

DATA SHEET

PRIMERGY SX650 Storage Blade

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- For easy and cost effective server consolidation

PRIMERGY SX Storage Blades are installed together with PRIMERGY Server Blades in the PRIMERGY BX system units.

The introduction of the storage blades for all PRIMERGY Blade Servers offers an easy and cost-effective server consolidation opportunity, i.e. for the transition from rack or tower servers to high-density blade server architecture. The use of storage blades equipped with tape drives (available for certain blade servers) also offers easy and fast local system data backup. Having local access to large amounts of data is often necessary, for example, in the world of computer-aided engineering (CAE), where smaller local workgroups have to access and create very large models. Operation within confined environments as file servers as well as for Microsoft® SharePoint portals and Microsoft® SQL Servers are popular usage cases for disk-based storage blades.

PRIMERGY SX650 Storage Blade

To extend the internal storage capacity of PRIMERGY BX620 S4 or BX620 S5 Dual Socket Server Blades, the PRIMERGY SX650 Storage Blades can be used. With two of these blades the internal storage capacity of one BX620 S4 can be extended by up to 2x 730 Gbyte. One Storage Blade SX650 occupies one additional Blade slot within the PRIMERGY BX600 S3 System Unit; the first SX650 is positioned at the right side of an adjacent BX620 S4 or BX620 S5 Server Blade, the second one right from the first one. The 5 hard disk drives of one SX650 are driven by a highly functional SAS/RAID controller with 512 Mbyte cache and BBU. This controller (HBA), installed in the BX620 S4 or BX620 S5, provides the RAID levels 0, 1, 5 and 6. The connection to each SX650 is realized via corresponding SAS cables which are dedicated for this configuration pair.



MAIN FEATURES	BENEFITS
Connection of one or two SX650 units to one BX620 S4 or BX620 S5 Server Blade (up to five or three combinations per system unit BX600 S3).	Variable configurations including optional upgrade from one to two Storage Blades on site.
Up to 5 SAS or SATA hard disk drives can be installed in one SX650. A single hard disk drive can provide up to 146 Gbyte of storage capacity.	The internal storage capacity of one BX620 S4 or BX620 S5 Server Blade can be increased by up to 2x 730 Gbyte. This may avoid in many cases a more expensive investment in and operation of external storage subsystems.
The SAS/RAID controller driving the SX650 hard disks provides RAID levels 0, 1, 5 and 6, accelerated by 512 MByte cache and secured by BBU.	Hardware based data protection on the SX650 through use of latest SAS/RAID controller technology features.
Operation of up to 5 completely segregated server-storage combinations in one Blade Server enclosure	Highest possible data security for customers that otherwise would have to fall back on external storage subsystems with an even higher degree of complexity.



Technical details

Enclosure

Type	Storage extension unit for BX620 S4 and S5 Server Blades
Number of hard disk drives	1 - 5
SAS	Mini-SAS x4 connector corresponding to SFF8088
Storage architecture	Direct Attached Storage (DAS)
Status LEDs	Power (green)

Interfaces

Hard disk drives	SATA, 3 Gb/s, 320 GB, 5400 rpm, hot-plug, 2.5-inch
	SATA, 3 Gb/s, 160 GB, 5400 rpm, hot-plug, 2.5-inch
	SAS, 3 GB/s, 300 GB, 10000 rpm, hot-plug, 2.5-inch
	SAS, 3 Gb/s, 146 GB, 15000 rpm, hot-plug, 2.5-inch
	SAS, 3 Gb/s, 146 GB, 10000 rpm, hot-plug, 2.5-inch
	SAS, 3 Gb/s, 73 GB, 15000 rpm, hot-plug, 2.5-inch
	SAS, 3 Gb/s, 73 GB, 10000 rpm, hot-plug, 2.5-inch

Dimensions / Weight

Dimension (W x D x H)	286 x 470 x 43 mm
Dimension notes	520 mm with connectors and handles
Weight	4.8 kg
Weight notes	occupies one Server Blade slot in system unit

Environmental

Temperature note	In accordance with the corresponding PRIMERGY BX600 System Unit
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Electrical values

Active power max. (per system unit)	53 W
Heat emission	190.8 kJ/h (180.9 BTU)

Compliance

Germany	GS
Europe	CE
USA/Canada	CSAc/us ULc/us FCC Class A
Global	CB RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment)
Japan	VCCI
China	CCC
Australia/New Zealand	C-Tick
Taiwan	BSMI
Compliance notes	In combination with corresponding PRIMERGY BX system unit
Compliance link	https://sp.ts.fujitsu.com/sites/certificates/default.aspx

Information about environmental care, policies, programs and our Environmental Guideline FSC 03230:

<http://ts.fujitsu.com/aboutus>

Take back and Recycling information:

<http://ts.fujitsu.com/recycling>