                                                                        |
|---------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Product photo                                     |  |  |
| <b>Hardware Specifications</b>                    |                                                                                   |                                                                                     |
| 10/100/1000 Mbps RJ-45 ports                      | 7 (configurable), 1 x SFP (configurable)                                          | 12 (configurable), 2 x SFP (configurable)                                           |
| USB3.0 ports                                      | 2                                                                                 | 2                                                                                   |
| Console port                                      | Yes (DB9)                                                                         | Yes (DB9)                                                                           |
| Rack-mountable                                    | Yes                                                                               | Yes                                                                                 |
| Fanless                                           | -                                                                                 | -                                                                                   |
| <b>System Capacity &amp; Performance*1</b>        |                                                                                   |                                                                                     |
| SPI firewall throughput (Mbps)*2                  | 2,300                                                                             | 5,400                                                                               |
| VPN throughput (Mbps)*3                           | 810                                                                               | 1,100                                                                               |
| VPN IMIX throughput (Mbps)*3                      | 240                                                                               | 550                                                                                 |
| IDP throughput (Mbps)*4                           | 1,500                                                                             | 2,000                                                                               |
| AV throughput (Mbps)*4                            | 800                                                                               | 1,450                                                                               |
| UTM throughput (AV and IDP)*4                     | 800                                                                               | 1,350                                                                               |
| Max. TCP concurrent sessions*5                    | 1,000,000                                                                         | 1,600,000                                                                           |
| Max. concurrent IPsec VPN tunnels*6               | 300                                                                               | 500                                                                                 |
| Concurrent SSL VPN users                          | 150                                                                               | 150                                                                                 |
| VLAN interface                                    | 64                                                                                | 128                                                                                 |
| Concurrent devices logins (default/max.)*7*8      | 200/300                                                                           | 500/800                                                                             |
| <b>Speedtest Performance</b>                      |                                                                                   |                                                                                     |
| SPI firewall throughput (Mbps)*11                 | 810                                                                               | 840                                                                                 |
| <b>WLAN Management</b>                            |                                                                                   |                                                                                     |
| Managed AP number (default/max.)*7                | 8/72                                                                              | 8/264                                                                               |
| Recommend max. AP in 1 AP Group                   | 60                                                                                | 200                                                                                 |
| <b>Security Service</b>                           |                                                                                   |                                                                                     |
| Anti-Malware*7                                    | Yes                                                                               | Yes                                                                                 |
| IPS (IDP)                                         | Yes                                                                               | Yes                                                                                 |
| Application Patrol*7                              | Yes                                                                               | Yes                                                                                 |
| Email Security                                    | Yes                                                                               | Yes                                                                                 |
| Web filtering (CF)*7*9                            | Yes                                                                               | Yes                                                                                 |
| SecuReporter Premium*7                            | Yes                                                                               | Yes                                                                                 |
| <b>Key Features</b>                               |                                                                                   |                                                                                     |
| VPN                                               | IKEv2, IPsec, SSL, L2TP/IPsec                                                     | IKEv2, IPsec, SSL, L2TP/IPsec                                                       |
| SSL (HTTPS) inspection                            | Yes                                                                               | Yes                                                                                 |
| 2-Factor Authentication                           | Yes                                                                               | Yes                                                                                 |
| Hotspot Management*7                              | Yes                                                                               | Yes                                                                                 |
| Ticket printer support*10/<br>Support Q'ty (max.) | Yes (SP350E)/10                                                                   | Yes (SP350E)/10                                                                     |
| Microsoft Azure                                   | Yes                                                                               | Yes                                                                                 |
| Amazon VPC                                        | Yes                                                                               | Yes                                                                                 |
| Device HA Pro                                     | Yes                                                                               | Yes                                                                                 |
| Link Aggregation (LAG)                            | Yes                                                                               | Yes                                                                                 |

| Model                                 |                                | USG FLEX 500                                                                                                         | USG FLEX 700                                                                                |
|---------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| <b>Power Requirements</b>             |                                |                                                                                                                      |                                                                                             |
| Power input                           |                                | 12V DC, 4.17A                                                                                                        | 100-240V AC,<br>50/60Hz, 2.5A max.                                                          |
| Max. power consumption<br>(Watt Max.) |                                | 24.1                                                                                                                 | 46                                                                                          |
| Heat dissipation (BTU/hr)             |                                | 82.23                                                                                                                | 120.1                                                                                       |
| <b>Physical Specifications</b>        |                                |                                                                                                                      |                                                                                             |
| Item                                  | Dimensions (WxDxH)<br>(mm/in.) | 300 x188 x 44/<br>16.93 x 7.4 x 1.73                                                                                 | 430 x 250 x 44/<br>16.93 x 9.84 x 1.73                                                      |
|                                       | Weight<br>(Kg/lb.)             | 1.65/3.64                                                                                                            | 3.3/7.28                                                                                    |
| Packing                               | Dimensions (WxDxH)<br>(mm/in.) | 351 x 152 x 245/<br>13.82 x 5.98 x 9.65                                                                              | 519 x 392 x 163/<br>20.43 x 15.43 x 6.42                                                    |
|                                       | Weight<br>(kg/lb.)             | 2.83/6.24                                                                                                            | 4.8/10.58                                                                                   |
| Included accessories                  |                                | <ul style="list-style-type: none"> <li>• Power adapter</li> <li>• Power cord</li> <li>• Rack mounting kit</li> </ul> | <ul style="list-style-type: none"> <li>• Power cord</li> <li>• Rack mounting kit</li> </ul> |
| <b>Environmental Specifications</b>   |                                |                                                                                                                      |                                                                                             |
| Operating                             | Temperature                    | 0°C to 40°C/<br>32°F to 104°F                                                                                        | 0°C to 40°C/<br>32°F to 104°F                                                               |
|                                       | Humidity                       | 10% to 90%<br>(non-condensing)                                                                                       | 10% to 90%<br>(non-condensing)                                                              |
| Storage                               | Temperature                    | -30°C to 70°C/<br>-22°F to 158°F                                                                                     | - 30°C to 70°C/<br>- 22°F to 158°F                                                          |
|                                       | Humidity                       | 10% to 90%<br>(non-condensing)                                                                                       | 10% to 90%<br>(non-condensing)                                                              |
| MTBF (hr)                             |                                | 529688.2                                                                                                             | 947736                                                                                      |
| Acoustic Noise                        |                                | 24.5dBA on < 25degC<br>Operating Temperature,<br>41.5dBA on full FAN speed                                           | 24.5dBA on < 25degC<br>Operating Temperature,<br>41.5dBA on full FAN speed                  |
| <b>Certifications</b>                 |                                |                                                                                                                      |                                                                                             |
| EMC                                   |                                | FCC Part 15 (Class A),<br>CE EMC (Class A),<br>C-Tick (Class A), BSMI                                                | FCC Part 15 (Class A),<br>CE EMC (Class A),<br>C-Tick (Class A), BSMI                       |
| Safety                                |                                | LVD (EN60950-1), BSMI                                                                                                | LVD (EN60950-1), BSMI                                                                       |

\*: This matrix with firmware ZLD4.50 or later.

\*1: Actual performance may vary depending on system configuration, network conditions, and activated applications.

\*2: Maximum throughput based on RFC 2544 (1,518-byte UDP packets).

\*3: VPN throughput measurement are based on RFC 2544 (1,424-byte UDP packets); IMIX: UDP throughput based on a combination of 64 byte, 512 byte, and 1424 byte packet sizes.

\*4: AV (with Express Mode) and IDP throughput measured using the industry standard HTTP performance test (1,460-byte HTTP packets). Testing done with multiple flows.

\*5: Maximum sessions measured using the industry standard Ixia IxLoad testing tool

\*6: Including Gateway-to-Gateway and Client-to-Gateway.

\*7: With Zyxel service license to enable or extend the feature capacity.

\*8: This is the recommend maximum number of concurrent logged-in devices.

\*9: SafeSearch function in CF need to enable SSL inspection firstly and not for small business models.

\*10: With Hotspot Management license support

\*11: The Speedtest result is conducted with 1Gbps WAN link in real world and it is subject to fluctuate due to quality of the ISP link.

## Wireless Specifications

| Model                                          |                                | USG FLEX 100W                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard compliance                            |                                | 802.11 a/b/g/n/ac                                                                                                                                                                                                                                                                                                    |
| Wireless frequency                             |                                | 2.4 / 5 GHz                                                                                                                                                                                                                                                                                                          |
| Radio                                          |                                | 2                                                                                                                                                                                                                                                                                                                    |
| SSID number                                    |                                | 8                                                                                                                                                                                                                                                                                                                    |
| Maximum transmit power<br>(Max. total channel) | US (FCC) 2.4 GHz               | 25 dBm, 3 antennas                                                                                                                                                                                                                                                                                                   |
|                                                | US (FCC) 5 GHz                 | 25 dBm, 3 antennas                                                                                                                                                                                                                                                                                                   |
|                                                | EU (ETSI) 2.4 GHz              | 20 dBm(EIRP), 3 antennas                                                                                                                                                                                                                                                                                             |
|                                                | EU (ETSI) 5 GHz                | 20 dBm(EIRP), 3 antennas                                                                                                                                                                                                                                                                                             |
| No. of antenna                                 |                                | 3 detachable antennas                                                                                                                                                                                                                                                                                                |
| Antenna gain                                   |                                | 2 dBi @ 2.4GHz<br>3 dBi @ 5 GHz                                                                                                                                                                                                                                                                                      |
| Data rate                                      |                                | <ul style="list-style-type: none"> <li>• 802.11n: up to 450Mbps</li> <li>• 802.11ac: up to 1300Mbps</li> </ul>                                                                                                                                                                                                       |
| Frequency Band                                 | 2.4 GHz<br>(IEEE 802.11 b/g/n) | <ul style="list-style-type: none"> <li>• USA (FCC): 2.412 to 2.462 GHz</li> <li>• Europe (ETSI): 2.412 to 2.472 GHz</li> <li>• TWN (NCC): 2.412 to 2.462 GHz</li> </ul>                                                                                                                                              |
|                                                | 5 GHz<br>(IEEE 802.11 a/n/ac)  | <ul style="list-style-type: none"> <li>• USA (FCC): 5.150 to 5.250 GHz; 5.250 to 5.350 GHz;<br/>5.470to 5.725 GHz; 5.725 to 5.850 GHz</li> <li>• Europe (ETSI): 5.15 to 5.35 GHz; 5.470 to 5.725 GHz</li> <li>• TWN (NCC): 5.15 to 5.25 GHz; 5.25 to 5.35 GHz;<br/>5.470 to 5.725 GHz; 5.725 to 5.850 GHz</li> </ul> |
| Receive sensitivity                            | 2.4 GHz                        | 11 Mbps ≤ -87 dBm<br>54 Mbps ≤ -74 dBm<br>HT20 ≤ -71 dBm<br>HT40 ≤ -68 dBm                                                                                                                                                                                                                                           |
|                                                | 5 GHz                          | 54 Mbps ≤ -74 dBm<br>HT40, MCS23 ≤ -68 dBm<br>VHT40, MCS9 ≤ -62 dBm<br>HT20, MCS23 ≤ -71 dBm<br>VHT20, MCS8 ≤ -66 dBm<br>VHT80, MCS9 ≤ -59 dBm                                                                                                                                                                       |

# Software Features

## Security Service

### Firewall

- ICSA-certified corporate firewall
- Routing and transparent (bridge) modes
- Stateful packet inspection
- User-aware policy enforcement
- SIP/H.323 NAT traversal
- ALG support for customized ports
- Protocol anomaly detection and protection
- Traffic anomaly detection and protection
- Flooding detection and protection
- DoS/DDoS protection

### Unified Security Policy

- Unified policy management interface
- Support Content Filtering, Application Patrol, firewall (ACL/SSL)
- Policy criteria: zone, source and destination IP address, user, time

### Intrusion Detection and Prevention (IDP)

- Routing and transparent (bridge) mode
- Signature-based and behavior based scanning
- Customized signatures supported
- Automatic signature updates

### Application Patrol

- Granular control over the most important applications
- Identifies and controls application behavior
- Supports 30+ application categories
- Supports user authentication
- Real-time statistics and reports

### Anti-Malware

- Stream-based scan engine (Stream Mode)
- HTTP, FTP, SMTP, and POP3 protocol supported
- No file size limitation
- Automatic signature updates

### E-mail Security

- Transparent mail interception via SMTP and POP3 protocols
- Spam and Phishing mail detection
- Blacklist and whitelist support
- Supports DNSBL checking

### URL Threat Filter

- Botnet C&C websites blocking
- Malicious URL blocking
- Supports External URL blacklist

### Content Filtering

- HTTPs domain filtering
- SafeSearch support
- Whitelist websites enforcement
- URL blacklist and whitelist with keyword blocking
- Customizable warning messages and redirect URL
- Customizable Content Filtering block page
- URL categories increased to 111
- CTIRU (Counter-Terrorism Internet Referral Unit) support

### IP Exception

- Provides granular control for target source and destination IP
- Supports security service scan bypass for IDP, Anti-Malware and URL Threat Filter

## VPN

### IPSec VPN

- Key management: IKEv1 (x-auth, mode-config), IKEv2 (EAP, configuration payload)
- Encryption: DES, 3DES, AES (256-bit)
- Authentication: MD5, SHA1, SHA2 (512-bit)
- Perfect forward secrecy (DH groups) support 1, 2, 5, 14, 15-18, 20-21
- PSK and PKI (X.509) certificate support
- IPSec NAT traversal (NAT-T)
- Dead Peer Detection (DPD) and relay detection
- VPN concentrator
- Route-based VPN Tunnel Interface (VTI)
- VPN high availability (Failover, LB)
- GRE over IPSec
- NAT over IPSec
- L2TP over IPSec
- Zyxel VPN client provisioning
- Support iOS L2TP/IKE/IKEv2 VPN client provision

### SSL VPN

- Supports Windows and Mac OS X
- Supports full tunnel mode
- Supports 2-Factor authentication

## Networking

### WLAN Management

- Supports AP Controller (APC) version 3.60
- 802.11ax Wi-Fi 6 AP and WPA3 support
- 802.11k/v/r support

- Wireless L2 isolation
- Supports auto AP FW update
- Scheduled WiFi service
- Dynamic Channel Selection (DCS)
- Client steering for 5 GHz priority and sticky client prevention
- Auto healing
- Customizable captive portal page
- WiFi Multimedia (WMM) wireless QoS
- CAPWAP discovery protocol
- Multiple SSID with VLAN
- Supports ZyMesh
- Support AP forward compatibility
- Rogue AP Detection

### Mobile Broadband

- WAN connection failover via 3G and 4G\* USB modems
- Auto fallback when primary WAN recovers

### IPv6 Support

- Dual stack
- IPv4 tunneling (6rd and 6to4 transition tunnel)
- SLAAC, static IP address
- DNS, DHCPv6 server/client
- Static/Policy route
- IPSec (IKEv2 6in6, 4in6, 6in4)

### Connection

- Routing mode, bridge mode and hybrid mode
- Ethernet and PPPoE
- NAT and PAT
- NAT Virtual Server Load Balancing
- VLAN tagging (802.1Q)
- Virtual interface (alias interface)
- Policy-based routing (user-aware)
- Policy-based NAT (SNAT)
- GRE
- Dynamic routing (RIPv1/v2 and OSPF, BGP)
- DHCP client/server/relay
- Dynamic DNS support
- WAN trunk for more than 2 ports
- Per host session limit
- Guaranteed bandwidth
- Maximum bandwidth
- Priority-bandwidth utilization
- Bandwidth limit per user
- Bandwidth limit per IP
- Bandwidth management by application
- Link Aggregation support\*

## Management

### Authentication

- Local user database
- External user database: Microsoft Windows Active Directory, RADIUS, LDAP
- IEEE 802.1x authentication
- Captive portal Web authentication
- XAUTH, IKEv2 with EAP VPN authentication
- IP-MAC address binding
- SSO (Single Sign-On) support
- Supports 2-factor authentication with Google Authenticator as the second factor for administrator account

### System Management

- Role-based administration
- Multi-lingual Web GUI (HTTPS and HTTP)
- Command line interface (console, web console, SSH and telnet)
- SNMP v1, v2c, v3
- System configuration rollback
- Configuration auto backup
- Firmware upgrade via FTP, FTP-TLS and Web GUI
- New firmware notify and auto upgrade
- Dual firmware images
- Cloud CNM SecuManager

### Logging and Monitoring

- Comprehensive local logging
  - Syslog (to up to 4 servers)
  - Email alerts (to up to 2 servers)
  - Real-time traffic monitoring
  - Built-in daily report
  - Cloud CNM SecuReporter
- \*: For specific models supporting the 3G and 4G dongles on the list, please refer to the Zyxel product page at 3G dongle document
- \*1: Supported models USG FLEX 500/700

## Access Point Compatibility List

| Product                   | Unified AP                                                                                                                                                | Unified Pro AP                                                                                                                                         |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Models</b>             | <ul style="list-style-type: none"> <li>• NWA5301-NJ</li> <li>• NWA5121-NI</li> <li>• NWA5123-AC HD</li> <li>• NWA5123-AC</li> <li>• NWA5123-NI</li> </ul> | <ul style="list-style-type: none"> <li>• WAC5302D-S</li> <li>• WAX510D</li> <li>• WAC5302D-Sv2*</li> <li>• WAC500*</li> <li>• WAC500H*</li> </ul>      |
|                           |                                                                                                                                                           | <ul style="list-style-type: none"> <li>• WAC6103D-I</li> <li>• WAC6503D-S</li> <li>• WAC6502D-S</li> <li>• WAC6303D-S</li> <li>• WAC6553D-E</li> </ul> |
|                           |                                                                                                                                                           | <ul style="list-style-type: none"> <li>• WAC6552D-S</li> <li>• WAC6502D-E</li> <li>• WAX650S</li> <li>• WAX610D*</li> </ul>                            |
| <b>Functions</b>          |                                                                                                                                                           |                                                                                                                                                        |
| <b>Central management</b> | Yes                                                                                                                                                       | Yes                                                                                                                                                    |
| <b>Auto provisioning</b>  | Yes                                                                                                                                                       | Yes                                                                                                                                                    |
| <b>Data forwarding</b>    | Local bridge                                                                                                                                              | Local bridge/Data tunnel                                                                                                                               |
| <b>ZyMesh</b>             | Yes                                                                                                                                                       | Yes                                                                                                                                                    |

\*: From APC3.0, commercial gateways supporting APC technology are able to recognize APs with FW release higher than APC3.0 as Forward Compatible APs. Resellers can introduce newly-available Zyxel APs with basic features supported without upgrading any new controller firmware.

## Accessories

### SecuExtender Software

| Item                     | Description                                                                                                | Supported OS                                                                                                                                                                                               |
|--------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>IPSec VPN Client*</b> | IPSec VPN client software for the ZyWALL and USG Series with Easy VPN for zero configuration remote access | <ul style="list-style-type: none"> <li>• Windows Server 2016</li> <li>• Windows Server 2019</li> <li>• Windows 7 (32/64-bit)</li> <li>• Windows 8 (32/64-bit)</li> <li>• Windows 10 (32/64-bit)</li> </ul> |
| <b>SSL VPN Client*</b>   | Secured VPN connection between PC/MAC and ZyWALL Firewall                                                  | <ul style="list-style-type: none"> <li>• Windows 7 (32/64-bit)</li> <li>• Windows 8 (32/64-bit)</li> <li>• Windows 10 (32/64-bit)</li> <li>• MacOS 10.14</li> </ul>                                        |

\*: A 30-day trial version of IPSec VPN client and SSL VPN client for MAC OS can be downloaded from official Zyxel website. To continue using the application, please contact your regional sales representatives and purchase a commercial license for the application.

### Service Gateway Printer

| Model         | Feature                                                                                                                                                                                                                                                                                                                 | Supported Model                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SP350E</b> | <ul style="list-style-type: none"> <li>• Buttons: 3</li> <li>• Paper roll width: 58 (+0/-1) mm</li> <li>• Interface: 10/100 Mbps RJ-45 port</li> <li>• Power input: 12V DC, 5A max.</li> <li>• Item dimensions (WxDxH): 176 x 111 x 114 mm (6.93" x 4.37" x 4.49")</li> <li>• Item weight: 0.8 kg (1.76 lb.)</li> </ul> | <ul style="list-style-type: none"> <li>• USG FLEX 200</li> <li>• USG FLEX 500</li> <li>• USG FLEX 700</li> <li>• VPN50</li> <li>• VPN100</li> <li>• VPN300</li> <li>• VPN1000</li> <li>• USG60(W)</li> <li>• USG110</li> <li>• USG210</li> <li>• USG310</li> <li>• USG1100</li> <li>• USG1900</li> <li>• USG2200 Series</li> <li>• ZyWALL 110</li> <li>• ZyWALL 310</li> <li>• ZyWALL 1100</li> </ul> |

\*: Hotspot management licenses required

### Transceivers (Optional)

| Model                    | Speed           | Connector | Wavelength                 | Max. Distance      | Optical Fiber Type | DDMI |
|--------------------------|-----------------|-----------|----------------------------|--------------------|--------------------|------|
| <b>SFP10G-SR*</b>        | 10-Gigabit SFP+ | Duplex LC | 850 nm                     | 300 m/<br>328 yd   | Multi Mode         | Yes  |
| <b>SFP10G-LR*</b>        | 10-Gigabit SFP+ | Duplex LC | 1310 nm                    | 10 km/<br>10936 yd | Single Mode        | Yes  |
| <b>SFP-1000T</b>         | Gigabit         | RJ-45     | -                          | 100 m/<br>109 yd   | Multi Mode         | -    |
| <b>SFP-LX-10-D</b>       | Gigabit         | LC        | 1310 nm                    | 10 km/<br>10936 yd | Single Mode        | Yes  |
| <b>SFP-SX-D</b>          | Gigabit         | LC        | 850nm                      | 550 m/<br>601 yd   | Multi Mode         | Yes  |
| <b>SFP-BX1310-10-D*1</b> | Gigabit         | LC        | 1310 nm(TX)<br>1490 nm(RX) | 10 km/<br>10936 yd | Single Mode        | Yes  |
| <b>SFP-BX1490-10-D*1</b> | Gigabit         | LC        | 1490 nm(TX)<br>1310 nm(RX) | 10 km/<br>10936 yd | Single Mode        | Yes  |

\*: only USG2200-VPN supports 10-Gigabit SFP+

\*1: SFP-BX1310-10-D and SFP-BX1490-10-D are must used in pairs.

For more product information, visit us on the web at [www.zyxel.com](http://www.zyxel.com)

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All specifications are subject to change without notice.

Datasheet ZyWALL USG FLEX 100/100W/200/500/700



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