VigorSwitch Series

DrayTek
www.draytek.com

- 8 10/100/1000Base-T Gigabit Ethernet ports Layer 2 managed switch (G2080)
- 24 10/100/1000Base-T Gigabit Ethernet ports Layer 2 managed switch (G2240)
- 24 10/100 Fast Ethernet ports Layer 2 managed PoE switch (P2260)

- VLAN features for providing both security and performance
- Layer 4 classification for QoS function to assist real-time applications
- Port Mirroring mechanism for monitoring network without breaking down data flow
- Dual media ports for flexible fiber connection switching
- Port trunk for balancing traffic load
- 802.1x Access Control for improving network security
- 802.1d compatible & 802.1w Rapid Spanning Tree for failover backup
- Broadcast/Multicast Storm Control for preventing flooding in the network

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SMBs do notice that the increasing business requires much more comprehensive corporate structure to conduct diversified tasks. At the same time, your current corporate structure escalates the complexity of the IT infrastructure such as the considerable numbers of wire PCs needed, the management of bandwidth usage, the need of isolated data transmission between departments and so on. Not having sufficient IT resources to deal with these things? DrayTek VigorSwitch series makes you and your IT professionals' life easier. In addition to the basic switch function for managing wire PCs, VigorSwitch series takes care of the stable quality and security of the data flow.

Stable Quality:

VigorSwitch series utilize both fixed and dynamic methods to ensure the quality of daily data transmission, especially for the real-time application. For fixed method, DrayTek bandwidth management allows users to define different bandwidth for various departments. For example, you might like your Sales Dept. to always have highest speed for data upload/download to achieve customers' requests ASAP. On the other hand, your HR Dept. could be allocated the smaller bandwidth due to its job function more focusing on internal communication. For dynamic method, DrayTek applies QoS (Quality of Service) to make sure the essential data always receives the highest priority. For instance, Qos gives your VoIP the highest priority to ensure the crystal-clear voice quality.

Security:

For external networking communication security, VigorSwitch series apply 802.1x authentication for user access to the network. Moreover, MAC filter function allows users to limit the number of MAC address per port. Users can define static MAC address for each port to ensure the access of registered machines. With these two features, users can establish an access mechanism with identifying user and machine and control the number of access stations easily.

For your internal security management, you wouldn't like each individual in your organization to access the corporate confidential data not corresponding to his/her job function. VigorSwitch series allows you to set up various VLAN groups to control the access between certain VLAN groups to enhance the security. For example, Sales Dept. (VLAN 1) would only have limited or no data accessibility to Financial Dept. (VLAN 2) dependent upon your corporate policy. On the other hand, employees in the same department (VLAN) can exchange data quicker to enhance the performance.

Besides providing security, VLAN group setup also lets you easily grant the suitable bandwidth to particular Dept. Moreover, VLAN assists dynamic data transmission through Q in Q. For example, VigorSwith series would assign the tag for certain data related to real-time applications, such as VoIP or IPTV to obtain the highest speed through your network.

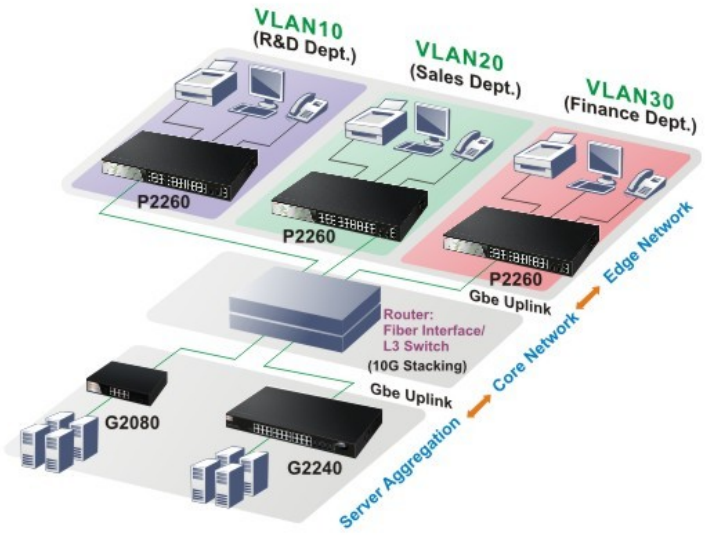
Certainly, DrayTek understands you want more! VigorSwitch series complied with Layer 2 are easy to use and install. Also, VigorSwitch series fully-compatible with existing 10/100/1000 network infrastructure provide high speed data flow with 8 and 24 Gigabit Ethernet ports. Users can utilize dual media ports for flexibly switching to the fiber connection. Moreover, VigorSwitch series reflect the current "Green IT" demand to have professional design and launch POE switch to better manage your energy consumption. Now, you can save your electricity bill and protect our own mother earth at the same time.

G2080

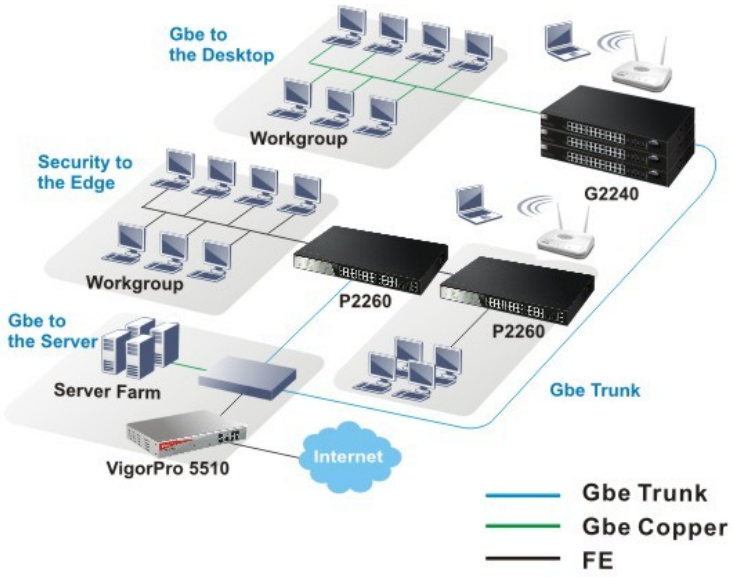
G2240

P2260

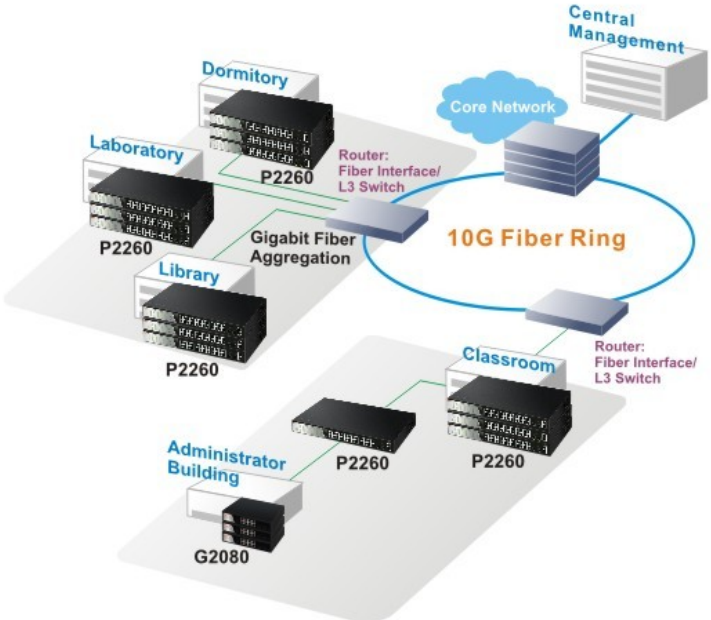
Enterprise Solution



Building Solution



Campus Solution



VigorSwitch G2080

8 Gigabit Port Layer 2 Managed Switch

Standard Compliance

- IEEE 802.3x Flow Control Capability
- IEEE 802.1q VLAN
- IEEE 802.1p QoS

Performance

- Switching Capacity
  - 8 Gigabit Ethernet Ports with Non-blocking Wise Speed Performance
  - 8 K MAC Addresses
  - 144KB On-chip Frame Buffer
  - Supports Jumbo Frame, Up to 8K
  - Broadcast/Multicast Storm Suppression
  - Port Mirroring
- VLAN
  - Port-base VLAN
  - IEEE802.1q Tag-base VLAN, Up to 256 active VLANs
  - Q-in-Q is an efficient method for enabling Subscriber Aggregation
- VSM (Virtual Stacking Management)
  - Up to 16 switches can be managed via single IP
  - Virtual stacking, no extra stacking hardware and physical central wiring closet are needed
- QoS
  - Supports Layer 4 TCP/UDP port and ToS classification
  - Supports 802.1p QoS with Two-level priority queue
  - Supports priority in a Q-in-Q tag
- Bandwidth Control
  - Supports bandwidth rating per port ingress and egress rate limit 1000Mbps with 1Mbps

Protocol

- LACP
  - Port Trunking with 4 Trunking Groups
  - Up to 8 Ports for Each Group
- GVRP/GARP
  - 802.1q with GVRP/ GARP
- Multicasting
  - Supports IGMP snooping including active and passive modes
- STP/RSTP
  - IEEE802.1d/1w

Network Security

- 802.1x Access Control
- Management Access Policy Control

SNMPv1,v2c Network Management

- RFC 1213 MIB (MIB-II)
  - Interface MIB
  - Address Translation MIB
  - IP MIB
  - ICMP MIB
  - TCP MIB
  - UDP MIB
  - SNMP MIB
- RFC 1757 RMON MIB
  - Statistics Group 1
  - History Group 2
  - Alarm Group 3
  - Event Group 9
- RFC 1493 Bridge MIB
- RFC 1643 Ethernet MIB
- Enterprise MIB

Interface

- 8 x 10/100/1000Mbps Ports, RJ-45
- 2 x SFP Dual-media Ports (Shared with 2 Gigabit Ports)
- 1 x Console Port
- 1 x Restart Button

VigorSwitch G2240

24 Gigabit Port Layer 2 Managed Switch

Standard compliance

- IEEE 802.3x Flow Control capability
- IEEE 802.1q VLAN
- IEEE 802.1p QoS

Performance

- Switching capacity:
  - 24 Gigabit Ethernet Ports with Non-blocking Wise Speed Performance
  - 8 K MAC Addresses
  - Support Jumbo Frame, up to 9K
  - Unknown Unicast/Broadcast/Multicast Storm Suppression
  - Port Mirroring
- VLAN
  - Port-base VLAN
  - IEEE802.1q Tag-base VLAN, up to 4K active VLANs
  - Support Q-in-Q VLAN
  - Multicast VLAN Management
- VSM (Virtual Stacking Management)
  - Up to 16 switches can be managed via single IP
  - Virtual stacking, no extra stacking hardware and physical central wiring closet are needed
- QoS
  - Supports QCL for layer 4 TCP/UDP port and ToS classification
  - Supports IEEE802.1p QoS with Four-level priority queue
  - Supports priority in a Q-in-Q tag
- Bandwidth Control
  - Supports bandwidth rating per port ingress and egress rate limit 500Kbps~1000Mbps with 1Kbps

Protocol

- LACP
  - Port Trunking with 12 Trunking Groups
  - Up to 16 Ports for Each Group
- GVRP/GARP
  - IEEE802.1q with GVRP/ GARP
- Multicasting
  - Supports IGMP snooping including active and passive mode
- STP/RSTP/MSTP
  - IEEE802.1d/1w/1s

Network Security

- 802.1x Access Control for Port Based and MAC Based Authentication
- Management Access Policy Control
- Access Control List
- IP-MAC-Port Binding
- DHCP Relay Agent

SNMPv1,v2c Network Management

- RFC 1213 MIB (MIB-II)
  - Interface MIB
  - Address Translation MIB
  - IP MIB
  - ICMP MIB
  - TCP MIB
  - UDP MIB
  - SNMP MIB
- RFC 1757 RMON MIB
  - Statistics Group 1
  - History Group 2
  - Alarm Group 3
  - Event Group 9
- RFC 1493 Bridge MIB
- RFC 1643 Ethernet MIB
- Enterprise MIB

Interface

- 24 x 10/100/1000Mbps Ports, RJ-45
- 4 x SFP Dual-media Ports (Shared with 4 Gigabit Ports)
- 1 x Console Port
- 1 x Restart Button

VigorSwitch P2260

24 Fast Ethernet Port Layer 2 Managed PoE Network Switch

Standard compliance

- IEEE 802.3x Flow Control Capability
- IEEE 802.1q VLAN
- IEEE 802.1p QoS

Performance

- Switching Capacity
  - 24 Fast Ethernet Ports + 2 Gigabit Ethernet Ports with Non-blocking Wise Speed Performance
  - 8 K MAC Addresses
  - 256k Packet Buffer and 128k Control Memory
  - Multicast/Broadcast/Unknown-unicast Storm Suppression
  - Port Mirroring
- VLAN
  - Supports SVL/IVL configuration to meet your VLAN requirement
  - Port-base VLAN
  - IEEE802.1q Tag-base VLAN, Maximum 4K, up to 256 Active VLANs
  - Flooding unknown vlan frame setting, can flood packet with some vlan tag associated to a invalid/inactive vlan
  - In tag-base VLAN, supports egress/ingress packet filter
  - Q-in-Q is an efficient method for enabling Subscriber Aggregation
- VSM (Virtual Stacking Management)
  - Up to 16 switches can be managed via single IP
  - Virtual stacking, no extra stacking hardware and physical
  - central wiring closet are needed
- QoS
  - Port Based, 802.1p , TOS and Diffserv based QoS Packet Classification
  - Supports 4 level priority queues to prioritize in-bound and out-bound traffic
  - Supports two Scheduling, WRR and Strict
  - Supports priority in a Q-in-Q tag
- Isolated Group
  - Provide one group allows certain ports to be designated as protected
- Bandwidth Control
  - Ingress / Egress Rate Limit
    - 1~24 Ports: 1K up to 100Mbps
    - 25, 26 Ports: 1K up to 1000Mbps

PoE Specification

- 24-port IEEE802.3af PoE PSE
- Endpoint with 48VDC Power through RJ-45 pin 1, 2, 3, 6
- PoE Activity LED Indicator
- 185 Watts of Total Power (up to 15.4 watts per 10/100 port)
- Auto detect powered device and consumption levels
- Supports per port power consumption monitoring
- Smart feature for PD on/off, PD detection, power level, PD status and power feeding priority
- Circuit protection to prevent power interference between ports
- Supports per port PoE State setting
- Supports per port power priority setting

Protocol

- LACP
  - 2 Fast Ethernet +1 Gigabit Ethernet Groups
  - Per-group max 4 Member
  - Provides DA, SA and DA+SA Mac-based trunking with automatic link fail-over
- GVRP/GARP
  - 802.1q with GVRP/ GARP
- Multicasting
  - Supports IGMP snooping including active and passive mode
- STP/RSTP
  - 802.1d/1w

Network Security

- 802.1x Access Control
- Isolated Group
- Restricted Group
- Management Access Policy Control

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  - History Group 2
  - Alarm Group 3
  - Event Group 9
- RFC 1493 Bridge MIB
- RFC 1643 Ethernet MIB
- Enterprise MIB

Interface

- 24 x 10/100Mbps Ports, RJ-45
- 2 x SFP/Gigabit Dual-media Ports
- 1 x Console Port
- 1 x Restart Button
- 1 x LEDSET Button

	VigorSwitch P2260	VigorSwitch G2080	VigorSwitch G2240
Gigabit Port	2	8	24
SFP Port (GBIC Module-Slots)	2	2 (Shared)	4 (Shared)
IEEE802.3af PoE Port	24		
Throughput	8.8Gb	16Gb	48Gb
Mac Entry	8k	8k	8k
Port-base VLAN	26	8	24
Tag-base VLAN	256	64 static / 256 dynamic	4K
Q-in-Q	✓	✓	✓
QoS Priority Queues	4	2	4
Classification	Port Priority / 802.1p / IP TOS / DSCP / L2 MAC Priority	Port Priority / 802.1p / IP ToS / L4 IP TCP, UDP Port Classification / IP Diffserv Classification	Layer 4 TCP / UDP Port and ToS Classification
Storm Control	✓	✓	✓
Jumbo Frame	1536 byte(+CRC)	9208 byte(+CRC)	9216byte(+CRC)
Port Mirroring	✓	✓	✓
LACP	✓	✓	✓
802.1x	✓	✓	✓
STP / RSTP / MSTP	STP / RSTP	STP / RSTP	STP / RSTP / MSTP
ACL (Access Control List)			✓
QCL (QoS Control List)			✓
IP-MAC-Port Binding			✓
DHCP Option 82			✓
Trunking Group	2FE+1GbE	8GbE	16GbE
IGMP Snooping	V2	V2	V2
Fail-over	✓	✓	✓
GVRP	✓	✓	✓
SNMP	V2C	V2C	V2C
Rate Limit	66Kb~102400Kb	1~1000Mb	500Kb~1000Mb
In Band & Out Band managed	✓	✓	✓
VSM (Virtual Stacking Management)	✓	✓	✓
Dimensions	44(H), 442(W), 209(D)mm	44(H), 217(W), 132.7(D)mm	44(H), 442(W), 209(D)mm
POE	185W		

www.draytek.com E-mail:info@draytek.com Tel:+886 3 597 2727 Fax:+886 3 597 2121