



# Overview of the Cisco VG224 Voice Gateway

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This chapter provides a brief description of the Cisco VG224 voice gateway (VG) and contains the following sections:

- [Overview, page 1-1](#)
- [Cisco VG224 Voice Gateway Deployment, page 1-4](#)
- [Interfaces and Service Capabilities, page 1-4](#)
- [Physical Description and LEDs, page 1-5](#)
- [Specifications, page 1-6](#)
- [Software Elements, page 1-7](#)

## Overview

The Cisco VG224 supports the following interfaces:

- 10/100BASE-T LAN connection
- RJ-21 analog voice interface
- External/Internal compact flash

The Cisco VG224 can be housed in a rack, mounted on a wall, or set on a bench-top surface.



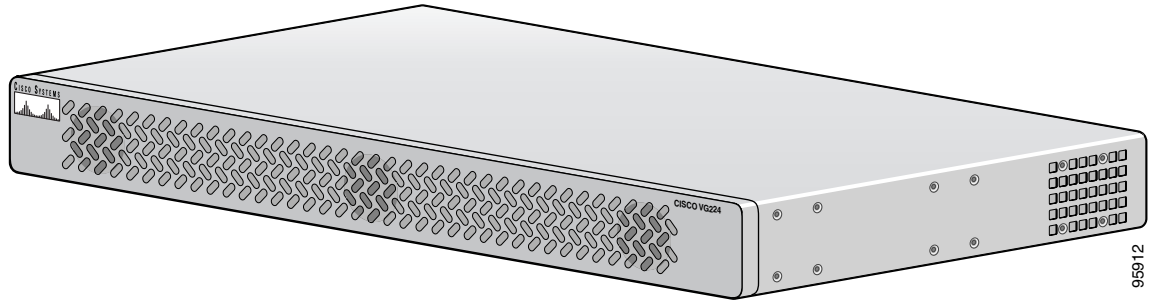
**Warning**

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**This unit is intended for installation in restricted access areas. A restricted access area can be accessed only through the use of a special tool, lock and key, or other means by security.** Statement 1017

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**Figure 1-1 Cisco VG224 Voice Gateway Front Panel**

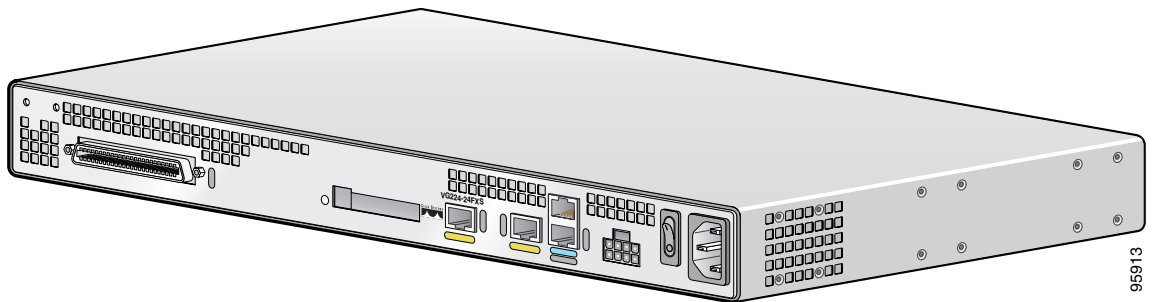


The Cisco VG224 provides 24 analog foreign exchange station (FXS) voice ports with two 10/100BASE-T ports. The chassis has the following interfaces:

- RJ-21 analog voice interface
- Two 10/100BASE-T ports
- External compact flash memory
- AC and DC power inputs

Figure 1-2 shows the basic types of Cisco VG224 chassis as seen from the cabling side.

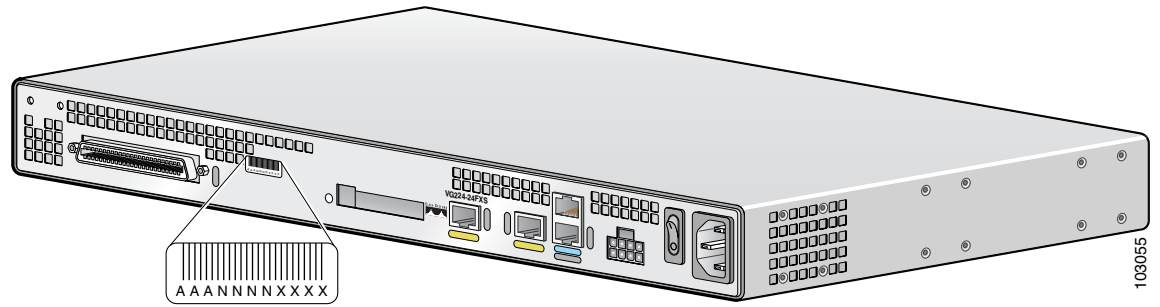
**Figure 1-2 Cisco VG224 Voice Gateway Chassis**



## Product Serial Number Location for the Cisco VG224 Voice Gateway

The serial number label for the Cisco VG224 Voice Gateway is located on the rear of the chassis, in the middle-left side. (See Figure 1-3.)

Figure 1-3 Serial Number Locations



  
**Note**

The serial number for the Cisco VG224 Voice Gateway is 11 characters long

## Configuration Options

The following interface options are available in the Cisco VG224 voice gateway:

**Table 1-1 Configuration Options**

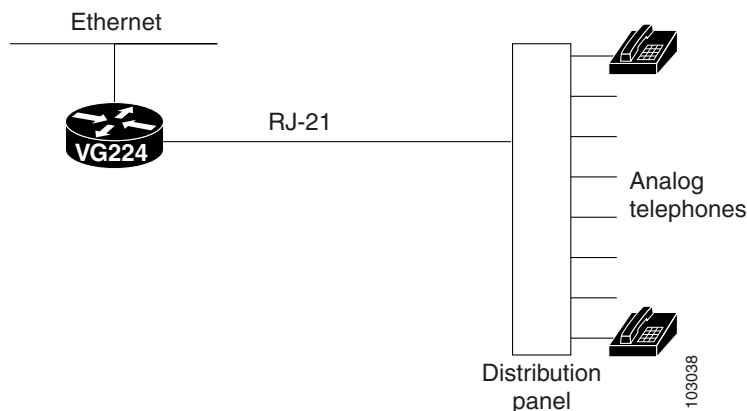
	RJ-21 <sup>1</sup>	T1/E1 <sup>2</sup>	FE <sup>3</sup>	WIC/VIC <sup>4</sup>	CF <sup>5</sup>
Cisco VG224 voice gateway	yes	none	2	n/a	external

1. Analog voice interface
2. T1/E1 ports
3. 10/100BASE-T ports
4. WAN interface card (data); voice interface card (voice)
5. Compact flash

## Cisco VG224 Voice Gateway Deployment

Figure 1-4 shows a typical deployment scenario for the Cisco VG224 voice gateway.

**Figure 1-4 Analog FXS User Interfaces with Metro Ethernet WAN Interface**



## Interfaces and Service Capabilities

The various physical ports and the services supported by each port type are described in Table 1-2.

- Two administrative ports—One console and one auxiliary.
- One or two 10/100BASE-T LAN ports.
- Cisco VG224 voice gateway for analog voice user interface is equipped with an RJ-21 port for connection to a distribution panel.

Table 1-2 Cisco VG224 Voice Gateway Interfaces and Service Capabilities

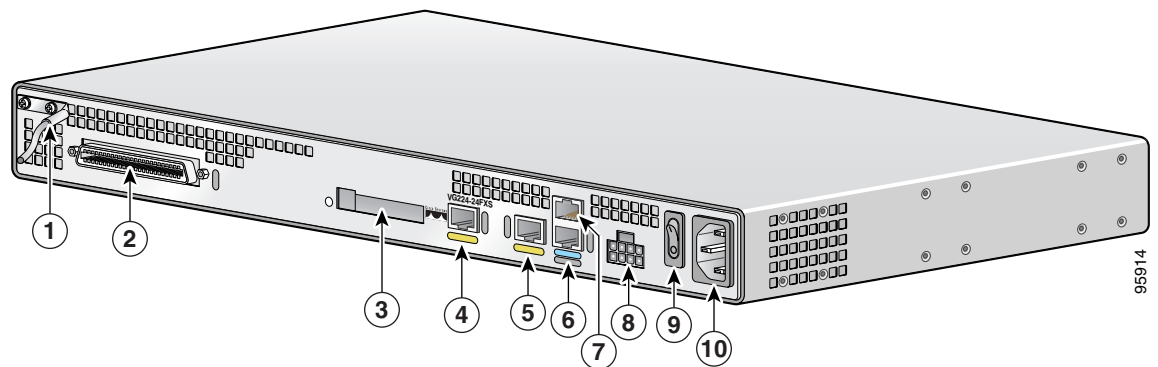
Port	Interface Configurations	Interface To	Services Supported	Details
Console Port 0/0	EIA/TIA-232 asynchronous serial (DCE <sup>1</sup> )	ASCII terminal Personal computer	Local administrative access	RJ-45 physical interface
Auxiliary Port 0/1	EIA/TIA-232 asynchronous serial (DTE <sup>2</sup> )	Modem	Remote administrative access Data backup	RJ-45 physical interface
Fast Ethernet Port 0/0, 0/1	10/100BASE-T (802.3)	LAN	Data	RJ-45 physical interface
RJ-21 24 analog FXS voice ports Port 2/0 to 2/23	FXS (loop-start or ground-start)	Analog phone, fax, or modem Network side of key system Network side of analog PBX	Analog voice/fax or modem	Provides battery RJ-21 physical interface
CF <sup>3</sup> Slot 0			Flash memory	Flash card

1. DCE = data communications equipment
2. DTE = data terminal equipment
3. CF = compact flash memory

## Physical Description and LEDs

All interface ports and LEDs are on the rear of the chassis.

Figure 1-5 Cisco VG224 Voice Gateway LEDs



1	Chassis ground connection	5	Fast Ethernet port 0	9	On/off switch
2	RJ-21 connector	6	AUX port	10	AC power input
3	Compact flash port	7	Console port		
4	Fast Ethernet port 1	8	DC power input <sup>1</sup>		

1. This is not a redundant failover power supply connection. You must use either DC or AC.

# Chassis Grounding

Chassis grounding is provided through the power cable, which uses a standard grounding plug. The chassis is also equipped with two multi 4 x 0.7 screw terminals for chassis grounding. The accessory kit contains a crimp-type ground lug that attaches to the two screw terminals. For more information, refer to the “[Installing the Ground Connection](#)” section on page 3-11.


# Port Numbering Conventions

Port numbering conventions for the Cisco VG224 are as follows:

- An external compact flash card is numbered CF 0.
- 10/100BASE-T ports are numbered 10/100BASE-T 0/0 and 10/100BASE-T 0/1 from right to left.
- FXS voice port numbering begins at 2/0 and extends to 2/7, 2/15, or 2/23, depending on the number of voice ports.

# Specifications

**Table 1-3 Cisco VG224 Voice Gateway Technical Specifications**

Characteristic	Value
Dimensions	1.75H x 17.5W x 13.5D in. (44.4 x 444.5 x 342.9 mm)
Weight	11 lb (4.106 kg) max
Input power	100 to 240 VAC, 1 A (max), 50 to 60 Hz, 70 W (max)
Maximum power surge	
Input power (DC 12 volt battery) by chassis	60 W (204.7 BTU/h)
	 <b>Caution</b> Do not try to use AC and DC power at the same time. If you do, the unit stops operating and you have to reboot using a single power source.
MTBF	195,671 hours
Operating environment	32 to 122° F (0 to 50° C)
Nonoperating temperature	–40 to 185° F (–40 to 85° C)
Operating humidity	5 to 95%, noncondensing
Noise level	55 dB @ 3 ft
Agency approvals	Refer to the <a href="#">Cisco VG224 Regulatory Compliance and Safety Information</a> document at the following URL:  <a href="http://www.cisco.com/en/US/products/hw/gatecont/ps2250/products_regulatory_approvals_and_compliance_list.html">http://www.cisco.com/en/US/products/hw/gatecont/ps2250/products_regulatory_approvals_and_compliance_list.html</a>

**Warning**

**Ultimate disposal of this product should be handled according to all national laws and regulations.**  
Statement 1040

## Software Elements

The operating system for the Cisco VG224 voice gateway is the Cisco IOS software that resides in flash memory.

## Configuration Connections

You can use an ASCII terminal or a PC to configure a Cisco VG224 voice gateway. The configuration can be performed in several ways:

- Locally, with a direct connection through the console port
- Remotely, with a connection through the auxiliary port and a modem
- Through Telnet and TFTP

## Configuration Methods

### Automated Configuration

If your Cisco VG224 voice gateway was ordered with the Simple Network-Enabled Auto-Provision (SNAP) option, no onsite configuration is required. When the Cisco VG224 voice gateway is powered on and connected, the SNAP application downloads the applicable configuration files automatically.

### Manual Configuration

When a Cisco VG224 voice gateway is first installed, use the procedure in [Chapter 4, “Power-On Procedure,”](#) for the initial configuration. This sets the basic communication parameters. After the Cisco VG224 voice gateway is operating and able to communicate, use the procedures in the [Cisco VG224 Voice Gateway Software Configuration Guide](#) to configure the specific services and functions, or to make changes to the existing configuration.

There are multiple methods for configuring a Cisco VG224 voice gateway:

- System configuration dialog
- Configuration mode—Cisco IOS software command-line interface (CLI)
- setup command facility—Remote configuration through a LAN
- SNMP-based application—CiscoView or HP OpenView
- HTTP-based configuration server—Provides access to the CLI from a web browser

