

# Product Specifications

Industrial 5-Port 10/100/1000T VPN Security Gateway  
**IVR-100**

Version 1.0

This document contains confidential proprietary information and is property of PLANET. The contents of this document should not be disclosed to unauthorized persons without the written consent of PLANET.

Change History:

Revision	Date	Author	Change List
Version 1.0	2019/11/6	Keithy	Initial release

Author	Keithy	Editor:	Mark
Reviewed by:	Jonas	Approved by:	Kent

## 1. PRODUCT DESCRIPTION



### Powerful Industrial 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 IVR-100 Industrial VPN Security Gateway, an all-in-one appliance that carries several main categories across your industrial network security deployments: **Cyber security**, SPI firewall security protection, policy auditing (**Content Filtering**, **VPN Tunnel** and **VLAN**), and easy management (**Setup Wizard**, **QoS** and **Dashboard**). Furthermore, its **Dual-WAN Failover** and **Outbound Load Balance** features can improve the network efficiency while the web-based interface provides friendly and consistent user experience. For the harsh environment, the IVR-100 can not only operate stably under temperature range from **-40 to 75 degrees C**, but also is equipped with a compact **IP30** metal case that allows either DIN-rail or wall mounting for efficient use of cabinet space.



## **Excellent Ability in Threat Defense**

The IVR-100 built-in SPI (stateful packet inspection) firewall and anti DoS/DDoS attack 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.

## **Ideal VPN Security Gateway Solution for SMBs**

The IVR-100 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 IVR-100 makes the connection solidly secure, more flexible, and more capable.

The IVR-100 supports many popular security features including Content Filtering to block specific URL, MAC/IP filtering, outbound load-balancing and more. Furthermore, 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 requirements nowadays, and the dual-WAN interfaces enable the IVR-100 to support outbound load balancing and WAN fail-over features.

## **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 IVR-100 is equipped with HTTPS web and SNMP management interfaces. With the built-in web-based management interface, the IVR-100 offers an easy-to-use, platform independent management and configuration facility. The IVR-100 supports SNMP and it can be managed via any management software based on the standard SNMP protocol.

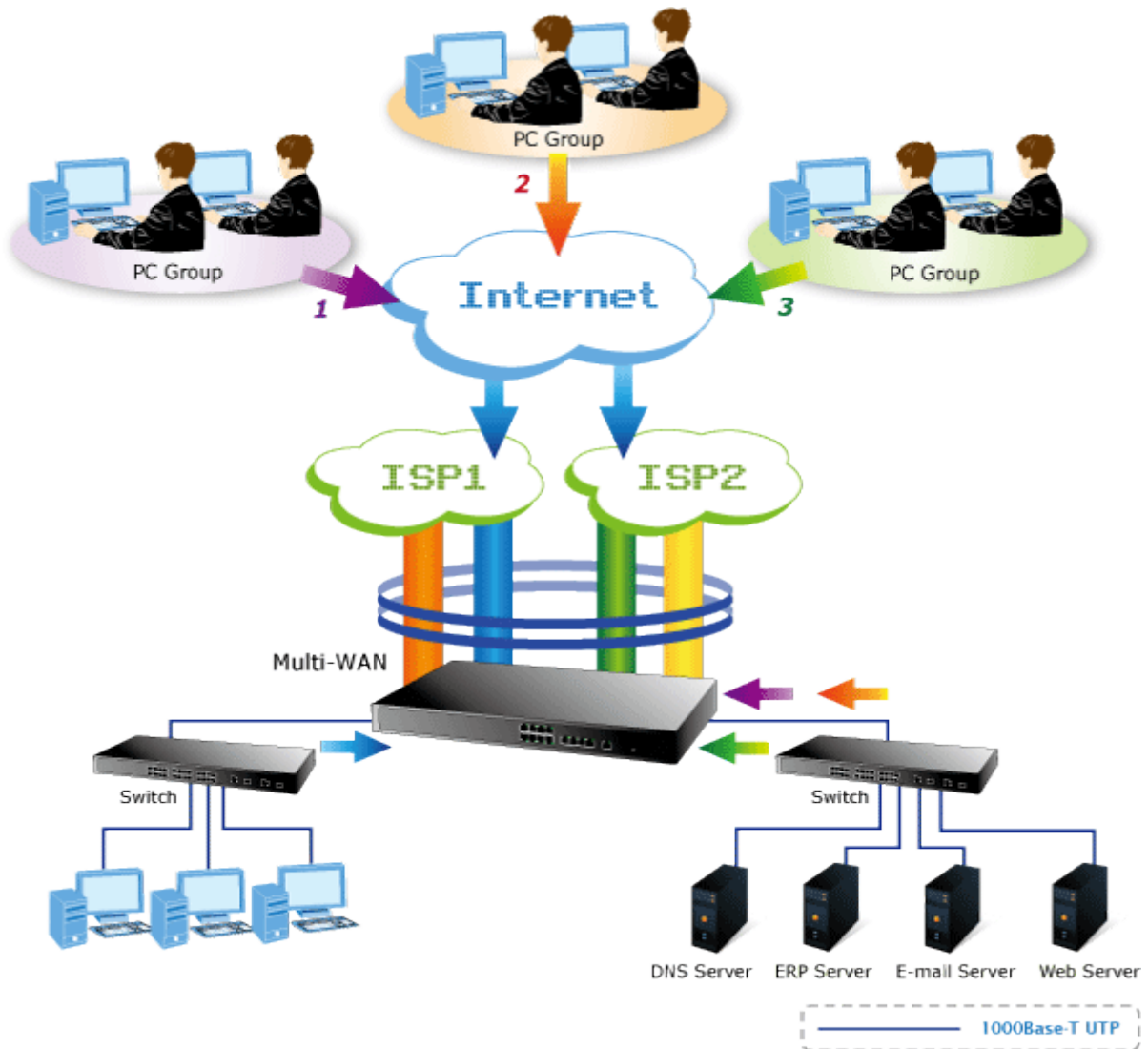
## **Improving Network Efficiency**

The IVR-100 has link redundancy, content filtering and many more functions to make the entire network system perform better. It is applicable to the small-scale sector (from 10 to 50 people), using a compact industrial design, with five Gigabit ports (WAN/LAN). The IVR-100's economical price with complete cable management features make it an inevitable choice for the next-generation office network load balancer.

The IVR-100's built-in content filtering feature 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.

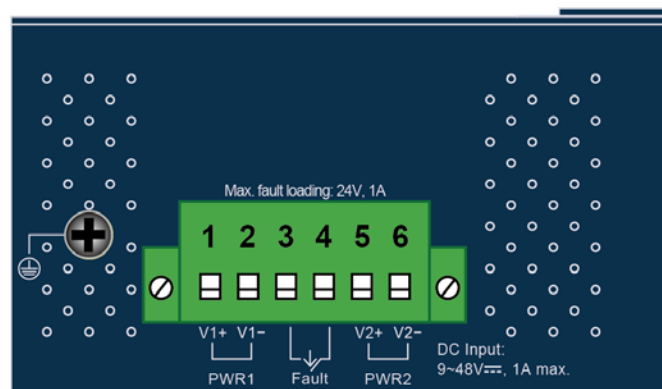
The IVR-100 can connect dual WANs with up to two different ISPs. It creates a stable and qualified VPN

connection for many important applications such as VoIP, video conferencing and data transmission.



### Convenient and Reliable Power System

To facilitate transportation and industrial-level applications, the IVR-100 provides an integrated power solution with a wide range of voltages (9~48V DC) for worldwide operability. It also provides dual-redundant, reversible polarity 9~48V DC power supply inputs for high availability applications.



## **Stable Operating Performance under Difficult Environments**

Today, the VPN demand expands from commercial applications to many critical networks in the harsh environment. The IVR-100 will be one of the ideal solutions that provide a high level of immunity against electromagnetic interference and heavy electrical surges typical of environments found on plant floors or in curb side traffic control cabinets. The IVR-100 can operate stably under temperature range from -40 to 75 degrees C which enables the users to conveniently apply the device in almost any location of the network. The IVR-100 is also equipped with a compact IP30 standard metal case that allows either DIN-rail or wall mounting for efficient use of cabinet space.

## 2. PRODUCT FEATURES

### Hardware

- 5 10/100/1000BASE-T RJ45 ports
- 1 undefined Ethernet port (LAN/WAN)
- Dual-WAN function
- 1 USB 3.0 port for system configuration backup and firmware upgrade
- Reset button

### Industrial Case and Installation

- IP30 metal case
- Solid DIN-rail, wall-mount or side wall-mount design
- Supports 6KV DC Ethernet ESD protection
- Fault alarm for power input failed
- DC redundant power with reverse polarity protection
- -40 to 75 degrees C operating temperature

### IP Routing Feature

- Static Route
- Dynamic Route (RIPv1/v2)

### Firewall Security

- Stateful Packet Inspection (SPI) firewall
- Blocks DoS/DDoS attack
- Web filtering
- MAC/IP filtering
- Blocks SYN/ICMP flooding

### VPN Features

- IPSec (Host to Host)/GRE/PPTP server/L2TP/SSL (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

- PPPoE/Static IP/DHCP client for WAN
- Protocols: TCP/IP, UDP, ARP, IPv4, IPv6
- Port forwarding
- QoS
- DMZ
- VLAN
- IGMP
- SNMP (v1/v2C/v3)
- DHCP server/NTP client
- MAC address clone
- DDNS: PLANET DDNS, PLANET Easy DDNS, DynDNS or No-IP
- Cybersecurity

### **Others**

- Setup wizard
- Dashboard for real-time system overview
- Supported access by HTTP or HTTPS
- Auto reboot
- Configuration backup and restoration via remote/USB port
- Firmware upgrade via remote/USB port
- Event message logging to remote syslog server
- PLANET Smart Discovery utility/UNI-NMS supported

### 3. PRODUCT SPECIFICATIONS

#### 3.1 Main Components

<b>CPU</b>	Dual-core MIPS1004Kc (880 MHz)
<b>RAM</b>	512MB
<b>Flash</b>	16MB

#### 3.2 Functional Specifications

<b>Product</b>	VPN security gateway
<b>Model</b>	IVR-100
<b>Hardware</b>	
<b>Ethernet</b>	5 10/100/1000BASE-T RJ45 Ethernet ports including <ul style="list-style-type: none"> <li>■ 3 LAN ports</li> <li>■ 1WAN port</li> <li>■ 1 LAN/WAN port</li> </ul>
<b>USB Port</b>	1 USB 3.0 port for system configuration backup and firmware upgrade
<b>Reset Button</b>	< 5 sec: System reboot > 5 sec: Factory default
<b>Enclosure</b>	IP30 metal case
<b>LED Indicators</b>	Power 1/Power 2 (Green) Fault (Red)
<b>Installation</b>	DIN-rail, wall-mount or side wall-mount design
<b>Connector</b>	Removable 6-pin terminal block Pin 1/2 for Power 1 Pin 3/4 for power fault alarm Pin 5/6 for Power 2
<b>Alarm</b>	One relay output for power failure. Alarm relay current carry ability: 1A @ 24V AC
<b>Power Requirements</b>	9-48V AC, 1A max.
<b>Power Consumption</b>	9W max.
<b>Weight</b>	0.53kg
<b>Dimensions (W x D x H)</b>	135 x 87.8 x 50 mm
<b>ESD Protection</b>	6KV DC
<b>Software</b>	
<b>Management</b>	Web browser
<b>Operation Mode</b>	Routing mode
<b>Routing Protocol</b>	Static route: 32 Dynamic route (RIPv1/v2): 4096
<b>NAT Throughput</b>	Max. 900Mbps
<b>Firewall Security</b>	Stateful packet inspection (SPI) Blocks DoS/DDoS attack
<b>Outbound Load Balancing</b>	Supported algorithms: Weight
<b>Protocol</b>	IPv4, IPv6, TCP/IP, UDP, ARP, HTTP, HTTPS, NTP, DNS, PLANET DDNS, PLANET Easy DDNS, DHCP, SNMP (v1/v2C/v3), PPPoE, SNMP, QoS, VLAN, IGMP
<b>Content Filtering</b>	MAC filtering IP filtering

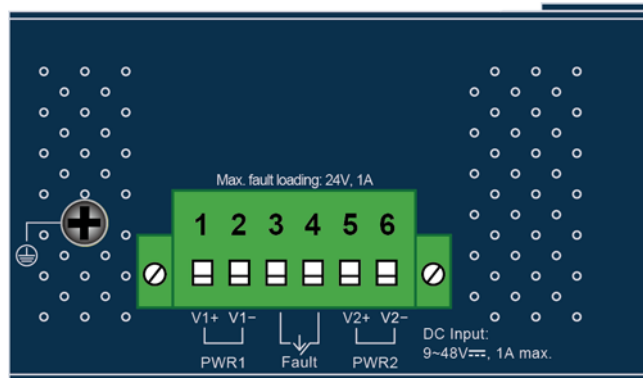


	Web filtering
<b>Log</b>	System Operation Log Event message logging to remote syslog server
<b>Others</b>	Outbound load balancing Failover for dual-WAN Port forwarding DMZ Cybersecurity Dashboard Setup wizard Auto reboot PLANET Smart Discovery utility/UNI-NMS supported
<b>VPN</b>	
<b>VPN Function</b>	IPSec (Host to Host)/GRE/PPTP server/L2TP/SSL (Open VPN)
<b>VPN Tunnels</b>	Max. 60
<b>VPN Throughput</b>	Max. 100Mbps
<b>VPN concurrent users</b>	Max. 60
<b>Encryption Methods</b>	DES, 3DES, AES or AES-128/192/256 encrypting
<b>Authentication Methods</b>	MD5/SHA-1/SHA-256/SHA-384/SHA-512 authentication algorithm
<b>Standards Conformance</b>	
<b>Regulatory Compliance</b>	CE, FCC
<b>Stability Testing</b>	IEC60068-2-32 (free fall) IEC60068-2-27 (shock) IEC60068-2-6 (vibration)
<b>Standards Compliance</b>	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX/100BASE-FX IEEE 802.3ab Gigabit 1000T IEEE 802.1Q VLAN tagging RFC 768 UDP RFC 791 IP RFC 792 ICMP RFC 2068 HTTP
<b>Environment Specifications</b>	
<b>Operating</b>	Temperature: -40 ~ 75 degrees C Relative Humidity: 5 ~ 95% (non-condensing)
<b>Storage</b>	Temperature: -40 ~ 85 degrees C Relative Humidity: 5 ~ 95% (non-condensing)

### 3.3 Physical Specifications

<b>Dimensions (W x D x H)</b>	135 x 87.8 x 50 mm
<b>Net weight</b>	0.53 kg

**Top View**



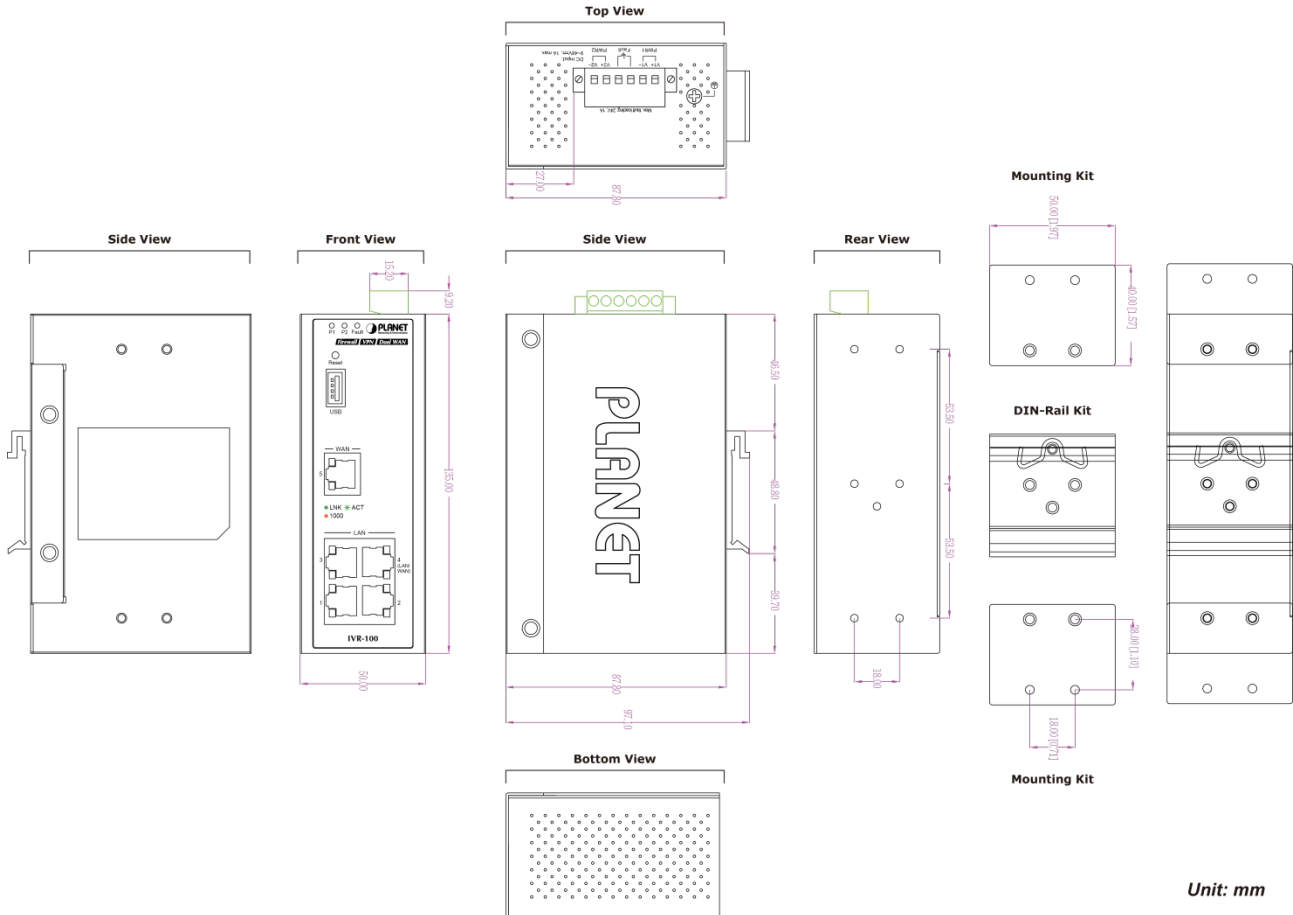
**Front View**



LED		
P1	Green	Lights to indicate power 1 has power.
P2	Green	Lights to indicate power 2 has power.
FAULT	Red	Lights to indicate either power 1 or power 2 has no power.
Ports		
USB Port	USB 3.0 port for system configuration backup and restoration.	

<b>Reset Button</b>	< 5 sec: System reboot > 5 sec: Factory default
<b>Port 1-3</b>	It is a LAN port for connecting to a switch.
<b>Port 4</b>	Default is LAN port. It can be defined as LAN port or WAN port.
<b>Port 5</b>	It is a WAN port for connecting to a perimeter router.

**Diagram**



**3.4 Environmental Specifications**

**Operating**

Temperature	-40 ~ 75°C
Relative Humidity	5 ~ 95% (non-condensing)

**Storage**

Temperature	-40 ~ 85°C
Relative Humidity	5~95% (non-condensing)

**3.5 Power Specifications**

Power Requirement	9-48V DC, 1A
-------------------	--------------

Power Consumption	Maximum 9 watts
-------------------	-----------------

### 3.6 Regulatory Compliance

FCC, CE

### 3.7 Reliability

MTBF > 50000 hrs @ 40 degrees C

### 3.8 Basic Packaging

- IVR-100 x 1
- Quick Installation Guide x 1
- Wall-mount Kit x 1
- Dust Cap x 5

### 3.9 Packaging Information

<b>Dimensions (W x D x H)</b>	202 x 140 x 94 mm
<b>Weight</b>	0.7 kg (gross weight)
<b>Carton Dimensions (W x D x H)</b>	600 x 239 x 332 mm
<b>Carton Weight</b>	9.2 kg
<b>Carton Unit</b>	12pcs in one carton