

RP-PG2618I

16-P Gigabit + 2-TP/SFP(100/1G) combo L2+ Managed PoE+ Switch



RP-PG2618I is a 16-port Managed Gigabit PoE Switch which delivers 16 (10M/100M/1G) RJ45 PoE+ ports, 2 Combo GbE RJ45/SFP ports and RJ45 Console port.

RP-PG2618I offers full suite of comprehensive Layer 2 switching capabilities such as ACL, Spanning Tree, DHCP Relay, IGMP QoS functions.. etc., and provides advanced L3 features like Static Route and IPv6 / IPv4 management functions. RP-PG2618I's 10/100/1000 Mbps ports are PoE-enabled, compliant with 802.3af and 802.3at standard, 16 ports PoE+ with a total power budget of 250W. RP-PG2618I provides a reliable infrastructure for your business network and delivers more intelligent features you need to improve the availability of your critical business applications, the switch provides ideal combination of affordability and capabilities for small and medium-size businesses to build high-performance network efficiently.

RP-PG2618I complies with 802.3az, the green feature enables the switch to automatically detect the length of connected Ethernet cables and adjust power usage accordingly.

Features

- L2+ features provide better manageability, security, QoS, and performance.
- PoE Port configuration and scheduling, 802.3at high power PoE plus standard
- Built in Device Management System (DMS)
- DHCP Server
- IPv4/IPv6 L3 static route
- Support SSH/SSL secured management
- Support SNMP v1/v2c/v3
- Support RMON groups 1,2,3,9
- Support sFlow
- Support IGMP v1/v2/v3 Snooping
- Support MLD v1/v2 Snooping
- Support RADIUS and TACACS+ authentication
- Support IP Source Guard
- Support DHCP Relay (Option 82)
- Support DHCP Snooping
- Support ACL and QCL for traffic filtering
- Support 802.1d(STP), 802.1w(RSTP) and 802.1s(MSTP)
- Support LACP and static link aggregation
- Support Q-in-Q double tag VLAN
- Support GVRP dynamic VLAN
- IEEE 802.3az EEE Energy Efficient Ethernet standard for green Ethernet

Specifications

Standards	<ul style="list-style-type: none"> ● IEEE 802.3/3u 10Base-T, 100Base-TX Ethernet ● IEEE 802.3ab 1000Base-T Ethernet ● IEEE 802.3z 1000Base-X Ethernet ● IEEE 802.3x Flow Control capability ● IEEE802.3at/af PoE standard ● IEEE802.3az Energy Efficient Ethernet
Interface	<ul style="list-style-type: none"> ● Port 1 to 16: RJ-45 10/100/1000Mbps with 802.3af/at PoE, auto MDI/X ● Port 17 to 18: RJ45/SFP(100/1000Mbps) combo ● RJ45 Console port ● Reset Button
Forwarding Capacity	<ul style="list-style-type: none"> ● 26.784 Mpps
Switching Capacity	<ul style="list-style-type: none"> ● 36 Gbps
Jumbo frames	<ul style="list-style-type: none"> ● 9216 Bytes
MAC Table	<ul style="list-style-type: none"> ● 8K MAC addresses
Layer 2 Switching	<ul style="list-style-type: none"> ●
Spanning Tree Protocol (STP)	<ul style="list-style-type: none"> ● Standard Spanning Tree 802.1d ● Rapid Spanning Tree (RSTP) 802.1w ● Multiple Spanning Tree (MSTP) 802.1s
VLAN	<ul style="list-style-type: none"> ● 802.1Q tag-based VLAN: Supports up to 4K VLANs simultaneously (out of 4096 VLAN IDs) <ul style="list-style-type: none"> ■ Port-based VLAN ■ Private VLAN Edge (PVE) ■ Voice VLAN ■ Guest VLAN ■ Q-in-Q (double tag) VLAN ■ 802.1v Protocol VLAN ■ MAC-based VLAN ■ IP Subnet-Based VLAN ■ Management VLAN
LACP Trunking	<ul style="list-style-type: none"> ● Link Aggregation Control Protocol (LACP) IEEE 802.3ad <ul style="list-style-type: none"> ■ Up to 9 groups ■ Up to 16 ports per group
GARP VLAN Registration Protocol (GVRP/GVRP)	<ul style="list-style-type: none"> ● GVRP stands for GARP (Generic Attribute Registration Protocol) VLAN Registration Protocol. It's a Layer 2 network protocol, for automatic configuration of switches in a VLAN network
DHCP Relay	<ul style="list-style-type: none"> ● Relay of DHCP traffic to DHCP server in different VLAN. ● Works with DHCP Option 82
IGMP v1/v2/v3 snooping	<ul style="list-style-type: none"> ● IGMP limits bandwidth-intensive multicast traffic to only the requesters ● Supports 1024 multicast groups
IGMP Querier	<ul style="list-style-type: none"> ● IGMP querier is used to support a Layer 2 multicast domain of snooping switches in the absence of a multicast router
IGMP Proxy	<ul style="list-style-type: none"> ● IGMP snooping with proxy reporting or report suppression actively filters IGMP packets in order to reduce load on the multicast router

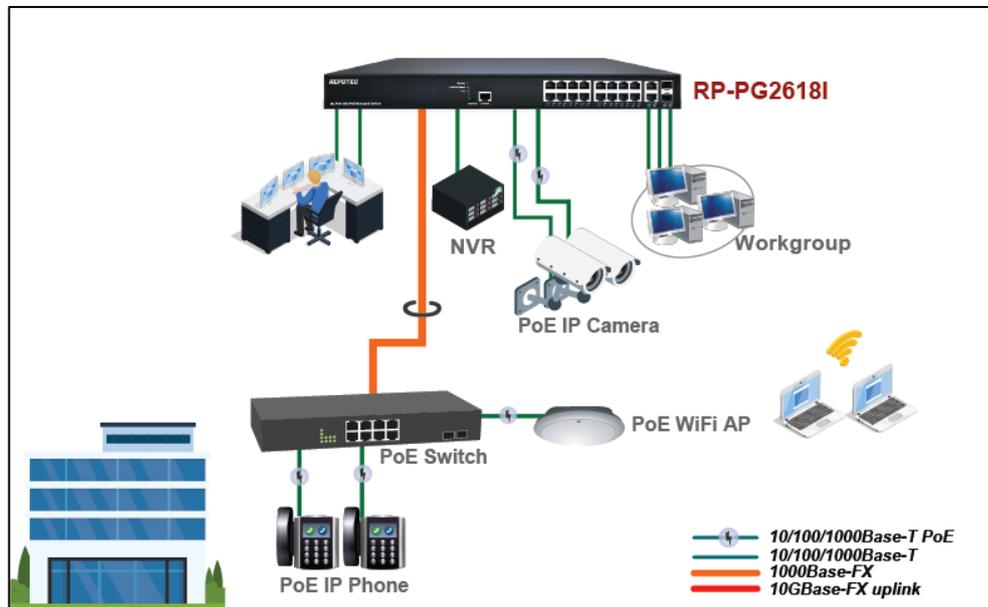
MLD v1/v2 snooping	<ul style="list-style-type: none"> ● Deliver IPv6 multicast packets only to the required receivers
Multicast VLAN Registration (MVR)	<ul style="list-style-type: none"> ● It uses a dedicated manually configured VLAN, called the multicast VLAN, to forward multicast traffic over Layer 2 network in conjunction with IGMP snooping
Layer 3 Switching	
IPv4 Static Routing	<ul style="list-style-type: none"> ● IPv4 Unicast: Static routing
IPv6 Static Routing	<ul style="list-style-type: none"> ● IPv6 Unicast: Static routing
Quality of Service	
Hardware Queue	<ul style="list-style-type: none"> ● Supports 8 hardware queues
Classification	<ul style="list-style-type: none"> ● Port based: Traffic QoS by Port ● 802.1p: VLAN priority based Layer 2 CoS QoS, Class of service is a parameter used in data and voice protocols to differentiate the types of payloads contained in the packet being transmitted ● DSCP based Differentiated Services (DiffServ) Layer 3 DSCP QoS: IP packets can carry either an IP precedence (IPP) value or a Differentiated Services Code Point (DSCP) value. QoS supports the use of either value because DSCP values are backward-compatible with IP precedence values ● Classification and re-marking TCP/IP ACLs: QoS by ACL
Rate Limiting	<ul style="list-style-type: none"> ● Ingress policer ● Egress shaping and rate control ● Per port
Scheduling	<ul style="list-style-type: none"> ● Strict priority and weighted round-robin (WRR): Weighted Round Robin is a scheduling algorithm that uses weights assigned to queues to determine how much data will be emptied from a queue before moving to the next queue
Security	
ACLs	<ul style="list-style-type: none"> ● Supports up to 512 entries. Drop or rate limitation based on: ● Source and destination MAC, VLAN ID or IP address, protocol, port ● Differentiated services code point (DSCP) / IP precedence ● TCP/ UDP source and destination ports ● 802.1p priority ● Ethernet type ● Internet Control Message Protocol (ICMP) packets ● TCP flag
Port Security	<ul style="list-style-type: none"> ● Locks MAC addresses to ports, and limits the number of learned MAC address
IP Source Guard	<ul style="list-style-type: none"> ● Prevents illegal IP address from accessing to specific port in the switch
Storm Control	<ul style="list-style-type: none"> ● Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port
IEEE 802.1X	<ul style="list-style-type: none"> ● IEEE802.1X: RADIUS authentication, authorization and accounting, MD5 hash, guest VLAN, single/multiple host mode and single/multiple sessions ● Supports IGMP-RADIUS based 802.1X ● Dynamic VLAN assignment

TACACS+	<ul style="list-style-type: none"> • Supports TACACS+ authentication. Switch as a client
Secure Shell (SSH)	<ul style="list-style-type: none"> • SSH secures Telnet traffic in or out the switch, SSH v1 and v2 are supported
Secure Sockets Layer (SSL)	<ul style="list-style-type: none"> • SSL encrypts the http traffic, allowing advanced secure access to the browser-based management GUI in the switch
HTTPs and SSL (Secured Web)	<ul style="list-style-type: none"> • Hyper Text Transfer Protocol Secure (HTTPS) is the secure version of HTTP
BPDU Guard	<ul style="list-style-type: none"> • The BPDU guard, an enhancement to STP, removes a node that reflects BPDUs back in the network. It enforces the STP domain borders and keeps the active topology predictable by not allowing any network devices behind a BPDU guard-enabled port to participate in STP
DHCP Snooping	<ul style="list-style-type: none"> • A feature acts as a firewall between untrusted hosts and trusted DHCP servers
Loop Protection	<ul style="list-style-type: none"> • To prevent unknown unicast, broadcast and multicast loops in Layer 2 switching configurations.
Management	
DHCP	<ul style="list-style-type: none"> • DHCP Server: Support DHCP server to assign IP to DHCP clients • DHCP client: The Dynamic Host Configuration Protocol (DHCP) is a standardized network protocol used on Internet Protocol (IP) networks for dynamically distributing network configuration parameters, such as IP addresses for interfaces and services
Event/Error Log	<ul style="list-style-type: none"> • Support SNMP Trap/Syslog/SMTP
SNMP	<ul style="list-style-type: none"> • SNMP version 1, 2c and 3 with support for traps, and SNMP version 3 user-based security model (USM)
Remote Monitoring (RMON)	<ul style="list-style-type: none"> • Embedded RMON agent supports RMON groups 1,2,3,9 (history, statistics, alarms, and events) for enhanced traffic management, monitoring and analysis
Firmware Upgrade	<ul style="list-style-type: none"> • Web browser upgrade (HTTP/ HTTPs) and TFTP • Upgrade through console port as well
Configuration Export/Import	<ul style="list-style-type: none"> • update of the firmware controlling the switch
Port Mirroring	<ul style="list-style-type: none"> • Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe. Up to N-1 (N is Switch's Ports) ports can be mirrored to single destination port. A single session is supported
IEEE 802.1ab (LLDP)	<ul style="list-style-type: none"> • Used by network devices for advertising their identities, capabilities, and neighbors on an IEEE 802.1ab local area network • Support LLDP-MED (ANSI/TIA-1057) extensions
UPnP	<ul style="list-style-type: none"> • The Universal Plug and Play Forum, an industry group of companies working to enable device-to-device interoperability by promoting Universal Plug and Play
CDP Aware	<ul style="list-style-type: none"> • The CDP operation is restricted to decoding incoming CDP frames (The switch doesn't transmit CDP frames). CDP frames are only decoded if LLDP on the port is enabled
s-Flow	<ul style="list-style-type: none"> • The industry standard for monitoring high speed switched networks. It

	gives complete visibility into the use of networks enabling performance optimization, accounting/billing for usage, and defense against security threats
Web GUI Interface	<ul style="list-style-type: none"> ● Built-in switch configuration utility for browser-based device configuration
CLI	<ul style="list-style-type: none"> ● For users to configure/manage switches in command line modes
Dual Image	<ul style="list-style-type: none"> ● Independent primary and secondary images for backup while upgrading
NTP	<ul style="list-style-type: none"> ● Network Time Protocol (NTP) is a networking protocol for clock synchronization between computer systems over packet-switched
Switch Management	<ul style="list-style-type: none"> ● HTTP/HTTPs ● SSH ● DHCP Client/ DHCPv6 Client ● Telnet ● IPv6 Management
Diagnostics	<ul style="list-style-type: none"> ● Cable diagnostics ● Ping ● Syslog
Device Management System (DMS)	
Graphical Monitoring	<ul style="list-style-type: none"> ● Topology view: Support intuitive way to configure and manage switches and devices with visual relations ● Floor view: It's easy to drag and drop PoE devices and help you to build smart workforces ● Map view: Enhance efficiency to drag and drop devices and monitor surroundings on google map ● Display visual chart of network traffic of all devices and monitor every port at any time from switches
Find my Switch	<ul style="list-style-type: none"> ● Search your real switches quickly and manage directly
Technical Support Online	<ul style="list-style-type: none"> ● Provide technical assistance to the user remotely
Traffic Monitoring	<ul style="list-style-type: none"> ● Display visual chart of network traffic of all devices and monitor every port at any time from switches
Trouble Shooting	<ul style="list-style-type: none"> ● Network diagnostic between master switch and devices ● Support protection mechanism, such as rate-limiting to protect your devices from brute-force downloading
Power over Ethernet (PoE)	
Port Configuration	<ul style="list-style-type: none"> ● Supports per port PoE configuration function
PoE Scheduling	<ul style="list-style-type: none"> ● Supports per port PoE scheduling to turn on/off the PoE devices (PDs)
Auto-checking	<ul style="list-style-type: none"> ● Check the link status of PDs. Reboot PDs if there is no responses
Power Delay	<ul style="list-style-type: none"> ● The switch provides power to the PDs based on delay time when PoE switch boots up, in order to protect switch from misuse of the PDs
PoE Power Budget	<ul style="list-style-type: none"> ● 250 Watts
Power Supply	<ul style="list-style-type: none"> ● Internal Power supply 100~240VAC, 50/60 Hz
Environment	<ul style="list-style-type: none"> ● Operating temperature: 0°C to 45°C ● Storage Temperature: -20 to 70°C ● Operating Humidity: 10% to 90% (Non-Condensing)

Dimension	<ul style="list-style-type: none"> ● 442 x 44 x 211mm (WxHxD)
Certification	<ul style="list-style-type: none"> ● CE, FCC Part 15 Class A ● EN61000-4-5 (for RJ45 Port, Surge 6KV)

Application



Ordering information

RP-PG2618I 16-P Gigabit + 2-TP/SFP(100/1G) combo L2+ Managed PoE+ Switch (250W)