

# StorNext G300 Gateway Appliance Site Planning Guide

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## Product Overview

The StorNext G300 Gateway Appliance combines industry-proven Quantum hardware and StorNext software into one convenient, out-of-the-box solution. Your StorNext G300 system software has been pre-installed and is ready to operate with a minimum of additional configuration required at time of installation. This guide provides an overview of site characteristics, physical requirements, and environmental specifications essential for the installation of the StorNext G300 Gateway Appliance.

**Note:** Make sure to take the online training for the StorNext G300 Gateway Appliance in order to make the best use of your product. The online training is available at [www.quantum.com/ServiceandSupport/StorageCareLearning/Index.aspx](http://www.quantum.com/ServiceandSupport/StorageCareLearning/Index.aspx)

# Included With Your StorNext G300 Gateway Appliance

The StorNext G300 Gateway Appliance is fully configured to your specifications and pre-tested in the factory. Every StorNext G300 Gateway Appliance configuration arrives with all necessary parts included. Each system comes with an accessory kit containing rack-mount hardware and ships with StorNext G300 Gateway software installed from the factory.

## Installation Requirements

### Rack Compatibility

Nearly all standard four-post EIA 19" server racks are compatible with the StorNext G300 Gateway Appliance rack mount kits. See [Physical Characteristics](#) on page 7 for system rack space requirements.

### StorNext G300 Gateway Appliance Setup

After the system has been installed and configured, you are ready to use your StorNext G300 Gateway Appliance.

### Required Network Information

- DHCP (Dynamic Host Configuration Protocol) is not supported. You must provide a static IP address at the time of installation.
- The default IP Address is: **10.1.1.1**

### Installation and Integration Services

Installation and integration of the StorNext G300 Gateway Appliance will be performed by Quantum Professional Services. Phone support for the installation process is available via the Quantum support number for your area. Quantum World Wide phone support is as follows

#### Americas:

800-284-5101 (toll free) or 949-725-2100

#### Europe, Middle East and Africa:

00800-4-782-6886 (toll free) or +49 6131 3241 1164

#### Asia Pacific:

+800 7826 8887 (toll free) or +603 7953 3010

## Hardware Description

The StorNext G300 Gateway Appliance ships with two 3.5" 500GB 7.2K RPM SATA hard disk drives (HDD) in a 1+1 RAID 1 configuration for the G300 platform software.

StorNext G300 Gateway servers include the following components:

- Two 2.4 GHz 6-core CPUs
- 24 GBs of memory (12GB/CPU)
- Redundant cooling fans and power

**Note:** The server ships with one 2-port 8 GB FC PCIe card in slot 4; two embedded 1 GbE Ethernet ports; and two expansion PCIe Ethernet cards that differ depending on the StorNext G300 model.

StorNext G300 Gateway Appliance models differ with regard to type and number of Ethernet expansion cards.

- G301 ships with two 4-port 1 GbE Ethernet PCIe expansion cards in slots 1 and 2.
- G302 ships with one 2-port 1 GbE Ethernet PCIe expansion card in slot 1, and one 2-port 10 GbE Ethernet PCIe expansion card in slot 2.

### G301 Gateway Appliance Ports

For the StorNext G301 Gateway Appliance, the MDC network is always a bonded (bond0) network. Physical ports 3 and 4 are dedicated to the MDC network. Ports 5 through 10 are dedicated to the LAN client network. The LAN client network is either bonded (bond1) or configured as individual network interfaces. When bonded, the G301 Gateway's LAN client network includes the on-board embedded Ethernet port 2 for a total of 7 network ports (see [Table 1](#) on page 4 for port descriptions).

See [Figure 1](#) below to view port assignments (ethernet ports denoted in yellow) and (fiber channel ports denoted in green) for the G301 Gateway Appliance.

Figure 1 G301 Port Numbers

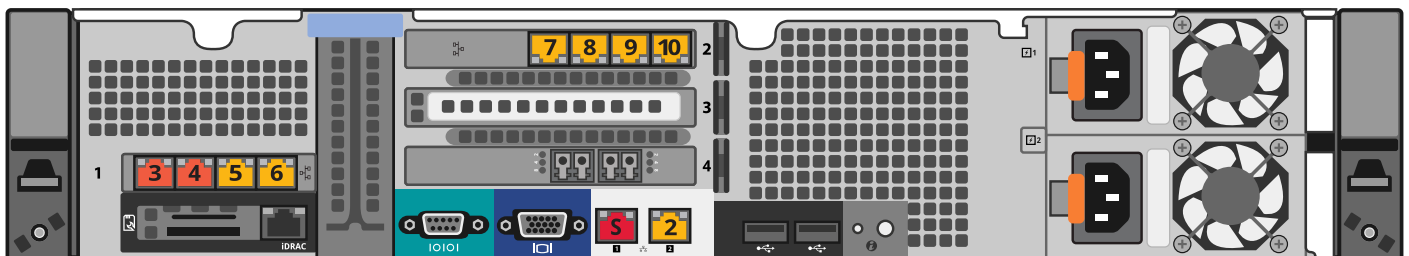


Table 1 G301 Network Ports

Physical Ethernet Port Number	Logical Ethernet Port Number	Port Physical Location	Port Function	Network Bonds
5	eth0	Embedded Port 1	Reserved for Quantum Service	n/a
2	eth1	Embedded Port 2	LAN Client Network (1 GbE)	<b>Bond 1</b> – This port can be bonded alongside the other LAN client ports (Eth6 - Eth11) or configured as a standalone port. ALL connected LAN ports must be bonded together OR not bonded and assigned individual IP addresses.
3	eth2	PCIe Slot 12 Port 1	Metadata Network (1GbE)	
4	eth3	PCIe Slot 12 Port 2	Metadata Network (1GbE)	<b>Bond 0</b> - The MDC network is always a bonded (Bond 0) network. The customer doesn't have the option to break the bond.
5	eth6	PCIe Slot 12 Port 3	LAN Client Network (1 GbE)	
6	eth7	PCIe Slot 12 Port 4	LAN Client Network (1 GbE)	<b>Bond 1</b> – The default is for all the LAN client ports to be bonded. ALL connected LAN ports must either be bonded together (Bond 1) OR not bonded and assigned individual IP addresses.
7	eth8	PCIe Slot 23 Port 1	LAN Client Network (1 GbE)	
8	eth8	PCIe Slot 23 Port 2	LAN Client Network (1 GbE)	
9	eth10	PCIe Slot 23 Port 3	LAN Client Network (1 GbE)	
10	eth11	PCIe Slot 23 Port 4	LAN Client Network (1 GbE)	

### G302 Gateway Appliance Ports

For the StorNext G302 Gateway Appliance, the MDC network is always a bonded (bond0) network. Physical ports 3 and 4 are dedicated to the MDC network. Physical ports 5 and 6 are dedicated to the LAN client network. The LAN client network is either

bonded (bond1) or configured as individual network interfaces (see [Table 2](#) on page 5 for port descriptions).

See [Figure 2](#) on page 5 to view port assignments (ethernet ports denoted in yellow) and (fiber channel ports denoted in green) for the G302 Gateway Appliance.

Figure 2 G302 Port Numbers

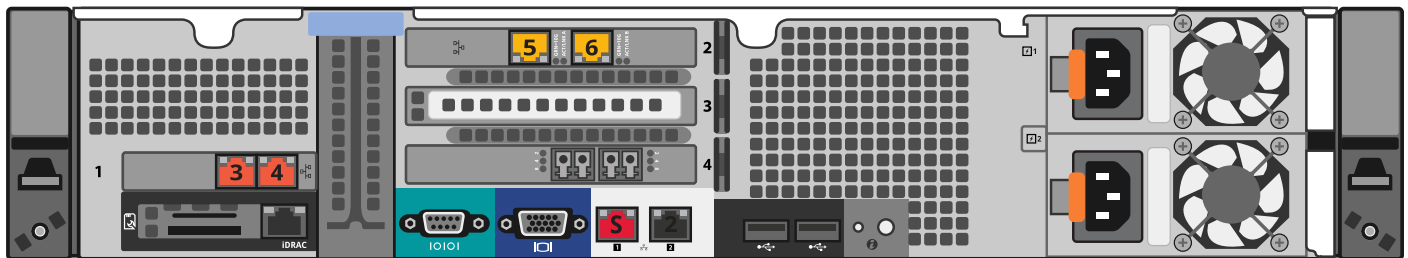


Table 2 G302 Network Ports

Physical Ethernet Port Number	Logical Ethernet Port Number	Port Physical Location	Port Function	Network Bonds
5	eth0	Embedded Port Port 1	Service	n/a
2	eth1	Embedded Port Port 2	Unused/ Unavailable	The OS does not recognize this port as in use, so it is unused and cannot be configured nor bonded to the LAN client or MDC network.
3	eth2	PCIe Slot 12 Port 1	Metadata Network (1GbE)	<b>Bond 0</b> - The MDC network is always a bonded network. These 1GbE ports and the customer doesn't have the option to break the bond.
4	eth3	PCIe Slot 12 Port 2	Metadata Network (1GbE)	
5	eth4	PCIe Slot 23 Port 1	LAN Client (10GbE)	<b>Bond 1</b> – The default is for all the LAN client ports to be bonded. The ports are either bonded or given individual IP addresses.
6	eth5	PCIe Slot 23 Port 2	LAN Client (10GbE)	

# Service

## StorNext G300 Gateway Appliance Warranty

The StorNext G300 gateway appliance's warranty includes one year of Quantum's Bronze Support Plan. This includes next business day on-site response, 5x9 telephone support, and on-line resources.

This warranty covers the StorNext G300 gateway Appliance and all drives, and includes firmware downloads, telephone support, and Internet access to Quantum's online Customer Support web site.

The Quantum Customer Support web site features online service request processing, Web-based event status tracking, and a comprehensive Knowledge Base. Quantum's Knowledge Base gives you 7x24 real-time electronic access to complete product and support resources and the expertise of Quantum's Global Services organization.

## Service Package Upgrades

Quantum's Global Services organization is geared towards delivering the fastest possible response and root cause resolution, helping you maximize your backup investments, better manage processes, and make the best use of your resources. We ensure total customer satisfaction by providing comprehensive, responsive services on a worldwide basis.

A variety of support options are available to you via Quantum's tiered hardware support plans to meet a range of budget and availability requirements.

Quantum's Support Plans include:

- **Next Business Day Gold** – (Next Business Day Onsite, 7x24 Phone Support)
- **Gold** – (7x24x4 Hr on-site, 7x24 phone support)
- **Customized Platinum** offering – A Warranty extension of **Bronze** (5x9xNBD on-site, 5x9 phone support) is also an option for the second and third year of ownership.

Features of these plans include: 24-hour telephone support, on-site response, access to strategic account management (available with select service packages), priority call handling, strategically located spares parts, online resources, and software/firmware upgrades.

For more information on these service plans, please visit [www.quantum.com](http://www.quantum.com) or contact your Quantum Sales Representative.

Quantum service engineers are available around the world and are deployed to respond to on-site service demands. In addition, spare part depots are strategically located around the globe so that service technicians have access to the parts and equipment necessary to maintain or repair your StorNext G300 gateway appliance.

## StorNext G300 Shipping Information

The StorNext G300 is delivered in the following configuration (see [Table 3](#)).

Table 3 StorNext G300 Shipping Configurations

G300 Configuration	Number of Shipping Boxes	Shipping Box Weight
1 StorNext G301	1	69.3 lbs (31.4 kg)
1 StorNext G302	1	64.6 lbs (29.3 kg)

## StorNext G300 Specifications

This section lists characteristics and specifications of the StorNext G300 Gateway Appliance. These characteristics and specifications are categorized as follows:

- [EMI Certification](#)
- [Physical Characteristics](#)
- [Environmental Specifications](#)

### EMI Certification

This product is certified under the regulatory model name E19S.

### Physical Characteristics

The following tables provide dimensions and other physical characteristics of the StorNext G300 Gateway Appliance system components:

- [Physical Characteristics](#)
- [Cable Drops](#)
- [Power Requirements](#)
- [Environmental Specifications](#)

Table 4 Physical Characteristics

	StorNext G300 Chassis
Height	2U, 3.5 inches (8.89 cm)
Width (side to side)	17.25 inches (43.8 cm)

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Depth (front to back)	24.5 in (62.2 cm)
Weight (stand alone)	37 lbs (16.78 kg)
Rack Space Required	2U
Air clearance	Open 4 in (10.2 cm) behind unit for proper air flow

Table 5 Cable Drops

StorNext G300 Cable Drops	
Ethernet Cable Drops	Gateway LAN Client direct Ethernet connections, Ethernet switch connections, and Ethernet connections for SAN metadata.
Power Outlets	<b>System</b> - 2 USA type 3-prong power outlets (Nema 5-15) or 2 C13 type 3-prong power outlets (IEC320 C13).

Table 6 Power Requirements

StorNext G300 Power Requirements	
Power Supplies and Cords	Two (2) hot swappable redundant power supplies Two (2) USA type 3-prong power cords with IEC320 C13 to Nema 5-15 connectors Two (2) C13 to C14 type 3-prong power cords with IEC320 C13 to IEC320 C14 connectors
Input Voltage	100–240 VAC
Input Frequency	50–60Hz
Rated Current	10-5 amps
Maximum Operating Current	2.5-1.0 amps
Inrush Current	5.2-5.1 amps
Maximum Operating Wattage	242 watts
Maximum Operating BTUs	825 BTU/hr

**Caution:** To safeguard continuous operations in the event of a power outage, Quantum recommends that you connect the StorNext G300 gateway appliance to a UPS (uninterruptable power supply). Two circuits should be used (one per power supply).



## Environmental Specifications

[Table 7](#) provides various StorNext G300 gateway appliance environmental specifications.

Table 7 Environmental Specifications

Climatic Environment		
Temperature and Altitude	Operating	10 to 35°C (50 to 95°F) with a maximum temperature gradation of 10°C per hour <b>Note:</b> 35 °C (95 °F) is the maximum temperature for the StorNext G300 Gateway Appliance at sea level. For altitudes above 2,950 ft (899.2m), decrease the operating temperature 0.9°C for every 1,000 ft (304.8m) of altitude.
	Shipping and storage	-4 to 140°F (-20°C to 60°C)
Relative humidity	Operating	20% to 80% (non-condensing)
	Shipping and storage	5% to 95% (non-condensing)
Altitude	Operating	0 to 10,000 ft (0 to 3,048m)
	Shipping and storage	0 to 35,000 ft (0 to 10,688m)
Vibration and Shock		
Maximum Vibration	Operational: 0.26 G's random vibration, 5 to 350Hz Non-operational: 0.5 G's random vibration, 5 to 350Hz	
Maximum Shock	Operational: 2 G's for 11ms, ½ Sine Non-operational: 3.5 G's for 11 ms, ½ Sine	
Acoustic		
Acoustic output	Operating	< 67 dBA at 1 meter, room temperature (20C)
Agency Approvals		
Safety	IEC 60950-1, CSA 60950-1-03/UL 60950-1	
Emissions	EN55022 Class A, FCC Part 15 Class A, ICES-003 Class A, VCCI Class A, CISPR 22 Class A, CNS13438 Class A, KN22 Class A	

Immunity	EN55024/KN24: EN 61000-3-2 - Harmonic current emissions test EN 61000-3-3 - Voltage fluctuations and flicker in low-voltage supply systems test EN 55024:1998 - Information technology equipment - Immunity characteristics - Limits and methods of measurements EN 61000-4-2 - Electrostatic discharge immunity test EN 61000-4-3 - Radiated, radio-frequency, electromagnetic field immunity test EN 61000-4-4 - Electrical fast transient/burst immunity test EN 61000-4-5 - Surge immunity test EN 61000-4-6 - Immunity to conducted disturbances, induced by radio-frequency fields EN 61000-4-8 - Power frequency magnetic field immunity test EN 61000-4-11 - Voltage dips, short interruptions and voltage variations immunity test
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For assistance, contact the Quantum Customer Support Center:

USA: **1-800-284-5101 (toll free) or +1-720-249-5700**  
EMEA: **+800-7826-8888 (toll free) or +49-6131-3241-1164**  
APAC: **+800-7826-8887 (toll free) or +603-7953-3010**  
Worldwide: <http://www.quantum.com/ServiceandSupport>

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Quantum is a proven global expert in Data Protection and Big Data management, providing specialized storage solutions for physical, virtual and cloud environments. From small businesses to major enterprises, more than 50,000 customers trust Quantum to help maximize the value of their data by protecting and preserving it over its entire lifecycle. With Quantum, customers can Be Certain they're able to adapt in a changing world—keeping more data longer, bridging from today to tomorrow, and reducing costs. See how at [www.quantum.com/BeCertain](http://www.quantum.com/BeCertain).