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# Aim to establish Win-Win Partnership with distributors, SIs, and ISPs around the world.

Since 1992, our Communication Division has been committed to the development, manufacture, and brand marketing of internet access devices.

Targeting the service integrators, SIs, VARs, and distributors, we provide a comprehensive portfolio of customizable, wired/wireless CPE devices to multi-national customers across five continents. Dedicated to developing In-Vehicle, M2M/Industrial IoT, Outdoor, Financial, and Networking equipment Solutions.

Ranging from xDSL, Fiber, Wi-Fi 5/Wi-Fi 6, fixed 5G/LTE Indoor and outdoor, and M2M/Industrial IoT routers.

Our complete line of networking products not only turns quality, stability, flexibility, and attentive service into reality but also consistently offers these important values to our customers.



# Content

### M2M/Industrial IoT Series

- M600-PT
- 4220Z
- M600
- 4220NZ
- M500
- 121P
- M120N
- 110NP
- M100/M150
- 8206AZ
- M100-NB
- 8920NZ
- M50UG
- 8206(V)AZ *R2*
- M50G
- 8208AZ

#### 5G NR Indoor Series

• 5500A

#### 5G NR Outdoor Series

• 5700

#### LTE Indoor Series

- 4520VAOZ R3
- 4520AZ R3
- 4500VAOZ *R3*
- 4500AZ R3
- 4520VNO(P)Z *R2*
- 4520NZ(L) R2
- 4500VNO(P)Z *R2*
- 4500NZ(L) R2

#### LTE Outdoor Series

- 4700AZ
- 4700ZU
- 4700ZUL
- 4600

#### xDSL Series

• 8900X *R3* 

#### xDSL+ Wireless AP

- 8206AZ *R2*
- 8206AZ
- 8200AXL-1200
- 8700NEXL *R2*
- 8700NEXL *R3*
- 8700AXL-1600
- 8900AX-1600 *R2*
- 8900AX-2400
- 8920AXL

### xDSL+Wireless AP+VoIP

- 8206VAZ *R2*
- 8700VAXL-1600

#### P2P Fibre Series

• 9900VA

# M2M/Industrial IoT Series



# Industrial/In-Vehicle Routers



WAN Interface				
LTE	•	•	● (x2)	•
EWAN	● GbE (*1)	● GbE (*1)	● GbE (*1)	● GbE <b>(*1)</b>
Hardware Interface				
SIM slot	● (x2)	● (x2)	• (x2)	● (x2)
Gigabit Ethernet	● (M12 x4) (Configurable EWAN x1)	● (RJ45 x4) (Configurable EWAN x1)	● (RJ45 x4) (Configurable EWAN x1)	● (RJ45 x4) (Configurable EWAN x1)
USB Host	● (USB 2.0 x1)	● (USB 2.0 x1)	● (USB 2.0 x2)	-
802.11n (2.4 GHz)	● (600Mbps)	● (600Mbps)	● (300Mbps)	● (300Mbps)
802.11ac (5 GHz)	● (1.7 Gbps)	● (1.7 Gbps)	-	-
GPS	•	•	•	• (optional)
mini USB	-	-	● (x2)	-
Serial port (RS-232/RS-485)	-	-	-	● (DB9 x1)
Features				
VPN	•	•	•	•
IPv4 / IPv6	•	•	•	•
Dual WAN (Failover/Failback)	•	•	•	•
Dual WAN (Load Balance)	•	•	•	•
Dual APNs	• (*2)	• (*2)	• (*2)	•(*2)
Dual Firmware Images	•	•	•	•
Metal Casing	•	•	•	•
Operating temperature	-40°C ~ 60 °C	-40°C ~ 60 °C	-40°C ~ 60 °C	-40°C ~ 60 °C

<sup>\*1:</sup> Software configurable EWAN.

<sup>\*2 :</sup> Dual APNs is only upon request for Telco/ ISP tender projects.

# **M2M/Industrial IoT Series**



	M100/M150	M100-NB	M50UG	M50U
Advanced Industrial Routers USB Dongle	C (UL) US LISTED  ((CCAM204G0190T4			1-1- A - 1- A
	Advanced Industrial LTE Router	Industrial LTE eMTC/NB-IoT Router	LTE USB Dongle	LTE USB Dongle
WAN Interface				
LTE	•	• (*1)	•	•
EWAN	●GbE (*2)	● GbE (*2)	-	_
Hardware Interface				
SIM slot	• (x1)	• (x1)	• (x2)	● (x2)
Gigabit Ethernet	● (RJ45 x2) (Configurable EWAN x1)	● (RJ45 x2) (Configurable EWAN x1)	-	-
GPS	• (optional)	• (optional)	• (optional)	• (optional)
Serial port (RS-232/RS-485)	● (DB9 x1)(*3)	● (DB9 x1)(*3)	-	-
Features				
VPN	•	•	-	-
IPv4 / IPv6	•	•	•	•
Dual WAN (Failover/Failback)	•	•	-	-
Dual WAN (Load Balance)	•	•	-	-
Dual APNs	• (*4)	•(*4)	-	-
Dual Firmware Images	•	•		
Metal Casing	•	•	•	•
Operating temperature	-20°C ~ 60 °C	-20°C ~ 60 °C	-40°C ~ 60 °C	-40°C ~ 60 °C

<sup>\*1:</sup> eMTC/NB-IoT (Cat.M1/Cat.NB1)

<sup>\*2:</sup> Software configurable EWAN.

<sup>\*3:</sup> M100, M100-NB supports RS-232 only. / M150 supports either RS-232 and RS-485.

<sup>\*4:</sup> Dual APNs is only upon request for Telco/ ISP tender projects.

# **M2M/Industrial IoT Series**



0°C ~ 40 °C

	BiPAC 4220Z	BiPAC 4220NZ	BiPAC 121P	BiPAC 110NP
M2M Routers	BREADEN, 0 0 T	BREDOW.	TOTAL	THE THE PARTY OF T
	LTE Embedded Firewall Router	LTE Embedded Wireless Firewall Router	LTE Triple-SIM VPN Router	Mini LTE Wireless VPN Router
WAN Interface				
LTE	•	•	•	•
EWAN	● GbE (*1)	● GbE (*1)	• (configurable via firmware)	• (configurable via firmware)
Hardware Interface				
SIM slot	● (x2)	● (x2)	● (x3)	● (x1)
Gigabit Ethernet	● (x2) (Configurable EWAN x1)	● (x2) (Configurable EWAN x1)	● (RJ45 x2)	● (RJ45 x2)
802.11n (2.4 GHz)	-	● (300Mbps)	-	● (300Mbps)
GPS	-	-	-	• (optional)
Features				
VPN	•	•	•	•
IPv4 / IPv6	•	•	•	•
Dual WAN (Failover / Failback)	•	•	•	•
Dual WAN (Load Balance)	•	•	•	•
Dual APNs	•	•	•	•

0°C ~ 40 °C

0°C ~ 40 °C

Operating temperature

0°C ~ 40 °C

Dual Firmware Images

<sup>\*1:</sup> Software configurable EWAN.

	8206AZ	8920NZ
M2M Routers		
	LTE Embedded V/ADSL2+ Wi-Fi 5 AC 1200 VPN Firewall Router	Dual-SIM LTE Embedded V/ADSL2+ Wireless-N VPN Firewall Router
WAN Interface		
LTE	•	•
V/ADSL	•	•
EWAN	• (*1)	• (*1)
Hardware Interface		
SIM slot	● (x1)	● (x2)
Gigabit Ethernet	● (x5) (Configurable EWAN x1)	● (x5) (Configurable EWAN x1)
USB Host	● (USB 2.0 x1)	● (USB 2.0 x1)
802.11n(2.4GHz)	● (300Mbps)	● (300Mbps)
802.11ac(5 GHz)	● (867Mbps(2x2))	-
FXS	-	-
Features		
VPN	•	•
IPv4 / IPv6	•	•
VLAN MUX	•	•
Dual WAN (Failover / Failback)	•	•
Dual WAN (Load balance)	•	•
Operating temperature	0°C ~ 40 °C	0°C ~ 40 °C

<sup>\*1:</sup> Software configurable EWAN.



<sup>\*1:</sup> Software configurable EWAN.



### **Billion CMS**

### Central Management System

Billion CMS is a standalone centralized management system that allows service providers and system integrators to monitor the status and performance of the terminals and remotely manage Billion devices.







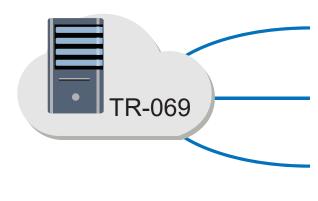
Streamline deployment & centralize maintenance

### **Billion CMS**

### Central Management System

Designed for service provider and system integrator to remotely control and manage Billion 5G/LTE routers, M2M routers, and VDSL/ADSL business routers, enabling users to minimize deployment, lower supporting service expenses, and maximize operational efficiency.





### M2M & LTE Embedded

M600-PT/M600/M500/4500 series/4700series

### xDSL 5G/LTE Embedded

8206AZ/8206AZ R2

### **xDSL**

89/87/82 series

# **Explore New Possibilities**

Delivering next-generation wireless WANs solutions based on 4G LTE and 5G NR to address critical business needs

### **Billion's 5G NR Access Solutions**

Indoor and outdoor gateways provide operators the flexibility to deliver 5G NR over Sub-6GHz with the fastest wireless broadband speeds and a more powerful subscriber experience.

# **5GNR Outdoor/Indoor Series**



**5G NR Indoor** Routers



5G NR Dual-Band Wi-Fi 5 VPN Firewall Router

WAN Interface	
5G NR	•
EWAN	● GbE (*1)
Hardware Interface	
SIM slot	● (x1)
Gigabit Ethernet	
802.11n (2.4GHz)	● (600 Mbps (3x3))
802.11ac (5GHz)	● (1733 Mbps (4x4))
USB Host	● (USB 2.0 x1)
Features	
VPN	•
Dual APN	• (*2)
Dual WAN (Failover/Failback)	•
Dual WAN (Load Balance)	•
IPv4 / IPv6	•
Operating temperature	0°C ~ 40 °C





5G NR Outdoor VPN Router

WAN Interface	
5G NR	•
EWAN	-
Hardware Interface	
SIM solt	● (x1)
Gigabit Ethernet	• (x1)
802.11n (2.4GHz)	-
802.11ac (5 GHz)	-
PoE-PD	•
Features	
VPN	•
Dual APN	• (*2)
Dual-WAN (Failover/Failback)	-
Dual-WAN (Load balance)	-
IPv4 / IPv6	•
IP67	•
Operating temperature	-40°C ~ 60 °C

<sup>\*1:</sup> Software configurable EWAN.

<sup>\*2:</sup> Dual APNs is only upon request for Telco/ ISP tender projects.

# **Specially designed for Carrier-Grade operations**

Designed to create new opportunities for network operators delivering a cost-efficient broadband service in rural and remote communities.

# Billion Outdoor LTE products have thousands of installed bases in North America and other areas.

Our Outdoor LTE routers offer superior RF engineering and a stable operating system for maximum LTE performance, as well as comprehensive networking solutions that are ready to be utilized in a diversity of revenue-generating applications and vertical markets.

# To meet the customer's demands for rich, immersive broadband experiences

This solution can help operators to extend the coverage and improve service to your customers at a fraction of the cost of existing fiber-to-the-premises solutions.

# **Outdoor LTE (VPN) Router**



**Covered with Industrial-Grade Ingress Protection Rating IP67** 

Embedded with the water-proofed capability that can sustain in the harshest outdoor weather without cracking the housing.

Can work reliably in freezing or extremely hot environments for extensive times





For delivering optimal network connectivity to all oil and mining sites, as well as serving as the reliable communication backbones for critical communication application











# **Outdoor LTE Dual-Band Wi-Fi Hotspot Router**

**Deliver Consistent Performance** even in the **Most Challenging Environments** 

# The cores of Billion Outdoor LTE Router technologies include

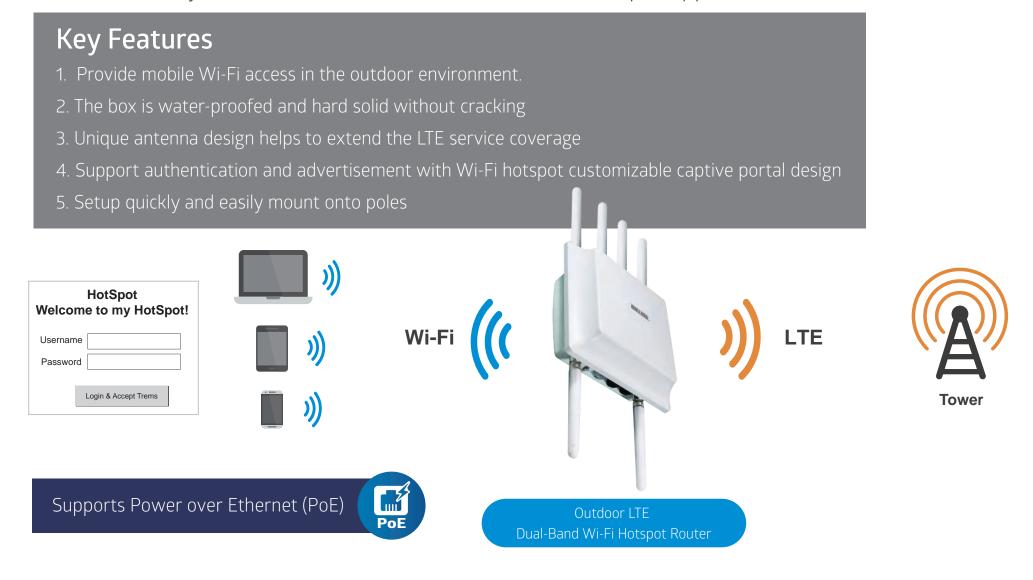
- Optimized antenna to extend the coverage to remote and rural areas
- ◆ Contain all Gigabit interfaces, including Ethernet and Wi-Fi
- ◆ IP67, Surge, and ESD protection
- Lightweight, compact and unobtrusive design
- ◆ Easy installation with PoE support
- ◆ Enterprise-class secure VPN connections, IPSec, OpenVPN, GRE, PPTP, L2TP
- ◆ Remote management with Billion CMS

# **Simultaneous Dual-Band Wireless** up to 2000Mbps

Concurrent dual-band 802.11a/n/ac(5GHz) and 802.11b/g/n(2.4GHz) Wireless LAN, allowing for Wi-Fi Hotspot functionality anywhere there is cellular signal.

■ Instant Outdoor Hotspot setup with Outdoor LTE Wi-Fi Router

BiPAC 4700AZ integrate the 4G LTE and Wi-Fi technology, providing instant high-performance LTE connectivity to outside harsh environments Wi-Fi Hotspot applications.



### ■ Instant POS Setup for Credit Card Access in Remote Area

Billion LTE outdoor router series can provide a robust LTE connection, enabling instant POS setup for credit card access in remote areas where there is no fixed-line Internet connection. Because of different local legislations, the POS system may need to be set up an Internet connection with the government's financial department (Ministry of Finance). BiPAC 4700ZU can establish a VPN connection with the central business unit where the main company server is located to process the transaction seamlessly.



	4700AZ	4700ZU	4700ZUL	4600
LTE Outdoor Routers				
	LTE Outdoor VPN Router with Carrier-Grade Dual-Band Wi-Fi Hotspot	LTE Outdoor VPN Router	LTE Outdoor Router	LTE Outdoor VPN Router
WAN Interface				
LTE	•	•	•	•
EWAN	● (GbE) (*1)	-	-	-
Hardware Interface				
SIM solt	● (x1)	• (x1)	• (x1)	• (x1)
Gigabit Ethernet	● (x2) (Configurable EWAN x1)	● (x1)	• (x1)	● (x1)
802.11n(2.4GHz)	● (300 Mbps (2x2))	-	-	-
802.11n(5 GHz)	● (1700 Mbps (4x4))	-	-	-
PoE-PD	•	•	•	•
Features				
IPv4 / IPv6	•	•	•	•
Dual APN	• (*2)	• (*2)	• (*2)	• (*2)
Dual-WAN (Failover/Failback)	•	-	-	-
Dual-WAN (Load balance)	•	-	-	-
Interface Grouping	•	-	-	-
VPN	•	•	-	•
Hotspot	•	-	-	-
IP67	•	•	•	•
Operating temperature	-40°C ~ 60 °C	-40°C ~ 60 °C	-40°C ~ 60 °C	-40°C ~ 60 °C

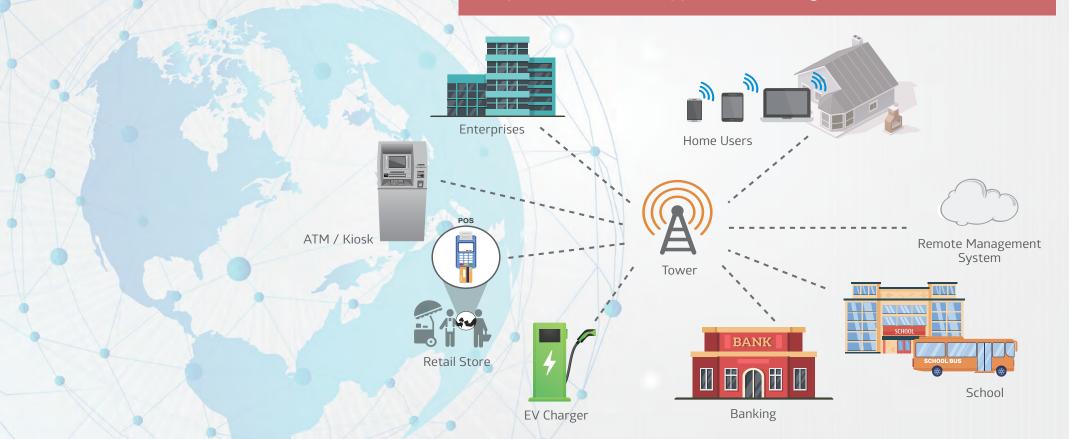
<sup>\*1:</sup> Software configurable EWAN.

<sup>\*2:</sup> Dual APNs is only upon request for Telco/ ISP tender projects.

# LTE represents the 4th generation of broadband cellular network technology, providing outstanding transmission efficiency and broadband service coverage.

Especially LTE can be used to offer Fixed-Wireless-Broadband services. The LTE Fixed-Wireless-Broadband market was valued at USD 22.3 billion in 2019 and is expected to reach USD 81.4 billion by 2025, at a CAGR of 24.5% over the 2020~2025 period.

Billion provides a variety of LTE products, creating superior solutions for in-house or outdoor environments, maintaining strong network connectivity in the served area, and enabling service providers and system integrators to build comprehensive applications and long-term winning business models to explore potential business opportunities and generate revenue.



### Features and Benefits



High-Performance Security VPN



High Availability and Network Redundancy



Advanced Antenna Technology



Multiple LTE Band Support



Integrate VoIP and Advanced Call Features



IPv6, The Path to the Future



Wi-Fi Hotspot



LTE Outdoor in Challenging Rugged Environment



Billion Central Management System (Billion CMS) Suppout

### **Applications and Solutions**



POS for Credit Card Access in Remote Area



Multiple VPN Solutions (IPSec, OpenVPN, GRE ...)



SCADA over VPN Tunnel with LTE Backup



Dual WAN (EWAN / LTE) Failover/Failback



Instant Outdoor Wi-Fi Hotspot with Dual WAN



Billion Central Management System (Billion CMS) for Remote Monitoring and Management

<b>Indoor LT</b>	E
Routers	



LTE Dual-SIM VoIP Wi-Fi 5 VPN Firewall Router LTE Dual-SIM Wi-Fi 5 VPN Firewall Router

LTE VoIP Wi-Fi 5 VPN Firewall Router

LTE Wi-Fi 5 VPN Firewall Router

WAN Interface				
LTE	•	•	•	•
EWAN	● (GbE) (*1)	● (GbE) (*1)	● (GbE) (*1)	● (GbE) (*1)
Hardware Interface				
SIM slot	● (x2)	● (x2)	● (x1)	● (x1)
Gigabit Ethernet	● (x4) (Configurable EWAN x1)			
802.11n (2.4GHz)	● (600 Mbps (3x3))			
802.11ac (5GHz)	● (1733 Mbps (4x4))			
USB Host	● (USB 2.0)	• (USB 2.0)	● (USB 2.0)	• (USB 2.0)
FXS	● (x2)	-	● (x2)	-
Features				
VPN	•	•	•	•
Dual APN	• (*2)	• (*2)	• (*2)	• (*2)
Dual WAN (Failover/Failback)	•	•	•	•
Dual WAN (Load Balance)	•	•	•	•
Interface Grouping	-	-	-	-
IPv4 / IPv6	•	•	•	•

<sup>\*1:</sup> Software configurable EWAN.

<sup>\*2:</sup> Dual APNs is only upon request for Telco/ ISP tender projects.

### **Indoor LTE** Routers







LTE Dual-SIM VoIP Wireless-N (VPN) Firewall Router

LTE Dual-SIM Wireless-N (VPN) Firewall Router

LTE VoIP Wireless-N(VPN) Firewall Router

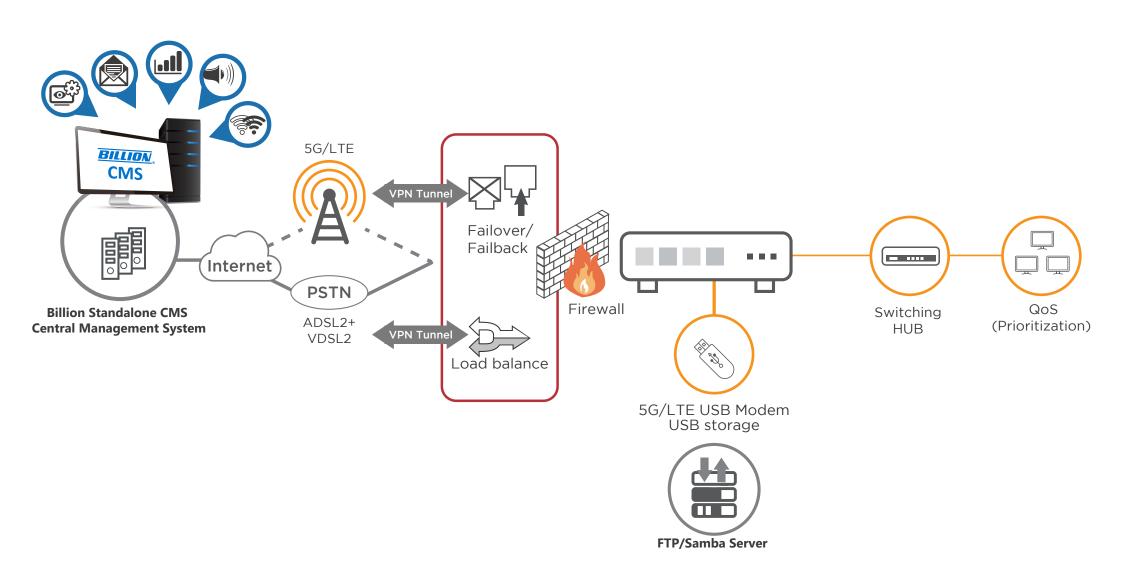
LTE Wireless-N(VPN) Firewall Router

WAN Interface				
LTE	•	•	•	•
EWAN	● (GbE) (*1)	● (GbE) (*1)	● (GbE) (*1)	● (GbE) (*1)
Hardware Interface				
SIM slot	● (x2)	● (x2)	● (x1)	● (x1)
Gigabit Ethernet		● (x4) (Configurable EWAN x1)	● (x4) (Configurable EWAN x1)	● (x4) (Configurable EWAN x1)
802.11n (2.4GHz)	● (300 Mbps (2x2))	● (300 Mbps (2x2))	● (300 Mbps (2x2))	● (300 Mbps (2x2))
802.11ac (5GHz)	-	-	-	-
USB Host	● (USB 2.0)	● (USB 2.0)	● (USB 2.0)	• (USB 2.0)
FXS	● (x2)	-	● (x2)	-
Features				
VPN	(4520VNOZ <i>R2</i> only)	(4520NZ <i>R2</i> only)	(4500VNOZ <i>R2</i> only)	(4500NZ <i>R2</i> only)
Dual APN	• (*2)	• (*2)	• (*2)	• (*2)
Dual WAN (Failover/Failback)	•	•	•	•
Dual WAN (Load Balance)	•	•	•	•
Interface Grouping	-	-	-	-
IPv4 / IPv6	•	•	•	•

<sup>\*1:</sup> Software configurable EWAN.

<sup>\*2:</sup> Dual APNs is only upon request for Telco/ ISP tender projects.







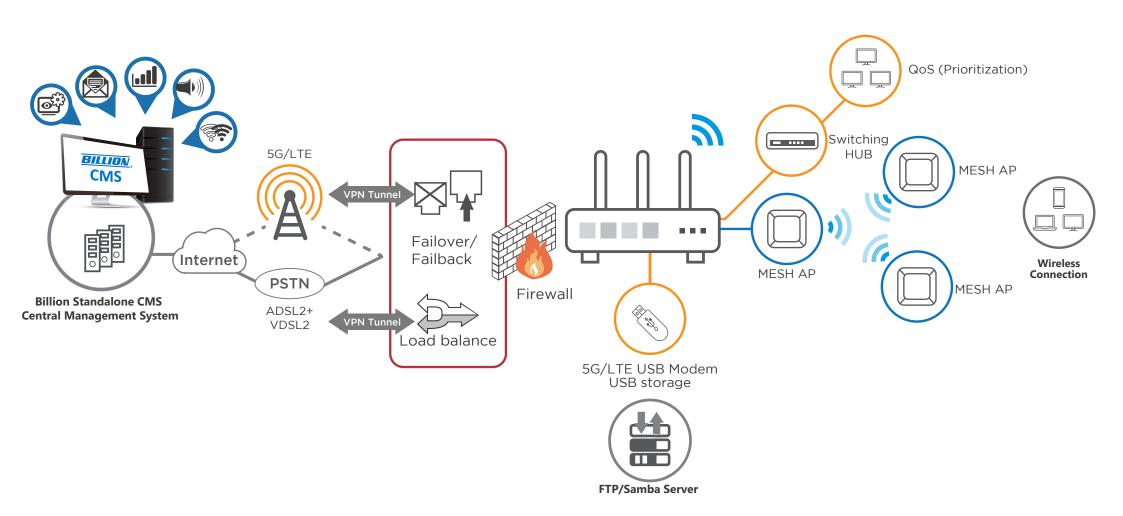


LTE VDSL2/ADSL2+ VPN Firewall Router

WAN Interface	
LTE	• (via USB)
EWAN	● GbE(*1)
V/ADSL	•
Hardware Interface	
Gigabit Ethernet	● (x4) (Configurable EWAN x1)
USB Host	● (USB 2.0 x1)
Features	
VPN	•
IPv4 / IPv6	•
VLAN MUX	•
Dual WAN (Failover / Failk	oack)
Dual WAN (Load Balance)	•

Gigabit Ethernet **EWAN** Reset Power USB Cable Ethernet Cable Ethernet Cable **Ethernet Cable USB** Connection Ethernet Switching HUB Power Adapter Splitter VDSL2/ ADSL2+ Internet Modem (Cable, xDSL, Fiber, PON, etc.) Phone 3G/4G LTE Adaptor/Donglefor Mobile Connectivity or USB Storage

<sup>\*1:</sup> Software configurable EWAN.



Wireless AP Routers







LTE Embedded V/ADSL2+ Wi-Fi 5 AC 1200 VPN Firewall Router



Triple-WAN Wi-Fi 5 AC 1200 LTE and VDSL2/ADSL2+ Firewall Router

WAN Interface			
LTE	● (5G/LTE)	•	• (via USB)
EWAN	● (GbE) <b>(*1)</b>	• (*1)	● (GbE) <b>(*1)</b>
V/ADSL	•	•	•
Hardware Interface			
SIM slot	● (x1)	● (x1)	-
Gigabit Ethernet	● (x4) (Configurable EWAN x1)	● (x5) (Configurable EWAN x1)	● (x4) (Configurable EWAN x1)
USB Host	● (USB 2.0 x1)	● (USB 2.0 x1)	● (USB 2.0x1 and USB 3.0x1)
802.11n (2.4 GHz)	● (300Mbps)	● (300Mbps)	
802.11ac (5 GHz)	-	● (867Mbps(2x2))	● (867Mbps(2x2))
802.11ax (5 GHz)	● (1200Mbps(2x2))	-	-
Features			
VPN	•	•	-
IPv4 / IPv6	•	•	•
VLAN MUX	•	•	•
ıal WAN (Failover / Failback)	•	•	•
ıal WAN (Load Balance)	•	•	•

<sup>\*1:</sup> Software configurable EWAN.

Wireless AP Routers



Wireless-N VDSL2/ADSL2+ Firewall Router Wireless-N VDSL2/ADSL2+ Firewall Router Triple-WAN Wireless 1600Mbps LTE and VDSL2/ADSL2+ Firewall Router

			Thewan Router	
WAN Interface				
LTE	• (via USB)	• (via USB)	• (via USB)	
EWAN	● (GbE)	• (GbE)	● (GbE)	
V/ADSL	•	•	•	
Hardware Interface				
SIM slot	-	-	-	
Fast Ethernet	● (x4)	● (x4)	-	
Gigabit Ethernet	●(x1) (for EWAN LAN5)	• (x1) (for EWAN LAN5)	● (x5)	
USB Host	● (USB 2.0 x1)	● (USB 2.0 x1)	● (USB 2.0 x1)	
802.11n (2.4 GHz)	● (300Mbps)	● (300Mbps)	● (300Mbps)	
802.11ac (5 GHz)	-	-	● (1300Mbps(3x3))	
Features				
VPN	-	-	-	
IPv4 / IPv6	•	•	•	
VLAN MUX	•	•	•	
Dual WAN (Failover / Failback)	•	•	•	
Dual WAN (Load Balance)	-	-	-	

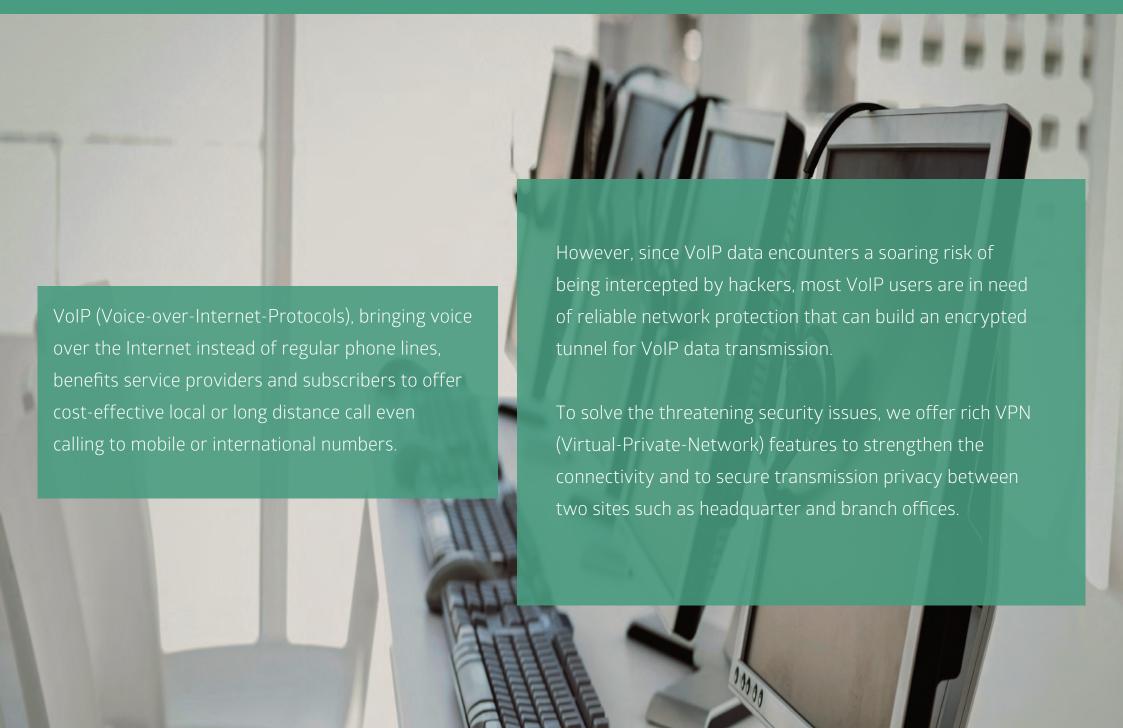
Wireless AP Routers



Wireless 1600Mbps LTE and VDSL2/ADSL2+ VPN Firewall Router Wireless-AC 2400Mbps LTE VDSL2/ADSL2+ VPN Firewall Router 1

Bonded VDSL2 with Triple-WAN Wireless 1600Mbps, LTE and VDSL2/ADSL2+ Firewall Router

		Filewall Routel	
WAN Interface			
LTE	• (via USB)	• (via USB)	● (via USB)
EWAN	• (GbE)	● (GbE)	● (GbE)
V/ADSL	•	•	•
Hardware Interface			
SIM slot	-	-	-
Fast Ethernet	-	-	-
Gigabit Ethernet	• (x5)	● (x4)	● (×4)
USB Host	● (USB 2.0 x1)	● (USB 2.0 x1)	● (USB 2.0 x1)
802.11n (2.4 GHz)	● (300Mbps)	• (600Mbps (3x3, high power))	● (300Mbps)
802.11ac (5 GHz)	● (1300Mbps(3x3))	● (1750Mbps (4x4))	● (1300Mbps(3x3))
Features			
VPN	•	•	-
IPv4 / IPv6	•	•	•
VLAN MUX	•	•	•
ual WAN (Failover / Failback)	•	•	•
ual WAN (Load Balance)	•	•	•

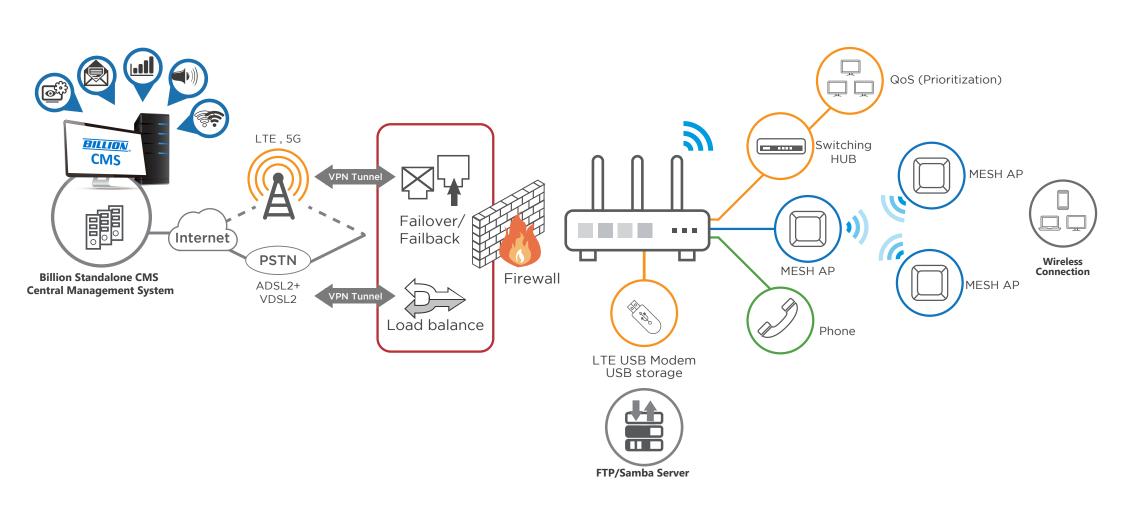




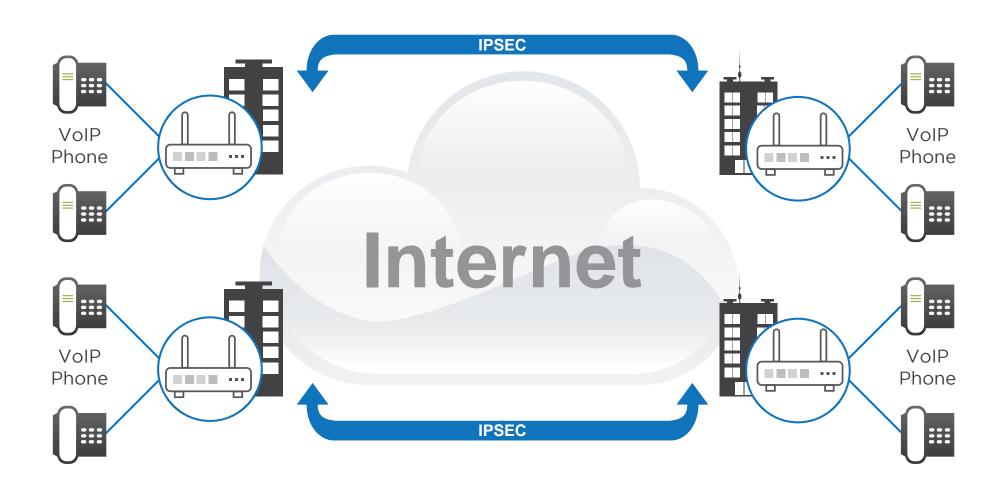
Manageable devices

Best bandwidth usage

Always on secure connection



With the failover and failback capability, voice providers can provide a secure, high speed internet to back up the connection in case of any network failure. We support common voice settings like call forwarding, call waiting, conference call, anonymous call, block anonymous call, speed dial, return call, and redial, ..etc, as well as advanced local SIP port setting to resolve any blocking problems. Customizable features and interfaces can be modified, enabling voice providers to offer high-quality, user-friendly network solutions to their customers.



### **xDSL+Wireless AP+VoIP Series**



# Wireless AP VoIP Routers



5G/LTE Embedded V/ADSL2+ Wi-Fi 6 AX 1500 VoIP VPN Firewall Router Triple-WAN Wireless-1600Mbps LTE and VDSL2/ADSL2+ VoIP Router

VAN Interface		
5G/LTE	● (5G/LTE)	• (via USB)
EWAN	● (GbE) (*1)	● (GbE) (*1)
V/ADSL	•	•
Hardware Interface		
SIM slot	● (x1)	-
Gigabit Ethernet	● (x4) (Configurable EWAN x1)	● (x4) (Configurable EWAN x1)
USB Host	● (USB 2.0 x1)	● (USB 2.0 x1)
FXS	<b>●</b> (x1)	● (x2)
802.11n (2.4 GHz)	● (300Mbps)	● (300Mbps)
802.11ac (5 GHz)	-	● (1300Mbps(3x3))
802.11ax (5 GHz)	● (1200Mbps(2x2))	-
Features		
VPN	•	-
IPv4 / IPv6	•	•
VLAN MUX	•	•
al WAN (Failover / Failback)	•	•
al WAN (Load Balance)	•	-

<sup>\*1:</sup> Software configurable EWAN.



Active Ethernet FTTH Solutions Last-Mile Access Solutions for Telco/ISP

We provide Active Ethernet Point-to-Point fiber router for Telco/ISP to deploy Giga wired-speed FTTH for last-mile access applications at residential and commercial areas.

### **Unique Features**



A Giga wired-speed connection from CO site to home user

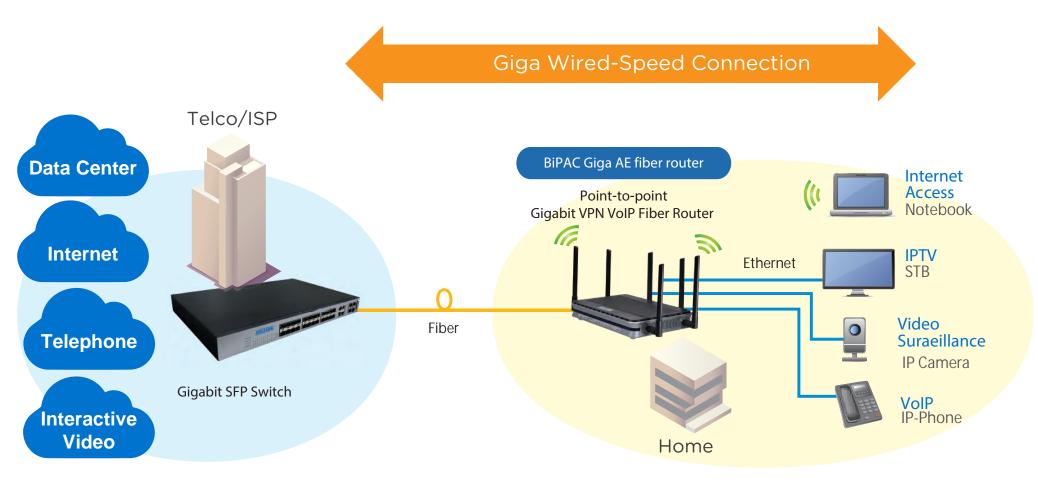


Establishes secure VPN connection from branch offices to headquarters

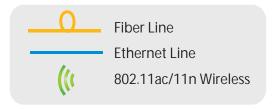
### ■ AE FTTH Solution for Home Users

A Complete AE (Active Ethernet) FTTH Solution for ISP/Telco to Provide Giga Wired-Speed FTTH Applications to Home Users

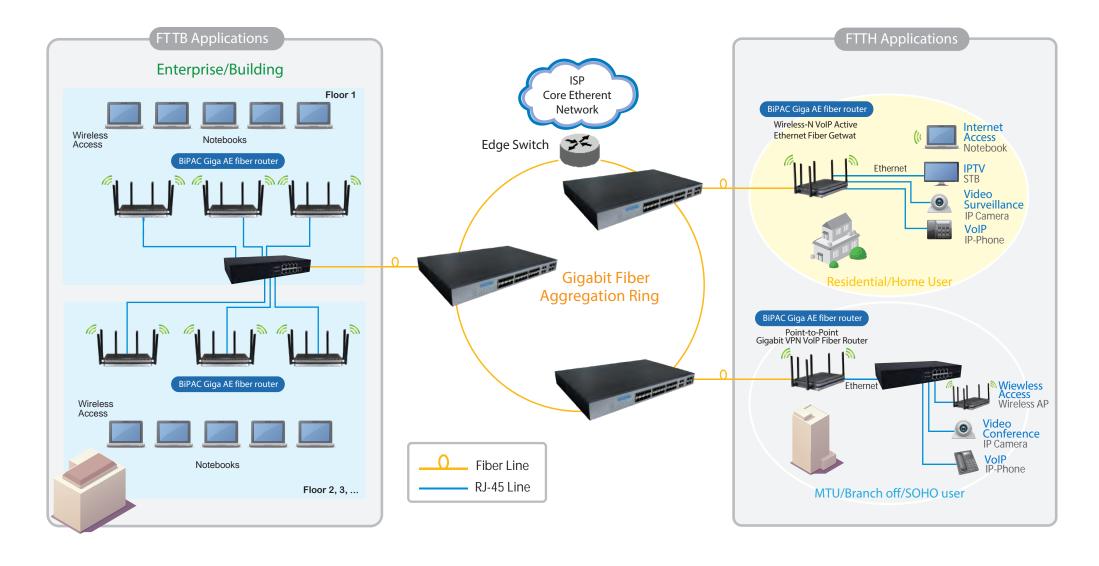
Through its Giga fiber connection ports, end users can connect with Billion Giga AE fiber router enjoying more cost-effective, faster, and safer Giga wired-speed FTTH applications.



Central Office(CO)



### ■ Application of High Density Communities



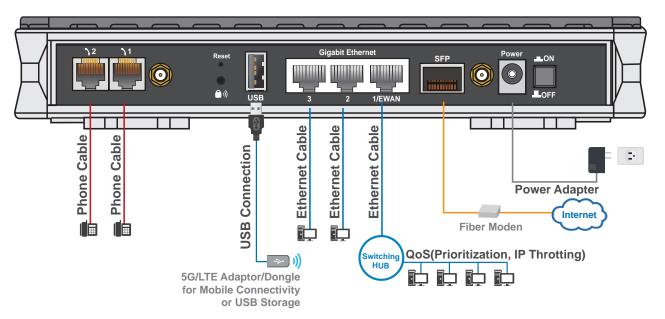


# 9900VA

Dual-Band Wireless Active Ethernet Point-to-Point VoIP VPN Gateway

WAN Interface	
P2P fiber Etherent	•
EWAN	● (GbE) (*1)
Hardware Interface	
Gigabit Ethernet	● (x3) (Configurable EWAN x1)
USB Host	● (USB 2.0 x1)
FXS	● (x2)
802.11n(2.4 GHz)	● (300Mbps)
802.11ac(5 GHz)	● (1700Mbps)
Features	
VPN	•
IPv4 / IPv6	•
Dual WAN (Failover / Failback)	•

Dual WAN (Failover / Failback)
\*1: Software configurable EWAN.



### **About BILLION**

Billion Electric Co., Ltd. (Taiex: 3027, trading as Billion) is a leading global information and communication technology (ICT) solutions provider. We enhance life and communication efficiency through a better-connected world, acting as a responsible corporate citizen, an innovative enabler for the information society, and a collaborative contributor to the industry. Billion is dedicated to creating optimal value for telecom operators and determined to pursue the position of industry vanguard by providing our current and future customers the highest quality of technology outputs.

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# Networking Communication Product Portfolio











