Cisco ME 6524 Ethernet Switch for Enterprises

Product Bulletin No. PB3218A

Cisco introduces the Cisco® ME 6524 Ethernet Switch, a fixed-configuration switch built to meet the requirements of next-generation Carrier Ethernet applications and enterprise applications such as branch, peering, MPLS provider edge/customer edge, or small distribution/core router. Based on groundbreaking and industry-leading Cisco Catalyst® 6500 Series technology, the Cisco ME 6524 cost-effectively delivers on the stringent performance, reliability, and quality of service (QoS) requirements of enterprise customers who want a compact, low-powered solution.

The Cisco ME 6524 can be deployed in the enterprise WAN in various places where Ethernet is available. It can be deployed as a branch office router, Multiprotocol Label Switching (MPLS) provider edge router, WAN edge router, or a peering router in the enterprise. The space- and power-optimized 1.5-rack-unit (1.5RU) Cisco ME 6524 enhances the industry-leading Cisco Carrier Ethernet solution portfolio by extending highly advanced MPLS, QoS, multicast, and IPv6 features into Ethernet access and aggregation networks, facilitating scalable and service-rich Gigabit Ethernet access for both fiber and copper deployments.

In an enterprise network where the Cisco Catalyst 6500 Series Switches are deployed in the access, aggregation, and core layers, the Cisco ME 6524 is a perfect fit for an end-to-end network deployment. Because the Cisco ME 6524 utilizes the same code as the Catalyst 6500 Series Switches, customers can standardize on a single image with the same feature set across their whole network, in both LAN and Metro Ethernet deployments.

The support for software modularity maximizes availability, boosts operational efficiency, and minimizes downtime. Evolutionary software advancements enable modular Cisco IOS® Software subsystems to run as independent, self-healing processes; minimize unplanned downtime through fault containment and stateful process restarts; simplify software changes through subsystem In-Service Software Upgrades (ISSUs); and enable process-level, automated policy control by integrating Embedded Event Manager (EEM), all key benefits necessary for Carrier Ethernet and broadband aggregation deployments. Software Modularity images require a minimum of 512 MB DRAM on the switch processor.

Furthermore, the Policy Feature Card 3C (PFC3C), which is included with the Cisco ME 6524, offers scalable support for multicast applications with protocols such as Internet Group Management Protocol Version 3 (IGMPv3), Protocol Independent Multicast (PIM), PIM Sparse Mode (PIM-SM), PIM Source Specific Multicast (PIM-SSM), and PIM Snooping, which optimize triple-play delivery at the network edge.

The Cisco ME 6524 can scale to support MPLS and IPv6 applications for Layer 2 and Layer 3 VPN services integration.

Announcement Summary

There are two models of the Cisco ME 6524:

- Cisco ME 6524 with 24 Gigabit Ethernet Small Form-Factor Pluggable (SFP) downlinks and 8 Gigabit Ethernet SFP uplinks (part number ME-C6524GS-8S), as shown in Figure 1.

Figure 1. Cisco ME 6524 with 24 Gigabit Ethernet SFP Downlinks

- Cisco ME 6524 with 24 Ethernet 10/100/1000 downlinks and 8 Gigabit Ethernet SFP uplinks (part number ME-C6524GT-8S), as shown in Figure 2.

Figure 2. Cisco ME 6524 with 24 Ethernet 10/100/1000 Downlinks

Specifications

The Cisco ME 6524 is a space- and power-optimized Ethernet access switch with the following specifications:

- 1.5 RU rack space
- Dimension: 2.625 inches height x 17.45 inches width x 19 inches depth (6.7 x 44.3 x 48.3 cm)
- 400W DC power supplies
- 400W AC power supplies

Because it comes standard with the PFC3C, the Cisco ME 6524 offers architecture and feature consistency with the Cisco Catalyst 6500 Supervisor Engine 720 and Supervisor Engine 32. Table 1 summarizes the key features available on the Cisco ME 6524. Tables 2 and 3 provide ordering information.

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Table 1. Key Features of the Cisco ME 6524

Technology	Feature
Layer 2 switching	• IEEE 802.1Q • IEEE 802.1D/802.1w/802.1s • Port Aggregation Protocol (PAgP) / IEEE 802.3ad • IEEE 802.1Q Tunneling • Layer 2 Protocol Tunneling (L2PT) • Flexlink • IEEE 802.3x • Cisco Discovery Protocol • VLAN Trunking Protocol (VTP) • Unidirectional Link Detection (UDLD)
IPv4 routing	• Static Routing • Open Shortest Path First (OSPF) • Enhanced Interior Group Routing Protocol (EIGRP) • Intermediate System-to-Intermediate System (IS-IS) Protocol • Border Gateway Protocol Version 4 (BGPv4) • Hot Standby Router Protocol (HSRP) • Virtual Router Redundancy Protocol (VRRP) • Gateway Load Balancing Protocol (GLBP) • Bidirectional Forwarding Detection (BFD) for OSPF and IS-IS
Security	• Port Security on access, 802.1Q trunk, and 802.1Q tunneling ports • IEEE 802.1x • Private VLAN • Per-VLAN MAC Limiting • Control Plane Policing • Hardware-based Rate Limiters • Unicast Flood Blocking • Storm Control • Dynamic Host Configuration Protocol (DHCP) Snooping • DHCP Option 82 • Dynamic ARP Inspection • VLAN-based and port-based ACLs
Multicast	• IGMP v1, v2, v3 • IGMP Snooping • PIM, PIM-SM, PIM-SSM • PIM Snooping • Bidirectional PIM
Quality of Service	• Ingress Policing (Per Port, Per VLAN, Per Port + Per VLAN) • Shaped Round Robin (SRR) and Deficit Weighted Round Robin (DWRR) Scheduling • DSCP Transparency • Class of service (CoS) Mutation
MPLS	• Ethernet over MPLS (VC Type 4 and VC Type 5) • MPLS VPN • Label Distribution Protocol (LDP) • Traffic Engineering for OSPF (OSPF-TE) and IS-IS (ISIS-TE) • MPLS TE Fast Reroute (FRR)
IPv6	• Native IPv6 • Routing Information Protocol next generation (RIPng), MP-BGP4, OSPFv3 • IPv6 over IPv4 Tunnels • Internet Control Message Protocol version 6 (ICMPv6) • Configured, Automatic, Generic Routing Encapsulation (GRE), 6to4, ISATAP Tunnels • IPv6 QoS • PIM-SM and PIM-SSM

Ordering Information

Table 2. Cisco ME 6524 Product Numbers and Software Images

Product Number	Description
Cisco ME 6524	
ME-C6524GS-8S	24 Gigabit Ethernet SFP interfaces + 8 Gigabit Ethernet SFP uplinks, 1 fan tray
ME-C6524GT-8S	24 Ethernet 10/100/1000 interfaces + 8 Gigabit Ethernet SFP uplinks, 1 fan tray
Power Supply for Cisco ME 6524	
PWR-400W-DC	400W DC power supply for the Cisco ME 6524
PWR-400W-AC	400W AC power supply for the Cisco ME 6524
Memory Options for Cisco ME 6524	
MEM-XCEF720-256M	Default memory on the Cisco ME 6524 switch processor
MEM-XCEF720-512M	512-MB memory upgrade option for the switch processor on the Cisco ME 6524
MEM-XCEF720-1GB	1-GB memory upgrade option for the switch processor on the Cisco ME 6524
MEM-MSFC2-512MB	Default memory on the Cisco ME 6524 router processor
MEM-MSFC3-1GB	1-GB memory upgrade option for the router processor on the Cisco ME 6524
MEM-C6K-CPTFL512M	Optional external 512-MB compact flash memory
Software Images	
S523IBL-12218ZU	• Cisco ME 6524 IP Base LAN Only • Layer 2 feature set • RIP • EIGRP Stub
S523IBK9L-12218ZU	• Cisco ME 6524 IP Base SSH LAN Only • Same functionalities as the Cisco ME 6524 IOS IP Base image
S523AIK9L-12218ZU	• Cisco ME 6524 IOS Advanced IP Services • Same functionalities as the Cisco ME 6524 IOS IP Base image • Layer 3 IPv4 services • Layer 3 IPv6 services • Advanced MPLS feature set

Table 3. Availability Dates for Cisco ME 6524

Part Number	Date
ME-C6524GS-8S and ME-C6524GS-8S=	August 2006
ME-C6524GT-8S and ME-C6524GT-8S=	August 2006
PWR-400W-DC and PWR-400W-DC=	August 2006
PWR-400W-AC and PWR-400W-AC=	May 2008
S523IBL-12218ZU	August 2006
S523IBK9L-12218ZU	August 2006
S523AIK9L-12218ZU	August 2006

For More Information

For more information about the Cisco ME 6524 Ethernet Switch, visit: http://www.cisco.com/en/US/products/ps6845/products_data_sheets_list.html.

Marketing Contacts

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