



## Q&A

# Cisco Catalyst 2948G-GE-TX Switch

## PRODUCT OVERVIEW

### **Q. What is the Cisco® Catalyst® 2948G-GE-TX Switch?**

**A.** The Cisco Catalyst 2948G-GE-TX Switch is a fixed-configuration switch that provides Gigabit Ethernet connectivity for small and midsized networks. It enhances network performance and productivity with 52 10/100/1000-Mbps ports in a 1 rack unit (RU) form factor. The Catalyst 2948G-GE-TX is also an affordable solution for delivering gigabit-speed connectivity to the desktop over Category 5 (Cat5) copper cabling. The Catalyst 2948G-GE-TX has 48 10/100/1000BASE-T ports and 4 Small Form-Factor Pluggable (SFP) ports.

### **Q. Which SFP uplinks does the Cisco Catalyst 2948G-GE-TX support?**

**A.** The following SFP uplinks are supported: 1000BASE-SX, 1000BASE-LX/LH, 1000BASE-ZX, 1000BASE-T, and coarse wavelength-division multiplexing (CWDM) SFP uplinks.

### **Q. Does the Cisco Catalyst 2948G-GE-TX Switch interoperate with SFP uplinks from other vendors?**

**A.** No. Similar to other Cisco switches and routers, the Cisco Catalyst 2948G-GE-TX Switch does not interoperate with other vendors' SFP uplinks. The switch will shut down the port if an SFP uplink provided by a vendor other than Cisco Systems® is inserted.

### **Q. What are the minimum software requirements of the Cisco Catalyst 2948G-GE-TX?**

**A.** The Catalyst 2948G-GE-TX is based on Catalyst OS software 8.2(1)GLX. The Catalyst 2948G-GE-TX uses the same feature-rich Catalyst OS software as the Catalyst 2948G, the Catalyst 2980G-A, and the Catalyst 4000 Series Switches.

### **Q. Does the Cisco Catalyst 2948G-GE-TX operate at wire-speed?**

**A.** The 4 SFP ports are wire-speed, and the 48 10/100/1000BASE-T ports can burst to Gigabit Ethernet line rate, and share 12 Gbps of capacity (or 6 Gbps full-duplex) into the switching fabric. All ports can utilize Cisco Gigabit EtherChannel® technology or IEEE 802.3ad for high-speed interconnection applications. All ports use the standard IEEE 802.3x flow control (PAUSE frame) mechanism to control Gigabit Ethernet host traffic.

### **Q. Where would I deploy a Cisco Catalyst 2948G-GE-TX?**

**A.** The Catalyst 2948G-GE-TX is designed for deployment in small and midsized workgroups requiring Gigabit Ethernet connectivity. It is ideal for deployments that require an inherently higher burst rate, such as “gigabit to the desktop” installations.

### **Q. What are the other Cisco Catalyst 2900 Series Switches?**

**A.** The Cisco Catalyst 2900 Series has industry-leading highest-density, small-form factor, fixed-configuration switches, offering feature-rich, end-to-end software and solutions for workgroup and wiring closets.

See Table 1 for product specifications.

**Table 1.** Cisco Catalyst 2900 Series Switches

Product Name	Product Number	Product Description
<b>Cisco Catalyst OS Based</b>		
Catalyst 2948G	WS-C2948G	<ul style="list-style-type: none"><li>• 48 10/100 ports and 2 fixed, gigabit interface converter (GBIC)-based 1000BASE-X uplink ports</li><li>• 1.5 RU switch</li><li>• Catalyst OS installed</li></ul>
Catalyst 2948G-GE-TX	WS-C2948G-GE-TX	<ul style="list-style-type: none"><li>• 48 10/100/1000 ports and 4 fixed SFP-based 1000BASE-X uplink ports</li><li>• 1 RU switch</li><li>• Catalyst OS installed</li></ul>
Catalyst 2980G-A	WS-C2980G-A	<ul style="list-style-type: none"><li>• 80 10/100 ports and 2 fixed GBIC-based 1000BASE-X uplink ports</li><li>• 2 RU switch</li><li>• Catalyst OS installed</li></ul>
<b>Cisco IOS® Software Based</b>		
Catalyst 2948G-L3	WS-C2948G-L3	<ul style="list-style-type: none"><li>• 48 10/100 ports and 2 fixed GBIC-based 1000BASE-X uplink ports</li><li>• 1.5 RU switch</li><li>• Layer 3 switching and routing</li><li>• Cisco IOS Software installed</li></ul>

## SOFTWARE

**Q.** For which fixed-configuration and stackable Cisco Catalyst switch product series can I obtain a “no additional cost” Cisco IOS Software update?

**A.** Cisco offers ongoing Cisco IOS Software updates for the following fixed-configuration and stackable Cisco Catalyst switch product series at no additional cost. For the life of the product, updates within the Cisco IOS package purchased (such as LAN Base, IP Base, IP Services, etc.) will be made available to customers.

- Cisco Catalyst Express 500 Series Switches
- Cisco Catalyst 2900 XL Series Switches
- Cisco Catalyst 2940 Series Switches
- Cisco Catalyst 2948G-GE-TX Series Switch
- Cisco Catalyst 2950 Series Switches
- Cisco Catalyst 2950 LRE Series Switches
- Cisco Catalyst 2955 Series Switches
- Cisco Catalyst 2960 Series Switches
- Cisco Catalyst 2970 Series Switches
- Cisco Catalyst 3500 XL Series Switches
- Cisco Catalyst 3550 Series Switches
- Cisco Catalyst 3560 Series Switches
- Cisco Catalyst 3750 Series Switches
- Cisco ME 2400 Series Ethernet Access Switches
- Cisco ME 3400 Series Ethernet Access Switches

Note that **upgrades** are different from **updates**. For example, an upgrade from the IP Base Package to the IP Services Package provides significant new functions; therefore, this upgrade requires the purchase of a software license upgrade. Updates are incremental software features and bug fixes that are released within a Cisco IOS package for which you own a license.

This statement supersedes any previous warranty or software statement and is subject to change without notice.

**Q. How do I get a “no additional cost” Cisco IOS Software update for my fixed-configuration and/or stackable Cisco Catalyst switch?**

**A.** Customers that own a software license for any of the aforementioned fixed-configuration and/or stackable Cisco Catalyst switch product series (listed previously) may obtain a software update at the Cisco.com Website.

Go to the following URL (<http://tools.cisco.com/support/downloads/pub/MDFTree.x?butype=switches>) or from <http://www.cisco.com> click on “Downloads” and select “Switch Software”. To download software, you will be required to log in using your Cisco.com username and password. If you do not have a Cisco.com username, you can obtain one by clicking on “Register” at the top of any Cisco.com Webpage (<http://tools.cisco.com/RPF/register/register.do>).

## WARRANTY AND SERVICE

### Limited Lifetime Warranty

The hardware warranty available on Cisco Catalyst 3750, Catalyst 3560, Catalyst 3550, Catalyst 2970, Catalyst 2960, Catalyst 2950, Catalyst 2940, Catalyst Express 500, Catalyst 3500 XL, and Catalyst 2900 XL Series Switches is the Limited Lifetime Hardware Warranty. This warranty automatically comes with the purchase of eligible Cisco Catalyst products, free of charge. Additionally, it offers free advanced replacement of products within 10 business days. For details on the Limited Lifetime Hardware Warranty, visit: [http://www.cisco.com/en/US/products/prod\\_warranties\\_item09186a00800e6e6e.html](http://www.cisco.com/en/US/products/prod_warranties_item09186a00800e6e6e.html).

### Technical Support Service

Technical Support Service is available through Cisco SMARTnet<sup>®</sup> and SMARTnet Onsite support programs. Cisco SMARTnet support augments the resources of your operations staff by providing them with access to a wealth of expertise, both online and by telephone, and a range of hardware Advance Replacement options. Cisco SMARTnet Onsite support complements the hardware Advance Replacement feature by adding the services of a field engineer-services that can be critical for those locations where you may have insufficient staffing or your current staff cannot perform parts-replacement activities for logistical or technical reasons. For more information about Cisco SMARTnet support, visit [http://www.cisco.com/en/US/products/svcs/ps3034/ps2827/ps2978/serv\\_group\\_home.html](http://www.cisco.com/en/US/products/svcs/ps3034/ps2827/ps2978/serv_group_home.html).

### Advanced Service

Total Implementation Solutions (TIS) offers a full range of implementation solutions including project management, project engineering, configuration, staging, and rollout coordination, and helping ensure correct installation and deployment. Configuration services now include development and verification of configuration for intelligent services such as QoS and multicast. For more information about Total Implementation Solutions, visit [http://www.cisco.com/en/US/products/svcs/services\\_area\\_root.html](http://www.cisco.com/en/US/products/svcs/services_area_root.html). For more information about configuration services for QoS and multicast, contact [gps-pds-west@cisco.com](mailto:gps-pds-west@cisco.com).

## PRODUCT INFORMATION

**Q. Where can I find technical instructions, product specifications, and other additional information about the Cisco Catalyst 2948G-GE-TX Switch?**

**A.** For a variety of product literature such as data sheets and product specifications, refer to the Cisco Catalyst 2900 Series Website at: <http://www.cisco.com/en/US/products/hw/switches/ps606/index.html>.





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