

# DrayTek

## VigorSwitch 2540x series

54-Port Layer 2+ Managed 10G Switch



DrayTek VigorSwitch 2540x series is a Layer 2+ Managed 10 Gbps switch with 48 Gigabit Ethernet ports and 6 x SFP+ 10Gbps Fiber links. Supporting advanced Layer 3 features, DHCP Server and VLAN Routing. Moreover, it supports VLAN routing to route the inter-VLAN traffic directly, shares loads of the router, and improve overall network performance.

## VigorSwitch G2540x/P2540x

48 x GbE  
10/100/1000Mbps  
Ethernet, RJ-45

6 x 10G SFP+  
1000Mbps/10Gbps  
fiber slot

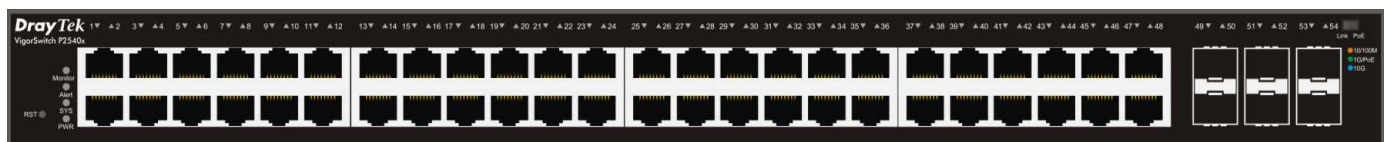
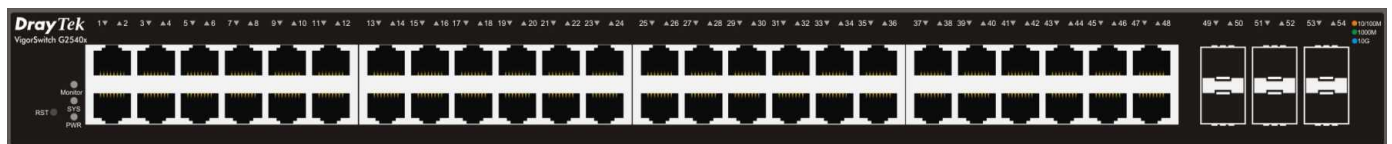
216 Gbps  
Switching Capacity

160.7 Mpps  
Forwarding Rate

## VigorSwitch P2540x

48 x PoE/PoE+  
PoE/PoE+ Gigabit  
Ethernet Ports

400 watts  
of PoE Power Budget



# Key Features



## PoE (P2540x)

Deliver power and data over one ethernet cable, turn on/off the PoE device periodically with PoE Schedule.



## QoS (Quality of Service)

Improve the performance of critical traffic by prioritizing the traffic with CoS, DSCP, and IP Precedence tag.



## PoE Device Check (P2540x)

Enable Ping Watchdog for all PoE devices, if they lose their network connection, automatically restart them by a power cycle.



## Wire-Speed VLAN Routing

Improve overall network performance to route the inter-VLAN traffic directly and offload the router.



## Auto Surveillance & Voice VLAN

Recognize traffic from IP cameras and IP phones automatically and add CoS tag for QoS prioritization.



## 10G SFP+

Provides 10G-capable fiber SFP ports for aggregation or uplinking to the core switches.



## IP Conflict Prevention

Improve network stability by avoiding IP conflicts caused by a misconfigured or malicious host.



## Multiple Admin Accounts

Multiple Admin accounts with two levels of administrator privilege.



## Access Control

Support ACL by IP/MAC and 802.1x port access control with RADIUS to filter unauthorized hosts.



## Energy-Efficient Ethernet

Compliant with IEEE 802.3az to reduce power consumption.



## ONVIF-Friendly

Recognize the ONVIF devices, display surveillance topology, provide UI for video streaming and device maintenance.



## Central Switch Management

Set up VLAN easily from the router and get a centralized hierarchy view of the switches.

# Specification

## Interface

LAN Port	8 x 10/100/1000Base-T Ethernet, RJ-45 4 x Gigabit Ethernet/SFP Combo
Slide Switch	1 (Port/PoE LED)(P2540x)
Button	1 x Factory Reset

## PoE (P2540x)

PoE Capable Ports	48
PoE Standards	PoE/PoE+ (802.3af/802.3at), Type mode A
PoE Power Budget	400 watts
Power Limit	•
Scheduled On/Off	•
Power Cycle on Port	Manual, Ping Watchdog

## Capacity

Buffer Size	16 Mbit
Switching Capacity	216 Gbps
Forwarding Rate	160.7 Mpps (64 bytes)
MAC Address Table	32k
Jumbo Frame	Up to 12KB
L3 Routing Table	Max. 2k

## Networking Standards

IP Version	IPv4, IPv6
Ethernet Standards	802.3af PoE, 802.3at PoE+ (P2540x) 802.3 10Base-T 802.3u 100Base-T 802.3ab 1000Base-T IEEE802.3ae 10GBase-X 802.3x Flow Control 802.3 Auto-Negotiation 802.1q Tag-based VLAN 802.1p Class of Service 802.1d STP 802.1w RSTP 802.1s MSTP 802.3ad LACP 802.1ad QinQ 802.1x Port Access Control 802.1AB LLDP 802.3az EEE

## VLAN

Max.Number of VLAN	256
VLAN Type	802.1q Tag-based MAC-based Protocol-Based Management VLAN Voice VLAN Surveillance VLAN
802.1x Guest VLAN	•
Port Isolation	•
GVRP	•
Q-in-Q	Basic

## ONVIF Surveillance

Discovery	•
Surveillance Topology	•
Real-Time Video Streaming	•
ONVIF Device Maintenance	Device Info, Reset Factory Default, Time Settings, Reboot

## Security

Access Control List	MAC, IPv4, IPv6
Storm Control	Broadcast, Unknown Multicast, Unknown Unicast
DoS Defense	•
802.1x Port Access Control	•
IP Source Guard	•
IP Conflict Detection/Prevention	•
Loop Protection	•
Dynamic ARP Inspection	•
DHCP Snooping with Option 82	•

## QoS

Number of QoS Queues	8
Queue Scheduling	SPQ, WRR
CoS (Class of Service)	802.1p CoS, DSCP, CoS-DSCP, IP Precedence
Rate Limit & Shaping	•

## Link Aggregation

Max. Number of Group	8
Max. Number of Member in Each Group	8
Type	Static, LACP
Traffic Load Balancing	MAC Address, IP/MAC Address

## Multicast

IGMP Snooping	v2, v3 (BISS)
IGMP Querier	•
MLD Snooping	v1, v2 (Basic)
Max. Number of Multicast Group	256
Group Throttling	•
Group Filtering	•
MVR (Multicast VLAN Registration)	•

## Layer 3 Features

Static Route	•
VLAN Route	•
DHCP Server	•

## Management

Web Interface	HTTP, HTTPS
Command Line Interface	Telnet, SSH
OpenVPN Client	Certificate-based authentication
User Authentication	Local Database, RADIUS, TACACS+
sFlow	•
SNMP	v1, v2c, v3
Private MIB	•
RMON Group	1, 2, 3, 9
LLDP	LLDP-MED, Media Endpoint Discovery Extension
Mail Alert	Port Status, Port Speed, System Restart, IP Conflict
Syslog	•
2-Level Admin Privilege	•
Multiple Admin Accounts	•
Managed by Vigor Router SWM	•
Managed by VigorConnect	•
Managed by VigorACS 2	•
Config File Export/Import	•
Dual Image	•
SNTP	•
Diagnostics Tools	Port Mirroring, Ping, Cable Test

## Physical

Operating Temperature	0 to 45°C
Storage Temperature	-20 to 70°C
Operating Humidity	10 to 90% non-condensing
Storage Humidity	5 to 90% non-condensing