Data Sheet

We make sure

FUJITSU SIEMENS COMPUTERS

FibreCAT$^{\circ}$ SX80
Storage systems you can simply rely on

FibreCAT SX80

The FibreCAT SX80 is the perfect system for the data centre. It offers up to 56 TB of storage capacity with 1-5 enclosures with up to 56 disks (SATA-II or SAS). Optionally the system can be equipped with a second RAID controller.

The FibreCAT SX80 offers enterprise class reliability as well as snapshot functionality. All this comes at a very affordable price. All critical components (RAID controller – in the case of dual-controller-systems, fans, power supplies, disks) are redundant and can be replaced during operations.

FibreCap™ technology protects the RAID controller cache in case of power failure.

The FibreCAT SX80 is a fast storage system. This comes from the state-of-the-art 4 Gigabit per second Fibre Channel technology, the fast 15k rpm SAS disks, as well as from FibreCache™, which uses a high performance interconnect to synchronize RAID controller caches directly.

Key Features	Benefits
n Redundant RAID controllers, fans and power supplies that are hot swappable. n FibreCap uses capacitor technology instead of batteries to protect RAID controller cache during power outages. This permits the array to return to high performance mode within minutes following restore versus hours. n A vast number of RAID levels	n Reliable
n FibreCache is a high performance interconnect that keeps RAID controller caches synchronized n 4 Gigabit per second Fibre Channel technology n SATA II and 15K rpm SAS disk drives	n Performance
n Preloaded management software with intuitive web interface n Integrated with Microsoft Virtual Disk Services (VDS)	n Easy to install and easy to use
n For heterogeneous environments and for PRIMERGY, PRIMEPOWER and PRIMEQUEST n Perfect for many scenarios (data bases, storage consolidation, clustering, tiered storage, backup-to-disk, VMware, etc.)	n Versatile
n Build-in snapshots as a standard n Possibility to upgrade from 4 to 32 snapshots n Integration with Windows Volume Copy Shadow Services (VSS)	n Improved data protection

Technical Data

Typ   4 Gbit/s Storage System

General specification / Shelf
- **Rack System**   2U, 12 Drives
- **Supported operating systems**
  Windows 2003R2 (VSS/VDS), Red Hat AS 4.0/5.0, SuSE SLES 9/10, VMware ESX 3.0, 3.0.1 and 3.0.2, SPARC Solaris 9 und 10
- **Number of power supplies**
  2 with full redundancy (hot-plug)
- **Controller Cache**   1.0 GB each RAID Controller
- **FibreCAP**   1 each RAID Controller
- **SFP**   2 each RAID Controller; Fix part of the RAID-Controller FRUs
- **Snapshots**   4 Snapshots per System (max. 32 Snapshots)
- **Max. number of Shelves**   5

Disk drives
- **Gross capacity** [1]   SATA II 500 GB, 750 GB, 1 TB with 7.200 rpm
  SAS 73 GB, 146 GB, 300 GB with 15,000 rpm
  (in 1" hot-plug disk cage)
- **Access time**   11ms / 12ms average (Read/Write) for SATA II HDD
- **Access time**   4ms / 5ms (Read/Write) for SAS HDD
- **Total capacity** [1]   56 TB (56 x 1 TB SATA-Drives)

1 TB Disk is available in April 2008

Supported RAID levels
- **RAID 0**   Data Striping about several disk drives
- **RAID 1**   mirrored disks drives
- **RAID 10**   Data mirroring, then Striping of the data over several disk drives
- **RAID 3**   Striping with dedicated parity drive
- **RAID 5**   Striping with distributed parity
- **RAID 50**   RAID 5 arrays, Striped again over all drives
- **RAID 6**   Striping with distributed double parity

System management

Signaling and monitoring of internal operating parameters via SES and status LEDs on the subsystem.

Management
- **Interfaces:**   Mini-DB9 (RS232), 10/100 Ethernet (RJ45)
- **Supported protocols:**   SNMP
- **Administration:**   Web-Environment, CLI

Options
- **Hot-plug Drives (SATA and SAS, mixing is possible)** [2]
- **Second RAID Controller**
- **Up to 4 Expansion Shelves cascadable with the Base Shelf**
- **Upgrade to 32 Snapshots**

Electrical values per Shelf
- **Power supply**   2 hot-plug modules 4)
- **Power**   600 W (230 VAC, 50 Hz) Apparent power
- **Max. electric current**   2,61 A (230 VAC, 50 Hz)
- **Continuous load**   535 W
- **Max. Effective Power**   572 W (230 VAC, 50 Hz)
- **Power factor**   0,953 (230 VAC, 50 Hz)
- **Peak load**   650 W
- **Rated voltage**   115 V – 240 V (AC)
- **Rated frequency**   50 Hz – 60 Hz
- **Fans**   1x integrated in each power supply

Ambient conditions (DIN EN 60721-3-X)
- **Operating temperature**   5°C up to 40°C (IEC 721)
- **Non operating temperature**   -40°C to 70°C
- **Relative Humidity**   10%- 90 %, non condensing

Heat Dissipation
- **Max. heat dissipation**   1926 kJ/h

Dimensions
- **Rack (H x W x D)**   3,45 Inch / 8,75 cm (2 HE)
  17,56 Inch / 44,60 cm
  22,5 Inch / 57,15 cm
- **Weight**   max. 30 kg (dependent on configuration level)

Compliance with standards
- **Product safety**   UL listet, cUL, CE, CSA-C22.2, EN 60950-2000, IEC 60950, GS, GOST, S-Mark
- **Approval**   GS, CSA US/C, CB-certificate
- **Electromagnetic compatibility**
- **FCC certification**   FCC Part 15 Class B, ICES-003, EN 300-386, EN 55022 Class B, VCCI Class B, AS/NZS 3548 Class B, BMSI Class B
- **Vibrations**   EN 61000-3, EN 61000-3-3
- **Immunity**   EN 300-386, EN 55024
- **CE certification**   EU Directive: 89/336/EWG (EMV); EN61000-3-2; and EN 6100-3-3 73/23/EWG (Product security)
- **Environmental compliance**   RoHS-compliant WEEE-compliant

[1] Information in this datasheet are based on decimal system (1 GB = 10^9 Bytes)
[2] These values are not valid for 110 VAC, 263 VAC and 60 Hz