GS-SR113E Server System

Installation Guide

Pentium® Processor Motherboard

22ME2-SR113E-01

How This Manual Is Organized

This manual is divided into the following sections:

1) Introduction	Basic product information and the key features of the product.
2) Important Safety Information	Include essential safety information
3) Contents Package	Description of shipping components
4) System Overview	Product information & specification
5) System Installation	Instructions on setting up the server
6) Appearance of Product	Introduction of product appearance and LED description

Contents

The author assumes no responsibility for any errors or omissions that may appear in this document nor does the author make a commitment to update the information contained herein.

Third-party brands and names are the property of their respective owners.

Please do not remove any labels on server system, this may void the warranty of this server.

Due to rapid change in technology, some of the specifications might be out of date before publication of this booklet.

1. Introduction

Welcome to the GS-SR113E Rack mount Server System Installation Guide. The manual provides instructions for configuration hardware for the GS-SR113E your system.
The GS-SR113E is an ultra thin optimized rack server which is designed for small and medium sized networks. The Wed-Hosting function of GS-SR113E provides scalability and security features.

The key features of the server include:

Processor / Chipset	
Processor Supported:	● Intel® Pentium 4 Processor with FC-PGA2 ● Socket 478; 533/400MHz FSB
Chipset:	● Intel® Chipset 845E HOST / AGP /Controller ● 82801BA(ICH2) I/O Controller Hub
System Memory	
Memory Capacity:	● 2 x 184-pin DDR200/266 DIMM Sockets ● 2GB Maximum Capacity
Memory Type:	● DDR200/266 Unbuffered DDR
DIMM Sizes:	● 64MB, 128MB, 256MB, 512MB, 1GB, 2GB
Memory Voltage:	● 2.5V only
Error Correction:	● Correct Single-bit Errors, Detect Multiple-bit Errors ,
Expansion Slot	
Description:	● 1 PCI Slot supports 33MHz & PCI 2.2compliant
Drive Bay	
Hard Disk Drives:	● 1 Easy Swap ● 2 IDE ATA100/133 Hot Swap HDDs
Floppy Drive	● Easy-swap mechanism for slim-type 1.44MB 3.5" Floppy drive
Slim Type CDROM	● 24x slim type CD-ROM
On-Board IDE	
Description:	● 2 IDE controllers on the Intel® 82801BA PCI Chipset provides IDE/HDD/CD-ROM (IDE1, IDE2) with PIO, Bus Master (Ultra DMA33/ATA66/ATA100) operation mode. ● IDE3 and IDE4 Compatible with RAID 0,1, Ultra ATA 133/100
Integrated LANs	
Controller:	● Dual Intel® 82550PM 10/100 Ethernet Controllers
Advanced Software Function:	● Adapter Fault Tolerance ● Adaptive Load Balancing ● Fast EthernChannel* (when used with a capable switch) ● Gigabit EthernChannel* (when used with a capable switch) ● Intel® Link Aggregation (when used with a capable switch)
Integrated Graphics	
Controller:	● ATI® RAGE-XL VGA Controller
Graphics Memory:	● 8MB PC-100 SDRAM
Integrated Super I/O	
Serial Ports:	● 2 x Serial Port COM1 (COM1/COM2)
Keyboard/Mouse:	● 1 x PS/2 Keyboard Port (Rear I/O-Shield) ● 1 x PS/2 Mouse Port (Rear I/O-Shield)
USB: 1.1	● 2 x USB ports (Rear I/O-Shield) ● 2 x USB Port (Front Panel)
System BIOS	
BIOS Type:	● Licensed AWARD BIOS ● 4Mb Flash Memory
Special Features:	● ACPI 1.1, DMI, WFM, PXE, Plug and Play, A/C Power Recovery
Front Panel Indicators	
LEDs:	● 1 HDD access LED (Green) ● 1 Health LED (Orange)

Switch/Button:	● 1 Power LED/Switch ● 1 Localization LED/Switch On both Front and Rear panel ● 1 NMI Hidden Switch, ● 1 Rest Hidden Switch
Server Management Functions	
BMC Chip:	● Integrated Winbond W83910F BMC chips
Remote Management:	● Standard supports IPMI v 1.0 for system monitoring.
Environment	
Ambient Temperature:	● Operating Temperature: 5oC to 35oC ● Non-operating Temperature: 0oC to 50oC
Relative Humidity:	● 10-85% operating Humidity at 30° C
Safety Regulations	
U.S. and Canada	● CSA C22.2 No. 60950
	● CB(USA/Canada/Japan/Australia/Korea/Scandinvia)
System	
Dimension without Packing:	● 1.73"H x 19"W x 23"D
System Accessories	
CPU Heat Sink	● 1
Dock Handle	● 2
Electrical Power Supply	
DC Power Supply:	● 250W ● 100V~240V (Plus or minus 10 percent) ● 50~60Hz(Plus or minus 6 percent)

2. Important Safety Information

WARNING!

Server mainboards and expansion cards contain vary delicate Integrated Circuits chips. To protect them and yourself against damage from static electricity, you should some precautions whenever work on your server system.

Read and follow all instructions marked on the product and in the documentation before you operate your system. Retain all safety and operating instructions for future use.

- The product should be operated only from the type of power source indicated on the rating label.
- If your computer has a voltage selector switch, make sure that the switch is in the proper position for your area. The voltage selector switch is set at the factory to the correct voltage.
- The plug-socket combination must be accessible at all times because it serves as the main disconnecting device.
- All product shipped with a three-wire electrical grounding-type plug only fits into a grounding-type power outlet. This is a safety feature. The equipment grounding should be in accordance with local and national electrical codes. The equipment operates safely when it is used in accordance with its marked electrical ratings and product usage instructions
- Do not use this product near water or a heat source.
- Set up the product on a stable work surface or so as to ensure stability of the system.
- Openings in the case are provided for ventilation. Do not block or cover these openings. Make sure you provide adequate space around the system for ventilation when you set up your work area. Never insert objects of any kind into the ventilation openings.
- To avoid electrical shock, always unplug all power cables and modem cables from the wall outlets before removing covers.
- Allow the product to cool before removing covers or touching internal components.

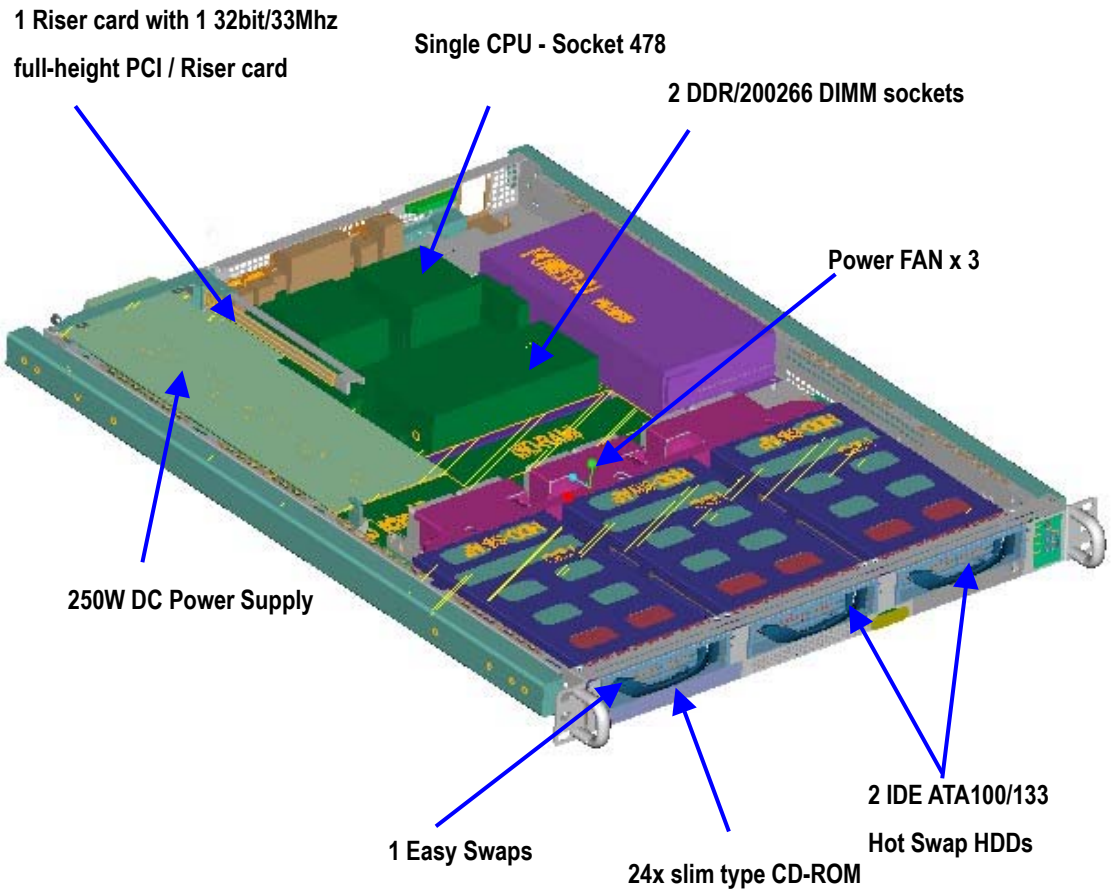
3. Contents Packages

When opening the package, please ensure the system components are not damaged during the shipping. Using the following checklist to verify the contents. If any component is missing or damaged in the system, please contact your vendor immediately.

3.1. Component Content List

- Chassis
- Power Supply (Installed)
- 8IERXRR-D Motherboard (Installed)
- Slim type CD-ROM drive (Installed)
- Slim type Floppy drive (Installed)
- Three Hard Disk Drive Trays
- One CPU heat sink pack (including one heat sink, one thermal conductivity compound, and two cooler bracket)
- Two Dock Handle with two tow screws
- Driver and Application CD
- GS-SR113E Server System Installation Guide
- GA-8IEXRR-D Motherboard manual

4. System Overview



5. System Installation

CAUTION !

Please observe the safety information in chapter " Important Safety Information"

Do not expose the server to extreme environmental conditions. Protect it from dust, humidity, and heat.

5.1. Installation Steps

- Unpack the server.
- Place the essential components into the server.
- Connect the server to the power supply.

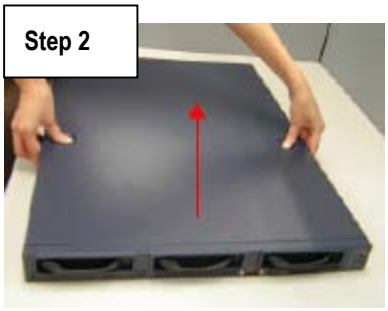
5.2. Unpacking the Server

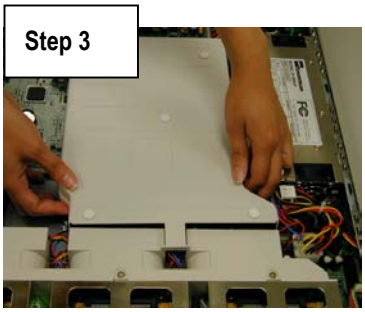
- Unpack all assembly parts.
- Check the delivered components are not damaged during transportation. Please observer the Item Check List in chapter "Contents Packages" on Page 10.
- Check whether the delivery agrees with the details in the delivery notes.

5.3. Server System Installation Steps

5.3.1. Chassis Removal

- Step 1 Come off the two thumbscrews from the back of the server.
- Step 2 Standing at the front of the system. Then, slide the cover toward to open it. Top cover may be lifted straight up.
- Step 3 After removing the top cover, you will see a plastic airflow duct over the CPU and Memory. Rise up the airflow duct to install other essential components.

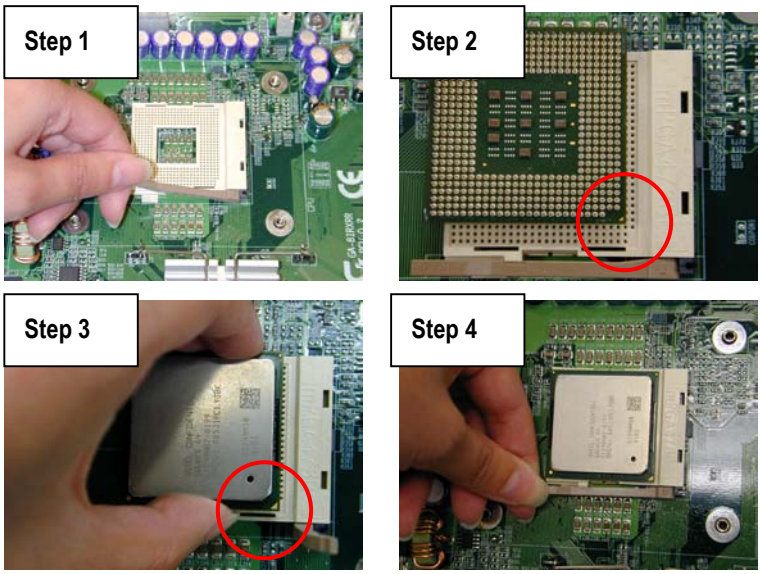




5.3.2. CPU Installation

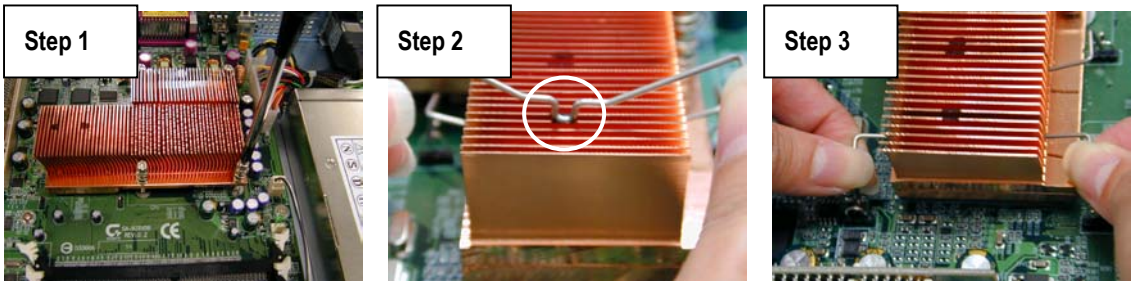
Note!! Please make sure the CPU type and speed are supported by the motherboard.

- Step 1 To Install the CPU, lift up the bar that located next to the socket.
- Step 2 The noticed corner should point toward the end of lever. The CPU will only fit in the orientation as shown.
- Step 3 Then, align the CPU insert it into the socket.
- Step 4 Push the lever back to the original position.



5.3.3. Heat Sink Installation

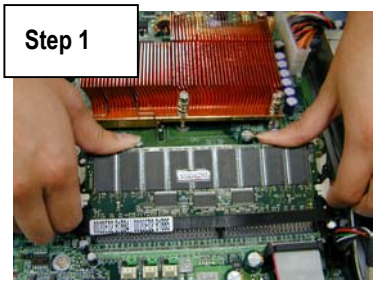
- Step 1 Put the Heat Sink on the CPU. Before putting the heat sink on the CPU, please well remember to apply the thermal conductivity compound on the CPU. Then, Seat the heat sink in the retention modules with the four screws.
- Step 2 Secure the heat sink firmly with two cooler brackets. There are two dark mark printed on the heat sink. Align the center of the cooler bracket to the dark mark and push it down.
- Step 3 Hook one end of the cooler bracket to the CPU socket as shown in the photo. Hook the other end of the cooler bracket by gripping it to another side of retention module.



5.3.4. Memory Installation

- Step 1 The motherboard contains two slanted DIMM (Dual Inline Memory Module) sockets. The systems BIOS will auto detect the size if the memory after installing. To install memory, simply push the memory modules into the DIMM sockets.

Step 1

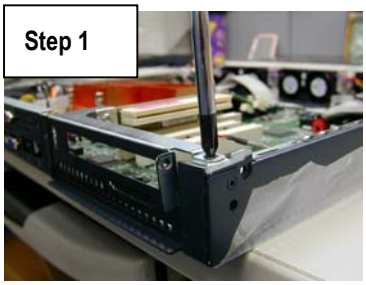


5.3.5. PCI Expansion Card Installation

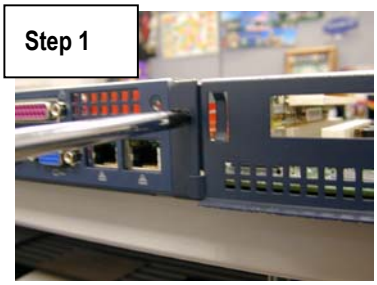
GS-SR113E provides one expansion riser slot for two peripheral cards, 32Bit/33 MHz full-height. To install the peripheral, please go through the following steps.

- Step 1 There are two screws holding the riser bracket. First, remove the screw on the top of the bracket, then, remove another screw located at the rear of the server.
- Step 2 Carefully pull up and remove the PCI riser bracket.
- Step 3 Install the card into place.
- Step 4 Replace the riser bracket into the PCI slot on the motherboard. Push down the bracket firmly. The card is seated properly into PCI slot. Put the PCI raiser bracket into the server system.
- Step 5 Reverse Step 1 & 2 to screw the PCI slot bracket to lock position.

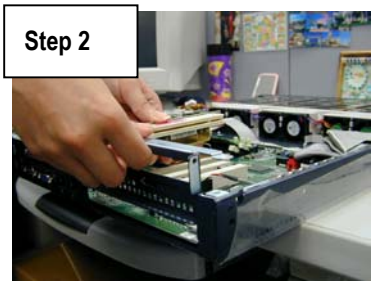
Step 1



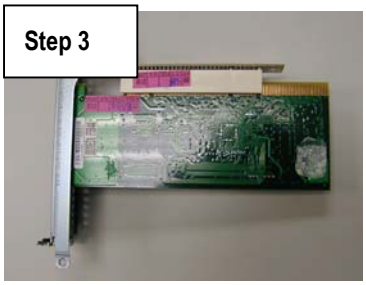
Step 1



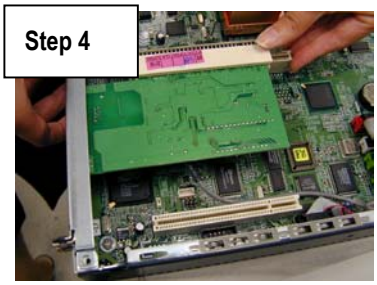
Step 2



Step 3



Step 4



5.3.6. Air Flow Duct Installation

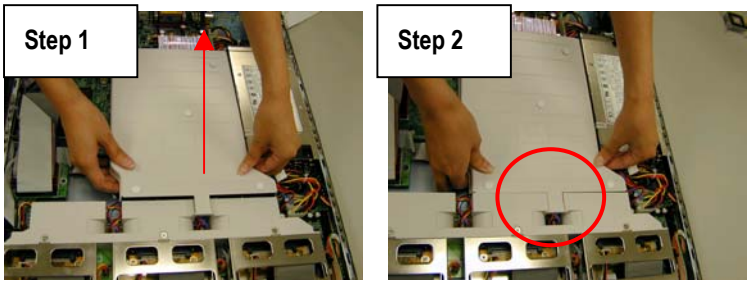
GS-SR113E is enhanced a new device which called Airflow Duct. The main function of the airflow duct is to increase the capability of driving out the excessive system heat (Especially the CPU heat). In order to maintain the system operating smoothly, please note that the CPU and Memory are installed in advance. Remember to install the airflow duct back to into the system to ensure the consistency of system operation.

To install the airflow duct properly, please take the following steps:

- Step 1 Insert the airflow duct follow the arrow direction. Slide it toward to screw-lock position.

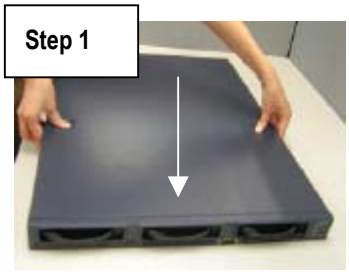
- Step 2 After inserting the airflow duct, please pay attention to the stable clip circle shown in picture. Make sure the airflow duct is firmly inserted in the airflow stable rack.

Note!! The airflow duct should be flat and completely placed into the system. When the case is placed, please be aware that the power supply header and the motherboard should be completely placed under the duct cover. Otherwise the case might not be able to close tightly.



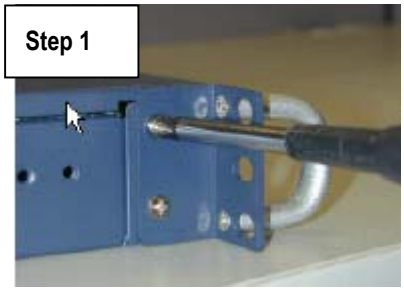
5.3.7. Reinstall Top Cover

- Step 1 Close the cover in un-lock position. Slide it toward to lock position.



5.3.8. Dock Handle Installation

- Step 1 Remove the dock handles from the package. Put two on each side of the chassis, secure with screws provided.

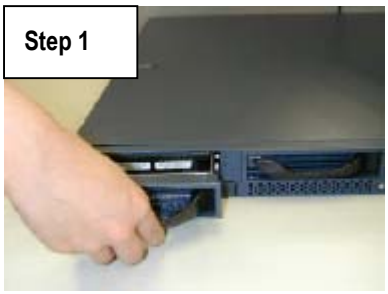


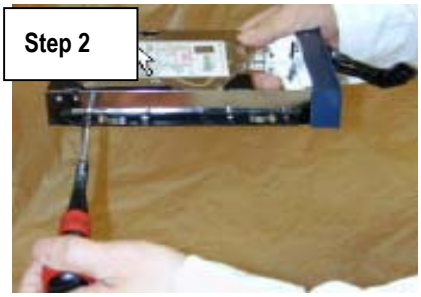
5.3.9. Hard Disk Drive Installation

- Step 1 Pull the hard disk drive tray handle and remove the tray from the chassis.
- Step 2 Insert the hard disk drive into the tray. Secure each hard disk drive with screws.
- Step 3 After securing the hard disk drive with the screws, hold the hard drive handle at open position, and place the

tray into chassis.

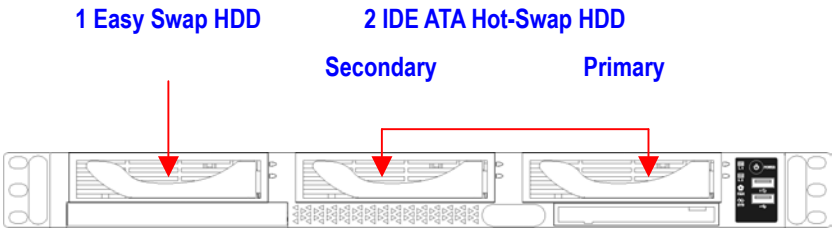
- Step 4 Push the hard disk drive tray handle to the closed position.



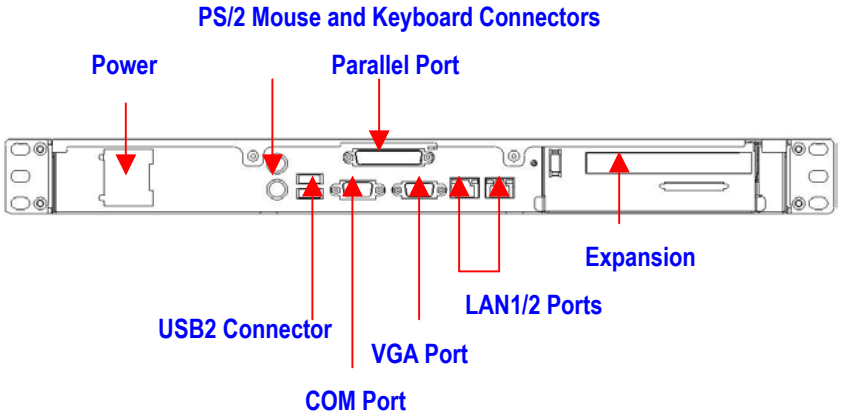


6. Appearance of GS-SR113E

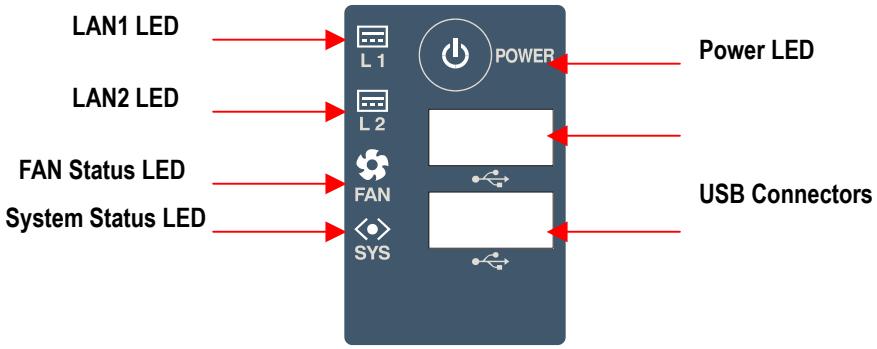
6.1. Front View of GS-SR113E



6.2. Rear View of GS-SR113E

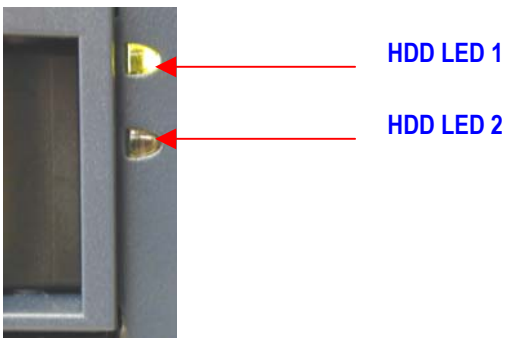


6.3. LED Indicator Description



	Acting	Color	Status
Power LED	On	Green	System power on
	Off	N/A	System power off
LAN LED	On	Green	LAN online
	Off	N/A	LAN offline
	Blink	Green	LAN acting
Fan LED	On	Amber	Fan fail
	Off	N/A	Fan acting
System LED	N/A	N/A	No definition

HDD LED:



	Acting	Color	Status	Condition
HDD LED 1	Off	N/A	No HDD Installed	Non-RAID
HDD LED 1	On	Green	HDD Installed	Non-RAID
HDD LED 2	Off	N/A	HDD idle	Non-RAID
HDD LED 2	Blink	Green	HDD acting	Non-RAID
HDD LED 1	Off	N/A	No HDD installed/ RAID fail or Rebuild	RAID
HDD LED 1	On	Green	HDD installed	RAID
HDD LED 2	Off	N/A	HDD idle	RAID
HDD LED 2	Blink	Green	HDD acting	RAID
HDD LED 2	On	Amber	RAID fail under OS or no HDD detected	RAID
HDD LED 2	Blink	Amber	HDD RAID Rebuiid	RAID
HDD LED 2	Blink	Amber	System booting	RAID

6.4. Connector Description

Suggested icons	Description
	Keyboard
	VGA
	Mouse
	LAN
	Serial Port
	USB