

Product Specifications

Enterprise 4-Port 10/100/1000T 802.3at PoE + 1-Port 10/100/1000T VPN Security Router

VR-300P

Version 1.0

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Change History:

Revision	Date	Author	Change List
Version 1.0	2020/12/14	Jonas	Initial release

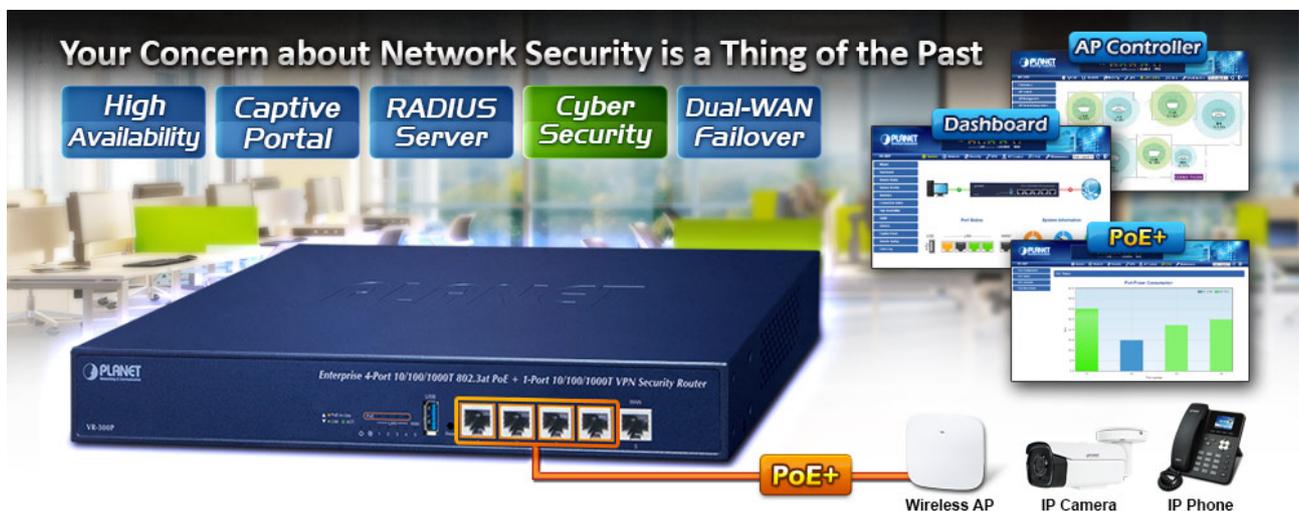
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Reviewed by:	Jonas	Approved by:	Kent

1. PRODUCT DESCRIPTION



Powerful VPN Security Solution

The innovation of the Internet has created tremendous worldwide opportunities for e-business and information sharing. It has become essential for businesses to focus more on network security issues. The demand for information security has become the primary concern for the enterprises. To fulfill this demand, PLANET has launched the VR-300P VPN PoE Security Router, an all-in-one appliance that carries several main categories across your network security deployments: **Cyber Security**, SPI firewall security protection, policy auditing (Content Filtering, VPN Tunnel and MAC/IP Filtering), **AP Controller**, **Captive Portal**, **RADIUS**, **SD-WAN*** and easy management (Setup Wizard, DHCP Server and Dashboard). Furthermore, its Dual-WAN Failover, Outbound Load Balance and **High-Availability** features can improve the network efficiency while the web-based interface provides friendly and consistent user experience.



**Note: The feature will be available via firmware upgrade.*

Built-in Unique PoE Functions for Powered Devices Management

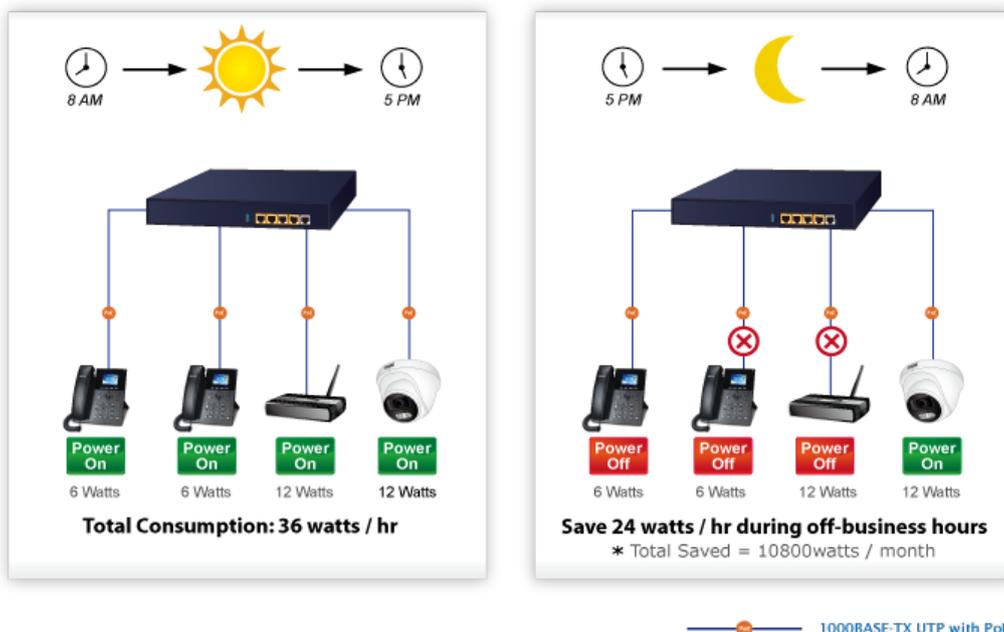
The VR-300P is capable of having a maximum of up to 120 watts of power output and can deliver up to 36W for each port. It also features the following special PoE management functions:

PoE Usage Monitoring

With PoE usage monitoring, it can show the PoE loading of each port, total PoE power usage and system status, such as overload, low voltage, over voltage and high temperature. User can obtain detailed information about the real-time PoE working condition of the VR-300P directly.

PoE Schedule

Under the trend of energy saving worldwide and contributing to environmental protection, the VR-300P can effectively control the power supply besides its capability of giving high watts power. The “PoE schedule” function helps you to enable or disable PoE power feeding for each PoE port during specified time intervals and it is a powerful function to help SMBs or enterprises save power and budget. It also increases security by powering off PDs that should not be in use during non-business hours.



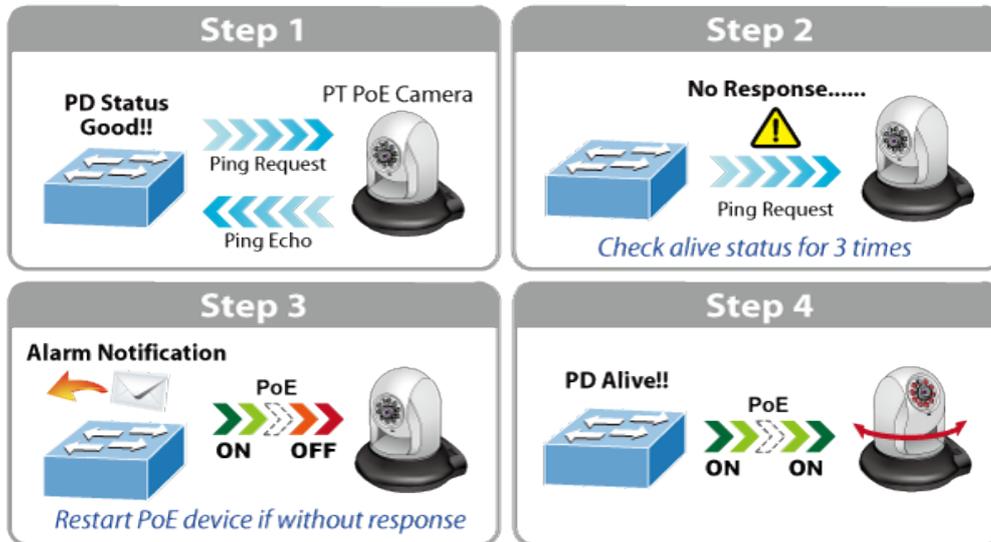
Scheduled Power Recycling

The VR-300P allows each of the connected PoE IP cameras or PoE wireless access points to reboot at a specific time each week. Therefore, it will reduce the chance of IP camera or AP crash resulting from buffer overflow.

PD Alive Check

The VR-300P can be configured to monitor connected PD status in real time via ping action. Once the PD stops working and responding, the VR-300P will resume the PoE port power and bring the PD back to work. It

will greatly enhance the network reliability through the PoE port resetting the PD's power source and reducing administrator management burden.



Wi-Fi Deployments and Authentication with Simplified Management

The VR-300P also provides a built-in AP Controller, Captive Portal, RADIUS and a DHCP server to facilitate small and medium businesses to deploy secure employee and guest access services without any additional server. The VR-300 can offer a secure Wi-Fi network with easy installation for your business.

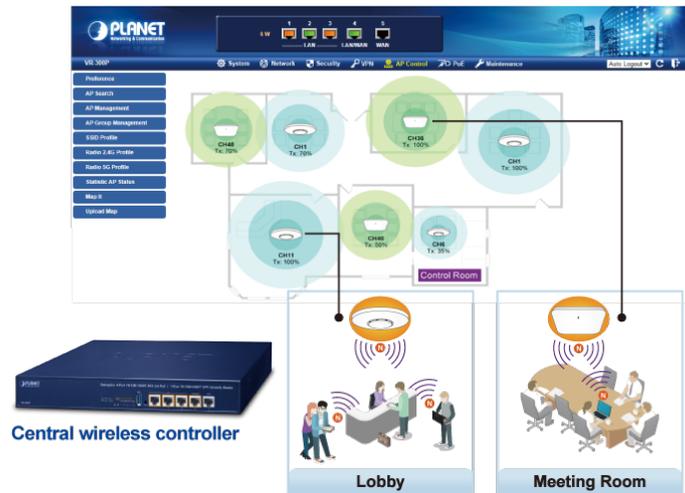
Captive Portal



Centralized Remote Control of Managed APs*

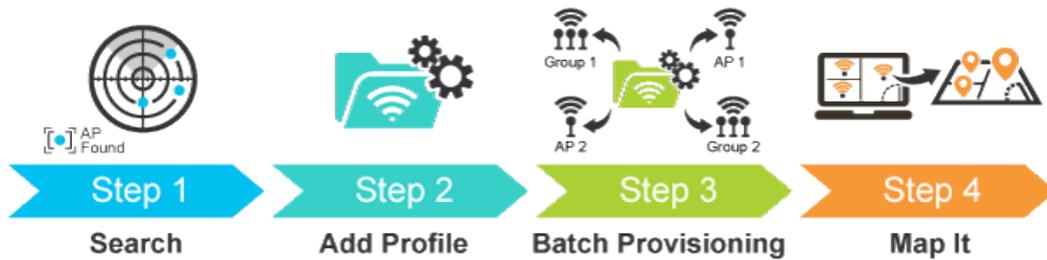
The VR-300P provides centralized management of PLANET Smart AP series via a user-friendly Web GUI. It's easy to configure AP for the wireless SSID, radio band and security settings. With a four-step configuration process, different purposes of wireless profiles can be simultaneously delivered to multiple APs or AP groups

to minimize deployment time, effort and cost.



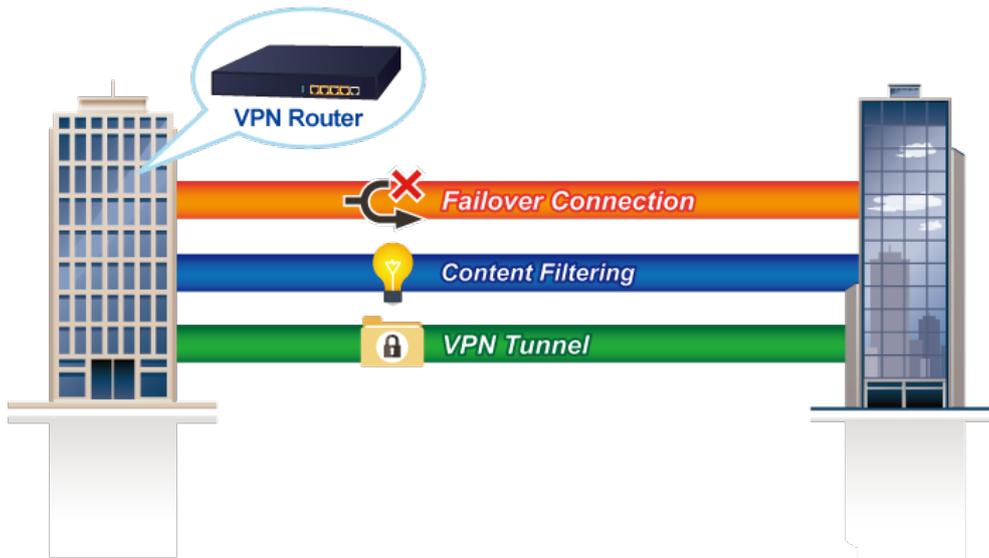
For example, to configure multiple Smart APs of the same model, the VR-300P allows clustering them to a managed group for unified management. According to requirements, wireless APs can be flexibly expanded or removed from a wireless AP group at any time. The AP cluster benefits bulk provision and bulk firmware upgrade through single entry point instead of having to configure settings in each of them separately.

Simplified Cluster Management with 4 Steps



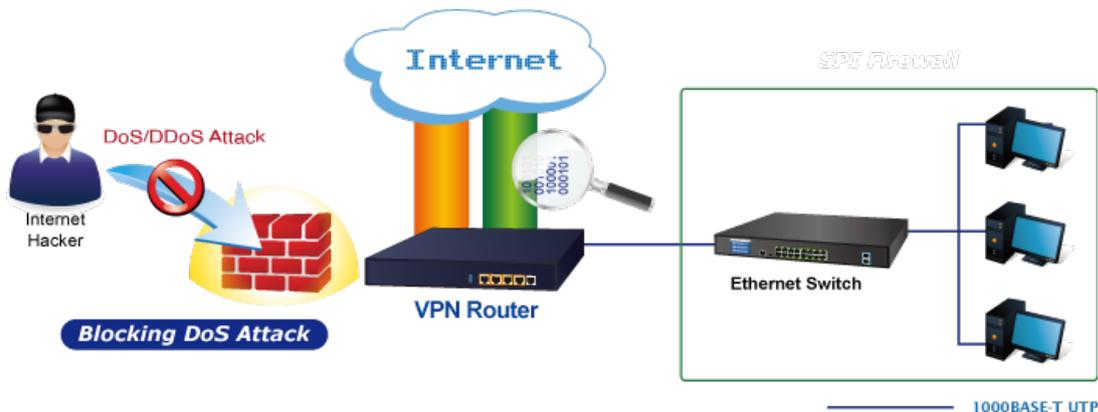
Ideal High-Availability VPN Security Router Solution for SMBs

The VR-300P provides complete data security and privacy for accessing and exchanging most sensitive data, built-in IPSec VPN function with DES/3DES/AES encryption and MD5/SHA-1/SHA-256/SHA-384/SHA-512 authentication, and GRE, SSL, PPTP and L2TP server mechanism. The full VPN capability in the VR-300P makes the connection secure, more flexible, and more capable.



Excellent Ability in Threat Defense

The VR-300P's built-in SPI (stateful packet inspection) firewall and DoS/DDoS attack prevention functions provide high efficiency and extensive protection for your network. Virtual Server and DMZ functions can let you set up servers in the Intranet and still provide services to the Internet users.



Cybersecurity Network Solution to Minimize Security Risks

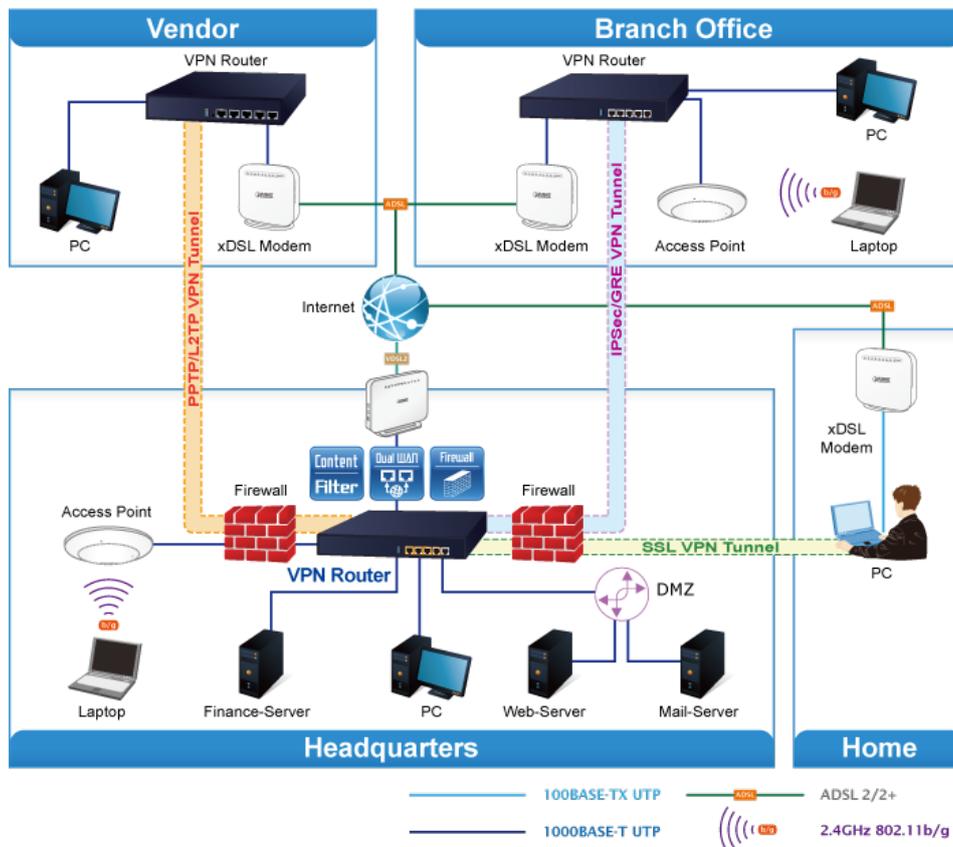
The cybersecurity feature included to protect the switch management in a mission-critical network virtually needs no effort and cost to install. For efficient management, the VR-300P is equipped with HTTPS web and SNMP management interfaces. With the built-in web-based management interface, the VR-300P offers an easy-to-use, platform independent management and configuration facility. The VR-300P supports SNMP and it can be managed via any management software based on the standard SNMP protocol.

Improving Network Efficiency

It is applicable to the small-scale sector (from 60 to 100 people), using a 13-inch desktop design, with five Gigabit ports (WAN/LAN). It provides higher performance with all Gigabit Ethernet interfaces which offer faster speeds for your network applications. The Gigabit user-defined interfaces flexibly fulfill the network requirement nowadays, and the High-Availability and Dual-WAN interfaces enable the VR-300P to support outbound load balancing and WAN fail-over features.

Furthermore, the VR-300P can connect dual IPv4/v6 WANs with up to two different ISPs and supports many popular security features including Content Filtering to block specific URL feature that can automatically resolve the IP address corresponding to all. Users' network can be easily managed by just typing the URL of the websites like Facebook, YouTube and Yahoo.

The VR-300P has link redundancy, MAC/IP filtering, outbound load balancing, QoS and many more functions to make the entire network system better. It creates a stable and qualified VPN security connection for many important applications such as VoIP, video conferencing and data transmission. The VR-300P's economical price with complete network security management features make it an inevitable choice for the next-generation office network load balancer.



2. PRODUCT FEATURES

Highlights

- Dual-WAN failover and Dual-WAN load balancing
- SSL VPN and robust hybrid VPN (IPSec/PPTP/L2TP over IPSec)
- Stateful Packet Inspection (SPI) firewall and content filtering
- Blocks DoS/DDOS attack, port range forwarding
- High-Availability, AP Controller, Captive Portal RADIUS and SD-WAN*
- IPv6, SNMP, PLANET DDNS and Universal Network Management System
- Compliant with the IEEE 802.3at PoE+

*Note: The feature will be available via firmware upgrade.

Hardware

- 5 10/100/1000BASE-T RJ45 ports with 4-port **IEEE 802.3at/af PoE** injector function
- 1 undefined Ethernet port (LAN/WAN) for Dual-WAN function
- 1 USB 3.0 port for system configuration backup and restore
- Desktop installation or rack mounting

Power over Ethernet

- Complies with IEEE 802.3at Power over Ethernet Plus, end-span PSE
- Backward compatible with IEEE 802.3af Power over Ethernet
- Up to 4 ports of IEEE 802.3af / 802.3at devices powered
- Supports PoE power up to 36 watts for each PoE port
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- PoE management
 - Total PoE power budget control
 - Per port PoE function enable/disable
 - PoE port power feeding priority
 - Per PoE port power limitation
 - PD classification detection
 - PD alive check
 - PoE schedule

IP Routing Feature

- Static Route
- Dynamic Route
- OSPF

Firewall Security

- Cybersecurity
- Stateful Packet Inspection (SPI) firewall
- Blocks DoS/DDoS attack
- Content Filtering
- MAC Filtering and IP Filtering
- NAT ALGs (Application Layer Gateway)
- Blocks SYN/ICMP flooding

VPN Features

- IPSec/Remote Server (Net-to-Net, Host-to-Net), GRE, PPTP Server, L2TP Server, SSL Server/Client (Open VPN)
- Max. Connection Tunnel Entries: 60 VPN tunnels,
- Encryption methods: DES, 3DES, AES, AES-128/192/256
- Authentication methods: MD5, SHA-1, SHA-256, SHA-384, SHA-512

Networking

- Outbound load balancing
- Failover for dual-WAN
- High Availability
- Captive Portal
- RADIUS Server/Client
- Static IP/PPPoE/DHCP client for WAN
- DHCP server/NTP client for LAN
- Protocols: TCP/IP, UDP, ARP, IPv4, IPv6
- Port forwarding, QoS, DMZ, IGMP, UPnP, SNMPv1,v2c, v3
- MAC address clone
- DDNS: PLANET DDNS, Easy DDNS, DynDNS and No-IP

Others

- Setup wizard
- Dashboard for real-time system overview
- Supported access by HTTP or HTTPS

- Auto reboot
- PLANET Smart Discovery utility/UNI-NMS supported

3. PRODUCT SPECIFICATIONS

3.1 Main Components

CPU	Dual-core MIPS1004Kc (880 MHz)
RAM	512MB
Flash	16MB + 32G eMMC

3.2 Functional Specifications

Product	Enterprise 4-Port 10/100/1000T 802.3at PoE + 1-Port 10/100/1000T VPN Security Router
Model	VR-300P
Hardware Specifications	
Ethernet	5 10/100/1000BASE-T RJ45 Ethernet ports including 3 LAN ports (Port-1 to Port-3) 1 LAN/WAN port (Port-4) 1 WAN port (Port-5)
USB Port	1 USB 3.0 port for system configuration backup and restore
Reset Button	Reset to factory default
Thermal Fan	1
LED Indicators	PWR (Green) Internet (Green) LAN/WAN (Green) PoE-in-Use LED (Amber)
Installation	Desktop installation or rack mounting
Power Requirements	100~240V AC, 50/60Hz, auto-sensing
Power Consumption / Dissipation	Max.121watts/413BTU
Weight	1.6kg
Dimensions (W x D x H)	330 x 155 x 43.5 mm, 1U height
Enclosure	Metal
Power over Ethernet	
PoE Standard	IEEE 802.3af / 802.3at PoE+ PSE
PoE Power Supply Type	End-span
PoE Power Output	Per port 52V DC, 36 watts (max.)
Power Pin Assignment	1/2 (+), 3/6 (-)
PoE Power Budget	120 watts (max.) @ 25 degrees C 100 watts (max.) @ 50 degrees C
Max. Number of Class 4 PDs	4
PoE Management	PD Alive Check Scheduled Power Recycling PoE Schedule PoE Usage Monitoring
Security Service	
Firewall Security	Cybersecurity Stateful Packet Inspection (SPI) Blocks DoS/DDoS attack
ALG (Application Layer Gateway)	SIP, RTSP, FTP, H.323, TFTP
NAT	Port forwarding

	DMZ Host UPnP
Content Filtering	MAC filtering IP filtering Web filtering
Bandwidth Management	Outbound load balancing Failover for dual-WAN QoS (Quality of Service)
Networking	
Operation Mode	Routing mode
Routing Protocol	Static Route, Dynamic Route (RIP), OSPF
VLAN	802.1q Tag-based, Port-based, Multi-VLAN
Multicast	IGMP Proxy
NAT Throughput	Max. 900Mbps
Outbound Load Balancing	Supported algorithms: Weight
Protocol	IPv4, IPv6, TCP/IP, UDP, ARP, HTTP, HTTPS, NTP, DNS, PLANET DDNS, PLANET Easy DDNS, DHCP, , PPPoE, SNMPv1/v2c/v3,
Key Features	HA (High Availability) Captive Portal RADIUS Server/Client AP Control SD-WAN* <i>*Note: The feature will be available via firmware upgrade.</i>
VPN	
VPN Function	IPSec/Remote Server (Net-to-Net, Host-to-Net), GRE, PPTP Server, L2TP Server, SSL Server/Client (Open VPN)
VPN Tunnels	Max. 60
VPN Throughput	Max. 60Mbps
Encryption Methods	DES, 3DES, AES or AES-128/192/256 encrypting
Authentication Methods	MD5/SHA-1/SHA-256/SHA-384/SHA-512 authentication algorithm
Management	
Basic Management Interfaces	Web browser SNMP v1, v2c PLANET Smart Discovery utility/UNI-NMS supported
Secure Management Interfaces	SSHv2, TLSv1.2, SNMP v3
System Log	System Event Log
Others	Setup wizard Dashboard System Status/Service Statistics Connections Status Auto reboot Diagnostics
Standards Conformance	
Regulatory Compliance	CE, FCC
Environment Specifications	
Operating	Temperature: 0 ~ 50 degrees C Relative Humidity: 5 ~ 95% (non-condensing)
Storage	Temperature: -10 ~ 60 degrees C Relative Humidity: 5 ~ 95% (non-condensing)

3.3 Physical Specifications

Dimensions (W x D x H)	330 x 155 x 43.5 mm
Net weight	1.6 kg

Front View



LAN Per 10/100/1000Mbps PoE port (Port-1 to Port-4)

LED	Color	Function	
LNK/ACT	Green	Lights:	To indicate the port is running at 1000Mbps or 100Mbps or 10Mbps and successfully established
		Blink:	To indicate that the router is actively sending or receiving data over that port.
PoE	Orange	Lights:	To indicate the port is providing 48V~56VDC in-line power
		Off:	To indicate the connected device is not a PoE powered device (PD)

WAN Per 10/100/1000Mbps RJ45 port (Port-4 and Port-5)

LED	Color	Function	
LNK/ACT	Green	Lights:	To indicate the port is running at 1000Mbps or 100Mbps or 10Mbps and successfully established
		Blink:	To indicate that the router is actively sending or receiving data over that port.

Rear View



3.4 Environmental Specifications

Operating

Temperature	0 ~ 50°C
Relative Humidity	5 ~ 95% (non-condensing)

Storage

Temperature	-10 ~ 60°C
Relative Humidity	5~95% (non-condensing)

3.5 Power Specifications

Power Requirement	100-240V AC, 2A
Power Consumption	Max.121watts/413BTU

3.6 Regulatory Compliance

FCC, CE

3.7 Reliability

MTBF > 50000 hrs @ 40 degrees C

3.8 Basic Packaging

- VR-300P x 1
- Quick Installation Guide x 1
- Power Cord x 1
- Feet Pads x 4
- Two rack-mounting brackets with attachment screws x 1

3.9 Packaging Information

Dimensions (W x D x H)	390 x 233 x 85 mm
Weight	1.65 kg (gross weight)
Carton Dimensions (W x D x H)	545 x 430 x 275 mm
Carton Weight	10kg
Carton Unit	6pcs in one carton