ESR-420

Build Unique Storage Solutions with a Technology Edge

Innovation balances what is possible with what is needed. Terabytes Storage Technology continues to design technology that offers high availability, reliable, and valuable server/storage products. The ESR Storage server series deliver technology that differentiates your company by helping you to create integrated competitive solutions that win. You customers need it, expect it, and demand it

The ESR series Storage server balances what the End-User and System vendor needs to deliver the best solution, provides classy design, highest flexibility, easy to install and maintain, more storage in limited space and ultimate drive and data protection in this limited space. Each unit has two PWM variable-speed, hot-swappable cooling fans and with multiple temperature sensors at the hot points. The ESR-420 redundant, load-sharing power supply modules and power management circuitry accommodate the dynamic requirements of today's drives. ESR-420 further includes power supply-to-drive isolation, which allows control over voltage and current fluctuations.

Chassis Specification

1. EIA 310-D standard 4U chassis, Dimension 19"Wx6.95"Hx28"D
2. Corrosion-resistant steel construction
3. Includes 20 Hot Swappable, low-profile hard-disk drive carriers with dual status LEDs at each drive carrier
4. Support Ultra 320, SATA, and SAS
5. Support SSI CEB1.0, SSI EEB 3.5, extended ATX form factor
6. PWM system fan control
7. On board temperature sensors
8. On board enclosure management feature includes multiple temperature sensors with audible and visible alarm, Power Supply health audible and visible alarm, System fan health audible and visible alarm
9. Front Panel includes:
   Buttons and Switches: Power on/off (momentary) button, system-reset button, alarm reset button
   LEDs: Power, Hard-Disk activity, network activity (two), system health
   Connectors: Two USB ports, One serial port
10. Support two hot-swap 120mm PWM fans for system cooling that can be connected to system board to provide RPM control and data for fan-failure prediction and detection
11. Optional two 60mm rear panel fans
12. Support up to 3 x 2.5" internal slim hard-disk drives
13. Includes slim CD-Rom and slim FDD carriers and conversion board
14. 930W PFC 2+1 Redundant Power Supply with simple cable connection
15. Horizontal BP design for better airflow, provides space for future SAS edge expander chips and delivers efficient connectivity to larger number of devices
16. Optional mechanical lock front bezel (special order only)
17. Includes easy install Slide-Rail Kit

SATA/SAS Backplane Specification

1. A power MOSFET to provide disk spin-up control
2. A pre-charge circuit for surge current protection when a disk is plugged in to protect the hard-disk drive and the backplane.
3. LED: Blue ON = HDD present; Blue Blanking = Drive activity; Red=Drive failed
4. A 4x2 header for Drive activity and Drive failed LED signal input
5. A 4x3 jumper with 4 jumper cap is added to select either disk activity LED is provide by the Host Bus Adapter or form HDD such as Western Digital or Maxtor Diamond Max X hard disk drive
6. Single DC input to provide better cable management
7. Included 32pin SFF8484 to Point-to-Point, to SFF8484, to Multilane or to SFF8087 miniSAS data cable

SCSI Backplane Specification

1. A power MOSDET to provide disk spin-up control
2. A pre-charge circuit for surge current protection when a disk is plugged in to protect the hard-disk drive and the backplane.
3. LED: Blue ON = HDD present; Blue Blanking = Drive activity; Red=Drive failed
4. A 4x2 header for Drive activity and Drive failed LED signal input
5. Single DC input to provide better cable management
6. Piano Switch for easy SCSI ID setting
7. Two HD68 SCSI connectors for daisy chain if required

SAS Expander Specification

1. A power MOSDET to provide disk spin-up control
2. A pre-charge circuit for surge current protection when a disk is plugged in to protect the hard-disk drive and the backplane.
3. LED: Blue ON = HDD present; Blue Blanking = Drive activity; Red=Drive failed
4. LSISAS12A expander to support eight hot-swap SAS or SATA II hard disk drives
5. SFF8087 cable connection
6. Unique SAS address for multi-expander solution.