HIGHLIGHTS

Enterprise SD-WAN, Firewall, VPN and Security in a Single Appliance

Support for up to 3 modems (4G-LTE, 5G and Wi-Fi) simultaneously

Dual 10GbE WAN/LAN Ports & Four 1GbE WAN/LAN Ports (Configurable)

All Inclusive SD-WAN Features within every zWAN Gateway Router at no extra cost

Scalable from a Small Single Office Business up to Multi-Office Enterprise

USE CASES

- **Standalone Gateway Router** Unmanaged, with WAN High Availability can be converted into a Managed Gateway Router
- **Always Connected Internet Gateway Router** Provides WAN High Availability both Unmanaged or Managed
- **VPN Server/Concentrator** Cloud Based Solution

- **SD-WAN Gateway Router** Suitable for Branch Offices or Data Centers
- **L7 Firewall Security** Upgradeable to a NGFW, IPS/IDS, DDoS, FQDN Filtering, DNS Filtering, Anti-Adware
- **Fast Deployment** Can be installed and deployed within minutes

Gateway Routers for Offices, Branches, Retail Locations & Remote Users

zWAN Gateway Routers (zWAN GRs) are multi-WAN network routers that integrate Firewall, VPN, SD-WAN and Security into a single appliance. zWAN GRs are an ideal choice for businesses looking to maintain uptime and performance, especially in environments where uninterrupted internet access is critical such as small-to-medium offices, branch offices, retail locations, remote site locations and remote users. zWAN GRs connectivity utilize Broadband and T-Mobile service which can be configured as a primary WAN connection, a secondary backup WAN connection or a tertiary WAN connection that bonds all Internet connections together for WAN High Availability and Network Balancing in a single device. zWAN GRs combine several essential networking features into one appliance, including:

- **Firewall Protection:** Ensures network security by blocking unauthorized access and potential threats.
- **VPN Support:** Provides secure connections for remote users and offices, ensuring privacy and data protection.
- **SD-WAN (Software-Defined WAN):** Allows dynamic, cost-effective management of multiple WAN connections for better performance and cost efficiency.
- **Security:** Enhances overall network security by integrating multiple layers of protection.
- **Scalability:** Scalable from a Single Gateway Router Deployment up to a Multi-Office Enterprise of Thousands of Locations.

Secure SD-WAN Gateway Router for Data Center & Branches

zWAN is AmZetta's cutting-edge Secure SD-WAN solution designed to enhance the agility, efficiency, and security of your organization's network. By leveraging multiple WAN services—such as Broadband, MPLS, 4G LTE, and 5G—zWAN ensures secure, reliable connections between your datacenters, branch offices, and remote workers utilizing available low cost network links. This innovative solution gives you complete control over your network, optimizing traffic flow to enhance the performance of critical applications and data.

With zWAN, organizations can simplify network management, improve application performance, reduce operational costs, and boost user experience. Whether you're a small business or a large enterprise, zWAN provides a scalable solution that connects offices, branches, and remote users seamlessly, driving productivity and supporting digital transformation.

Always Connected Internet (ACI) – Guaranteed Internet Connectivity

ACI, or Always Connected Internet, is a network solution that focuses on improving connectivity and reliability, particularly in single-office environments that typically wouldn't benefit from complex network setups like SD-WAN (Software-Defined Wide Area Network). Traditionally, SD-WAN technology has been used by large enterprises or multi-office organizations, but ACI brings these benefits to smaller-scale environments. Here's a breakdown of the core features:

- **Multiple WAN Paths:** ACI ensures reliable Internet connectivity by leveraging multiple types of WAN connections, including Broadband, 4G LTE, and 5G. This design guarantees that the office and its users stay online, even in the event of a network failure.

- **Modes of Operation:**
  - **WAN High Availability (HA) Mode:** This mode provides automated WAN failover and failback, meaning if one connection fails, the system quickly switches to another, minimizing downtime.
  - **Bonded HA Mode:** This is an active-active WAN configuration where all available Internet connections (e.g., Broadband, 4G LTE, 5G) work simultaneously. This not only provides failover but also increases available bandwidth, making the connection faster and more reliable.

- **Zero Downtime & Improved Performance:** ACI guarantees that your network will remain operational with zero downtime, even in the event of an Internet outage or slowdown. Additionally, it enhances application performance and ensures a better user experience.

In summary, ACI offers an advanced, reliable Internet solution for businesses that ensures continuous connectivity, high bandwidth, and seamless failover, without the complexities typically reserved for larger organizations.

USE CASES

Secure SD-WAN

- **Multi-Site Connectivity:** Connect multiple branches with secure, low-latency IPsec and SSL-VPN tunnels. Perfect for organizations needing seamless site-to-site communication.

- **Application-Aware Traffic Management:** Utilize the Level 7 firewall to prioritize critical applications and block unwanted traffic, ensuring consistent performance for business apps like VoIP, ERP, or SaaS tools.

- **Cost-Optimized WAN:** Combine broadband and cellular links to reduce reliance on expensive MPLS circuits, enabling cost-effective, reliable connectivity.

- **Centralized Network Management:** Manage multiple zWAN Gateway Routers via the zWAN Director, simplifying deployment, monitoring, and updates across distributed locations.

- **Secure and Scalable Deployment:** The zWAN Gateway Router's support for DNS filtering, anti-malware, and other security features protects against cyber threats, making it ideal for financial services, retail, and healthcare environments.

Always Connected Internet

- **Internet Uptime High Availability:** Combines multiple WAN connections (e.g., broadband and LTE) with automated failover and load balancing, ensuring a continuous internet connection.

- **Rapid Deployment:** Ideal for small businesses or remote sites requiring plug-and-play connectivity with minimal configuration.

- **Support for Hybrid Workforce:** Provides remote offices or work-from-home setups with resilient internet connectivity to support video conferencing, cloud applications, and collaboration tools.

- **Bandwidth Optimization:** Smart load balancing and policy-based routing optimize the use of LTE, 5G, and broadband simultaneously. This ensures low-priority traffic doesn't interfere with business-critical applications

- **Low-Cost Solution for SMBs:** Provides a cost-effective alternative to full SD-WAN setups, giving SMBs access to enterprise-grade reliability without the complexity or cost of a larger deployment.

zWAN FEATURES

- **Dynamic Path Selection & Transport -** Dynamic path selection to steer or route network traffic to one or multiple WAN links based on priority, network conditions or traffic patterns. Data packets are automatically steered to specific WAN links based on link availability, to balance network traffic dynamic path selection to steer or route network traffic to one or multiple WAN links based on priority, network conditions or traffic patterns. Data packets are automatically steered to specific WAN links based on link availability, to balance network traffic or to save costs. The data packets are identified by the SD-WAN and then categorized by application, source, user and destination. This packet identification is used to route the data packets down the most optimal path which results in enhanced performance of applications. The dynamic path selection and data routing is configured to utilize your existing underlay connectivity such as Broadband, LTE, MPLS or WAN. The SD-WAN uses the underlay connectivity's characteristics such as cost (flat, usage based etc.), bandwidth, latency and jitter to make decisions on application steering to the appropriate path(s).

- **Centralized Management -** Allows network administrators to centrally manage their entire network fabric by pushing out policies to all the branches with ease. This also allows for quicker integration of new branches. Administrators can also have a full view of the network, leading to the possibility of easily pinpointing any network issues and then take immediate action to resolve those issues. This insight can also be used to figure out where optimizations can be implemented to improve the overall usage of the network.

- **Network Security -** zWAN supplies an organization's network with a secure fabric to trusted devices while leveraging insecure connectivity, such as the Internet. SD-WAN has in-built security features as well, such as stateful firewalls, IPS/IDS Intrusion Prevention System/Intrusion Detection System), DNS filtering, and much more. All these features are provided at the CPE level, without the need for traffic to be filtered through a corporate data center. More advanced security features like web filtering, anti-SPAM, anti-phishing, ATD, etc. are available through the use of third-party security appliances.

- **Direct Connectivity -** SD-WAN empowers organizations with the freedom to connect branches directly to a corporate data center and directly to cloud services such as SaaS applications. Connecting to cloud services has the added benefit of not requiring the traffic to route through the corporate data center.

- **Policy Based Management -** Steers data based on policies (Quality of Service) configured specifically for your applications, devices, users, groups, locations and more. These polices are configured with a priority setting in which the SDWAN utilizes to prioritize the data packets and how they are dynamically routed. The policies can be configured to meet the specific business and QoS requirements. The policies enable the SD-WAN the ability to steer traffic over specific networks, based on costs, as well as prioritization of traffic based on application, such as videoconferencing of business-critical SaaS applications.

- **Zero-Touch Provisioning -** A secure true zero-touch provisioning of gateway routers. In order to onboard a device in a remote location the only required steps are to unbox the gateway router, plug it in and connect it to the internet. The gateway routers are automatically provisioned and configured to operational status. The network administrator can setup rules and policies that will be automatically applied when a matching gateway router is onboarded.

- **Improved Network Performance -** Awareness of traffic types that traverse through your network. An IT manager can prioritize traffic from business-critical applications as well as other services such as VoIP and web-conferencing and help steer the traffic via the most efficient route, automatically. This prioritization and steering work together to allow the IT Manager to get the best out of the available network, even minimize when network links experience packet loss and latency.

- **Cost Reduction -** Reduces overall costs by allowing the use of low cost alternatives to expensive MPLS such as the public internet, broadband and LTE networks, allowing direct cloud access for the increasing use of SaaS applications, getting better results from available public networks by use of traffic shaping, prioritization of network traffic.

- **Cloud Adaptation -** The use of SaaS applications and other cloud services are on the rise. SD-WAN facilitates cloud access throughout the network fabric, including branch offices and remote workers, which in turn removes the need to route cloud and remote traffic back through the corporate data center, thus reducing latency.

- **WAN High Availability -** Ensures that the zWAN Gateway Routers provide continuous uptime by automatically failing over to backup connections or devices in the event of a failure. By implementing multiple layers of redundancy, such as active-active or active-passive configurations, HA prevents network downtime and guarantees that critical business applications remain accessible even during unexpected disruptions. This feature is crucial for enterprises that rely on uninterrupted access to cloud services, corporate data centers, or essential applications.

- **Path Affinity -** Path Affinity ensures that traffic associated with a specific application or user flows through the same path consistently, optimizing performance and reliability. This feature is particularly useful in maintaining session persistence for applications that are sensitive to changes in network conditions, such as video conferencing, VoIP, or real-time communication tools. Path Affinity allows for seamless user experiences by reducing packet loss, latency, and jitter while improving overall application performance.

- **Load Balancing (Flow & Packet) -** zWAN Gateway Routers support both Flow-Based and Packet-Based Load Balancing, allowing efficient distribution of network traffic across multiple WAN links. Flow-Based Load Balancing directs entire sessions to a specific link, ideal for applications requiring consistent paths. Packet-Based Load Balancing, on the other hand, splits individual data packets across multiple links, optimizing bandwidth usage and ensuring maximum throughput. These features work together to prevent link saturation, ensuring network performance remains high, even during peak usage times.

- **Wireless Support (4G LTE/5G/Wi-Fi) -** zWAN Gateway Routers offer full support for 4G LTE and 5G wireless networks, giving organizations the flexibility to use wireless connectivity as a primary or backup WAN option. This feature is especially useful in remote locations where wired connections may be unavailable or costly. With built-in 4G LTE and 5G support, zWAN Gateway Routers can ensure business continuity by providing failover connectivity when primary WAN links experience outages or disruptions, ensuring constant uptime and network resilience.

- **Quality of Service (QOS) -** Quality of Service (QoS) allows network administrators to prioritize critical business applications over less important traffic, ensuring that time-sensitive applications like VoIP, video conferencing, and cloud services always receive the necessary bandwidth and low latency. QoS policies can be tailored to the needs of the organization, improving user experiences and maintaining consistent performance for the most important applications, even during times of network congestion.

- **Deep Packet Inspection (DPI) -** Deep Packet Inspection (DPI) analyzes the contents of each packet passing through the network to identify specific applications, users, and potential threats. By providing granular visibility into network traffic, DPI enhances security and allows for more precise policy enforcement. Administrators can use DPI to detect and block malicious content, manage bandwidth by application, and ensure compliance with organizational policies, all while improving overall network performance.

- **VPN Support -** Compatible with Windows 10/11, Linux, macOS, Android, and iOS devices, zWAN VPN offers seamless connectivity without requiring an agent for Windows 10/11. This streamlined approach simplifies remote access while ensuring secure and reliable connections across multiple platforms, making it ideal for organizations with diverse device environments.

zWAN SECURITY

zWAN Security is designed to provide comprehensive cybersecurity solutions to safeguard your network, devices, applications, and data. Key features of this bundle typically include:

- **Threat Prevention:** This includes advanced protection against both known and unknown cyber threats, such as malware, ransomware, and zero-day vulnerabilities. The system uses signature-based detection, behavioral analysis, and machine learning to identify malicious activity before it impacts your network.

- **Web Security:** This protects against web-based threats by filtering malicious websites and blocking harmful content. It can include URL filtering, content scanning, and DNS security, ensuring that users don't inadvertently access dangerous sites or download harmful content.

- **App & Data Protection:** zWAN Security helps safeguard sensitive data and applications through encryption, access controls, and data loss prevention technologies. These measures protect critical business applications from unauthorized access or data exfiltration, ensuring compliance with privacy regulations.

- **User Protection:** By securing users' interactions with both the network and the applications, the zWAN bundle includes features like multi-factor authentication, secure remote access, and user behavior analysis to mitigate internal and external risks

- **Secure Updates:** zWAN Gateway Routers are updated using a secure firmware update process that is very simple to perform. The zWAN Gateway Router requests updates which are sent via a secure tunnel from the AmZetta zWAN Repository. Updates are offered in the form of patches to ensure the process is quick and efficient.

Overall, the zWAN Security helps to create a robust, multi-layered defense system, ensuring the safety of all aspects of your digital infrastructure.

zWAN Security Features:

Stateful L7 Firewall - Stateful L7 Firewall with up to 1000 configurable rules. The Layer 7 (L7) Firewall allows users to control traffic based on specific applications rather than general traffic patterns. With this feature, users can enable or disable access to certain apps, meaning that only essential application traffic is allowed while all other traffic is blocked.

IPS/IDS - Intrusion prevention system and intrusion detection system monitors all incoming and outgoing network traffic, looking for any signs of abnormal or unauthorized activity. If a potential threat is detected, the IDS will alert the user, while the IPS takes it a step further by blocking suspicious traffic in real-time.

DNS Filtering - DNS Filtering blocks access to malicious or inappropriate websites by preventing domain names associated with harmful content from being resolved.

Anti-Adware (Ad Blocking) - Ad Blocking removes intrusive or malicious ads from websites and online services. By blocking ads, this feature speeds up web browsing and shields users from potentially harmful content, improving security and productivity.

FQDN Filtering - FQDN Filtering utilizes 35+ categories to determine categories of websites that are allowed or blocked. A user cannot access a website belonging to the blocked category while the opposite is true of a website belonging to the allowed category. There are also allowed and blocked website lists, which handle individual websites, rather than whole categories of websites.

Geofencing – Enhanced security with GPS-based geofencing, restricting device operation to predefined geographic boundaries. Geofencing activates during boot-up, ensuring the device functions only within authorized locations. Configurable through manual or auto-populated GPS settings, it supports real-time alerts and logging for boundary violations. This feature is ideal for deployments requiring strict location-based access control.

DDoS - zWAN Security was designed to defend against Distributed Denial of Service (DDoS) attacks by identifying and mitigating suspicious activities such as buffer overflow attacks, SYN floods, excessive port openings, and ICMP floods. These are indeed common methods for carrying out DDoS attacks, and it's crucial for a system to monitor these behaviors to protect networks and servers effectively.

zWAN Gateway Routers

TECHNICAL SPECIFICATIONS:

	z40	z50	z60	z100
Cellular Modems	3	1	1	-
SFP+	2x 10G	-	-	2x 10G
LAN/WAN Ports	4 x 1GbE	5 x 2.5GbE	8 x 2.5GbE	4x 1GbE
4G LTE Support	✓	✓	✓	-
5G Support	✓	-	-	-
Router Throughput	10 Gbps	4.5 Gbps	5 Gbps	13 Gbps
VPN Throughput (IPsec)	1500 Mbps	1500 Mbps	1500 Mbps	4.5 Gbps
Suggested User Count	Up to 50	Up to 100	Up to 200	Up to 1,000
Wi-Fi Access Point	✓	✓	✓	-
Wi-Fi WAN	✓	✓	✓	-
Wi-Fi Version	5, 6, 6e, 7	5, 6, 6e, 7	5, 6, 6e, 7	-
Remote Access	✓	✓	✓	✓
Operating Temperature	0°-40° C	0°-40° C	-20°-80° C	0°-40° C
Power Consumption	30W	15W	15W	12W
Dimensions (mm)	100.5 x 148 x 20	135 x 77 x 45	220 x 128 x 62	437 x 249 x 43
Security Features				
IPS/IDS	✓	✓	✓	✓
DNS Filtering	-	✓	✓	✓
Anti-Adware	✓	✓	✓	✓
DDoS	✓	✓	✓	✓
Firewall Rules	Up to 250	Up to 500	Up to 1,000	Up to 1,000

Wi-Fi® is a registered trademark of Wi-Fi Alliance. Bluetooth® is a registered trademark of Bluetooth SIG, Inc.

zWAN Gateway Routers

ORDERING INFORMATION

Product	Part Number	Description
AmZetta z40	AMZ-z40	AmZetta z40 Network Appliance (no modules)
5G Modem & Antennas	AMZ-Modem-QWS-RM520N-GL	5G Modem & 4 Antennas for AMZ-Z Network Appliance
4G Modem & Antennas	AMZ-Modem-QWS-EC25AF	4G LTE Modem & 2 Antennas for AMZ-Z Network Appliance
Wi-Fi Module & Antennas	AMZ-WIFI6-MPCIE-IN-1	WiFi Module & 2 Antennas for AMZ-Z Network Appliance
AmZetta z50	AMZ-z50	AmZetta z50 Network Appliance (no modules)
4G Modem & Antennas	AMZ-Modem-QWS-EC25AF	4G LTE Modem & 2 Antennas for AMZ-Z Network Appliance
Wi-Fi Module & Antennas	AMZ-WIFI6-MPCIE-IN-1	WiFi Module & 2 Antennas for AMZ-Z Network Appliance
AmZetta z60	AMZ-z60	AmZetta z60 Network Appliance (no modules)
4G Modem & Antennas	AMZ-Modem-QWS-RM530N-GL	4G LTE Modem & 4 Antennas for AMZ-Z Network Appliance
Wi-Fi Module & Antennas	AMZ-WIFI6-MPCIE-IN-1	WiFi Module & 2 Antennas for AMZ-Z Network Appliance
AmZetta z100	AMZ-z100	AmZetta z100 Network Appliance (no modules)

HARDWARE MAINTENANCE & WARRANTY INFORMATION

Hardware warranty is offered in 1, 3 and 5 terms with an annual renewal option for customers that want to pay annually for hardware warranty.

ADDITIONAL zWAN COMPONENTS

zWAN Software

The zWAN Software is preinstalled on the Gateway Router. The zWAN Software is licensed in Perpetual or Subscription models.

zWAN Director

The zWAN Director is a centralized management tool that simplifies the deployment, monitoring, and control of SD-WAN networks. It provides a single, intuitive interface where network administrators can configure policies, manage network traffic, and ensure optimal performance across multiple sites. By automating complex network tasks and offering real-time visibility into network operations, the Director enhances efficiency and security, to adapt to changing business requirements. The zWAN Director acts as the brain of the SD-WAN network, ensuring seamless connectivity and optimal performance. The zWAN Director is licensed in a Subscription model as self-hosted or within the AmZetta Cloud.

zWAN DC/Concentrator

The zWAN Datacenter/Concentrator is a critical component in the zWAN architecture, responsible for aggregating and managing traffic from multiple branch sites or remote locations. It operates as a central hub that consolidates network traffic, ensuring efficient and secure data flow between the enterprise's network and the wider internet or cloud services. By intelligently managing and directing traffic, the zWAN Concentrator optimizes network performance, reduces latency, and enhances overall connectivity. The zWAN Concentrator can be a physical Gateway Router in your Datacenter or a virtual appliance deployed

AmZetta Security Database & Updates

AmZetta Security contains a database for IPS/IDS Rule Set, DNS Filter, FQDN and Anti-Adware (Ad-Blocking). The database is managed by AmZetta and updated on a frequent basis. AmZetta offers both a manual and an automated model for updating the AmZetta Security Database for your zWAN Gateway Router. If you elect to take a Perpetual License for the zWAN Software, then a manual update of the AmZetta Security Database must be completed. If you elect to take a Subscription License for the zWAN Software, then an automated update of the AmZetta Security Database will be performed.

Utilities & Tools

Diagnostic Utilities and Tools such as speed test, ping test, trace path, ARP check, DNS lookup, self-diagnostic and many others are available to help diagnose performance issues and troubleshoot potential network constraints.

Configuration and Templates

The zWAN Gateway Router is designed to streamline and expedite the setup and deployment of your network infrastructure. By arriving preconfigured right out of the box, it eliminates the hassle of complex initial configuration and onboarding. Moreover, with zWAN's library of over 60 predefined templates, the deployment process becomes even more efficient and user-friendly, ensuring that you can get your network up and running quickly and smoothly. This combination of features makes the zWAN Gateway Router an ideal choice for businesses seeking a seamless and fast network implementation.

SUMMARY

The zWAN Gateway Router is a robust multi-WAN router designed for small-to-medium businesses, branch offices, retail locations, and remote users. It combines essential features such as firewall protection, VPN support for secure remote access, and SD-WAN capabilities for dynamic, cost-effective WAN management.

With multi-WAN connectivity, the Gateway Router supports primary, backup, and tertiary connections, enabling high availability and optimized bandwidth. Its Always Connected Internet (ACI) ensures seamless network stability by automatically switching to backup connections during outages, making it ideal for businesses requiring reliable and uninterrupted internet access.

Demo the Gateway Router in Your Environment

AmZetta offers free 7-day evaluation with no obligation to purchase. Simply visit **https://AmZetta.com/Eval** and complete the Evaluation Form. An AmZetta Solutions Engineer will contact you to get started in your evaluation.

About AmZetta

AmZetta Technologies was established in April 2019 as a spinoff from American Megatrends (better known as AMI). AmZetta is focused on hardware and software technologies in the VDI markets for the IT data center. Headquartered in Norcross, Georgia, AmZetta has locations in the U.S.A., India and Taiwan to better serve our customers. The AmZetta team has an average of 22 years of experience in leading technologies such as BIOS, Drivers, Firmware, Linux, Networking, RAID, Remote Management, Storage, VDI and Virtualization.