## **IBM XIV Storage System**





# IBM XIV Storage System Storage Reinvented

The IBM XIV® Storage System is a high-end disk system designed to support key current and future business requirements for a highly available information infrastructure. Built from a grid of standard Intel®/Linux® components, it is connected in an any-to-any topology using Gigabit Ethernet.

The ground-breaking XIV architecture delivers outstanding performance, scalability, availability, and reliability. Based on SATA disks, the XIV system applies a unique parallel architecture, caching algorithms, and more, eliminating hotspots and achieving performance levels beyond those of Fibre Channel (FC) disk-based systems.

The XIV system provides a true single-tier solution. It is offered in partial and full rack configurations.

## **Physical Features (per rack)**

### Disks

- Interface: SATA II
- 7,200 RPM supported
- Capacity: 1 TB

## Physical Specifications (full rack)

- Dimensions: 199.1 cm high, 60 cm wide, 109 cm deep
- Weight: 1,912 lb/ 869 kg
- Clearance: front, 120 cm; rear, 100 cm

## Power and Cooling (full rack)

- Input voltage: 180 to 264 VAC
  - Minimum maximum, 180 264 VAC, at 60A
  - Nominal, 200 240 VAC, at 60A
- Power consumption (nominal/peak):
  - Partial rack: 3.1 kW/ 3.5 kW
  - Full rack: 7.7 kW/ 8.4 kW
- Heat dissipation: 26K BTU/hour
- Redundant power feed

# Capacity and Resources (min/max)

Number of Disks	72/180
Number of FC Ports	8/24
Number of iSCSI Ports	0/6
Raw Capacity	72/180 TB
Usable Capacity	27/79 TB*
Internal Switching Capacity	64/168 Gbps
Memory	48/120 GB
Cache to Disk Bandwidth	240 Gbps
CPUs (Quad-core)	6/15

\*After taking into account capacity used by mirroring (redundancy), spares, and metadata



Available in partial and full rack configurations



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## **Physical Features (per rack)**

## **Operating Environment**

- Temperature: 10 35°C
- Altitude: 0 2,133 m
- Humidity: 25 80%, non-condensing

## **Functional Specifications**

## **Protection Features**

- Active-active N+1 redundancy on disks, modules, switches and UPS units
- All system components (disks, modules, UPS units, switches) are hot-swappable
- Data mirroring
- Self healing:
  - 30-minute rebuild time after 1 TB disk failure (minimizing double-failure risk)
  - Rebuild after module failure

## Functionality

- Differential snapshots
  - Up to 16,000 snapshots
  - Instant snapshot creation
  - Writable snapshots
  - Near-zero performance overhead
- Synchronous remote copy
- Instant volume copy

### Connectivity

- Fibre Channel rates: 1 Gbps, 2 Gbps, 4 Gbps
- iSCSI over Gigabit Ethernet
- SCSI-3 protocol for both FC and iSCSI

### For more information

To learn more about the IBM XIV Storage System, contact your IBM representative or IBM Business Partner, or visit:

#### www.xivstorage.com



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