

# RR-0812-LVD



The RR-0812-LVD is a high packaging density 8 drive SCSI RAID enclosure providing performance, value and capacity in a small 2U package.

The RR-0812-LVD is very flexible, with the capacity for expansion and growth. A simple RR-0812-LVD SCSI JBOD can be easily upgraded to a SCSI RAID system. Similarly, the enclosure can be easily expanded by using an additional RR-0812-LVD without a RAID Module installed.

Integrated within the system, the Chaparral JSS122 RAID controller provides a high level of performance. The controller has two Ultra 160 host channels and two Ultra 160 SCSI drive channels and offers many outstanding features such as extremely high transfer/transaction rates and uncompromised data reliability. Furthermore, the close working relationship between Chaparral and Xyratex ensure that we combine to provide an optimized system solution.

Xyratex's X-Cam software provides a user friendly system interface for the RR-0812-LVD. The basic feedback coming from Enclosure Management and SAF-TE is converted by X-Cam to offer the user an easy way to firstly, configure the system to their personal needs and secondly, track any changes in system conditions.

The enclosure provides a safe environment with chassis characteristics such as exceptional cooling, rotational vibration and acoustic performance. The front of the enclosure also allows for easy customization. For example, OEMs can change the colour and style of the drive carrier fascias to give a unique appearance to the RR-0812-LVD enclosure

## Features

- *U160 SCSI and U320 SCSI compliant JBOD*
- *8 drives in a 2U form factor*
- *Two host attachment channels*
- *Two drive SCSI channels*
- *SAF-TE enclosure management*
- *Auto-termination and termination active LED on expansion bus*
- *Single or redundant 350W power supplies. Autoranging 115/240VAC and 50/60 cycle operation*
  - *Redundant operation*
  - *Current sharing*
  - *Power factor correction*
- *EIA 19 inch rack mounting*
- *Customizable look and feel*
- *Microsoft accredited*
- *Enclosure fault indicators for power, cooling & system*
- *Individual fault indicators for drives, PSU, fan, controller FRUs*
- *2 drive LEDs (activity and fault)*
- *FCC class B, UL cUL, and CE*

## Chaparral JSS122 RAID Controller Features

- *RAID Levels 0, 1, 0/1, 3, 4, 5, 10*
- *Battery backed ECC-protected disk cache*
- *Sustained transfer rates over 180 Mbytes/sec*
- *Greater than 15,000 IOPS*
- *On-line capacity expansion allowing reconfiguration without interruptions*
- *OS independent: no special software drivers required*
- *Drive hot-swap supported*
- *Array status monitoring*
- *On-line capacity expansion*
- *Spare pooling and dedicated spares; array verification*
- *Controller/drive hot-swap supported*

# Technical Specification

<b>Product code:</b>	RR-0812-LVD
<b>U160 SCSI drives supported:</b>	8 per enclosure
<b>External interface:</b>	VHDCI connectors
<b>RAID Controller JSS122:</b>	3.5mm jack
<b>Device types supported:</b>	Ultra 2, U160 and U320* LVD SCSI drives to 15,000 rpm or up to 146GB (*SCSI compliant JBOD)
<b>Chassis &amp; drive carrier material:</b>	Combination of pre-plated sheet metal, injection molded plastics, and metal castings
<b>Hot pluggable components:</b>	PSU, cooling module, disk drives, I/O modules, RAID controller

## Dimensions

- **H:** 85.7mm; **D:** 545mm; **W:** 447mm
- 2 EIA Units
- Standard 19" rack mountable
- Overall weight 22kg

## Power

<b>Voltage:</b>	100-120 or 200-240 VAC (autoranging)
<b>Frequency:</b>	47-63 Hz
<b>Power consumption:</b>	370 VA max
<b>Operational currents:</b>	1.55A@230V, 2.8A@110V
<b>Inrush current :</b>	(25°C cold start 1 PSU) 9A @ 230 VAC

## Temperature and Humidity

	Operating	Non Operating	Storage	Shipping
<b>Temp Range</b>	5°C to 35°C	0°C to 50°C	1°C to 60°C	-40°C to 60°C
<b>Relative Humidity</b>	20% to 80% non-condensing	8% to 80% non-condensing	5% to 80% non-condensing	5% to 100% condensing but not precipitating
<b>Max Wet Bulb</b>	23°C	27°C	29°C	29°C

## Altitude

<b>Operating:</b>	0 to 2133m (0 to 7,000ft)
<b>Non operating:</b>	-305 to 12,192m (-1000 to 40,000 ft)

## Shock and Vibration

<b>Operational shock:</b>	5g 10ms 1/2 Sine
<b>Operational vibration:</b>	0.21 grms 5-500Hz Random
<b>Non-op shock:</b>	30g 10ms 1/2 Sine
<b>Non-op vibration:</b>	1.04 grms 2-200Hz Random
<b>Relocation vibration:</b>	0.3g 2-200Hz Sine

## Acoustics (at ambient 20°C)

<b>Sound power operating:</b>	Less than 6.0 B LwA
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## Chaparral JSS122 RAID Controller Features

<b>Host Interface:</b>	Two Ultra 160 SCSI channels
<b>Device Interface:</b>	Two Ultra 160 SCSI device channels
<b>RAID Levels Supported:</b>	0, 1, 0/1, 3, 4, 5, 10, JBOD
<b>Advanced RAID Features</b>	<ul style="list-style-type: none"> <li>• 128 or 256 Mbytes of PC-100 compatible SDRAM DIMM, ECC-protected, write-back data cache memory bus, 800 Mbytes/sec bandwidth</li> <li>• Integrated Nickel Metal Hydride (NiMH) cache battery backup interface</li> </ul>

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