# **HPE**Fibre Channel Switch (Entry/mid-range class)

system configuration diagram

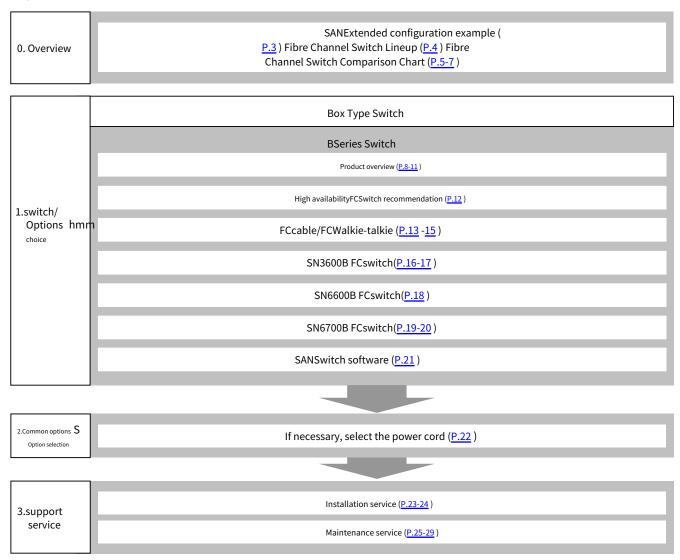
2025year6month12day







#### **Configuration Steps**



- 1. Fibre Channel switch (Fabric Connection), or select an option.
- 2. Select the power cord according to your needs.
- 3. Please select the service for the product you are interested in.

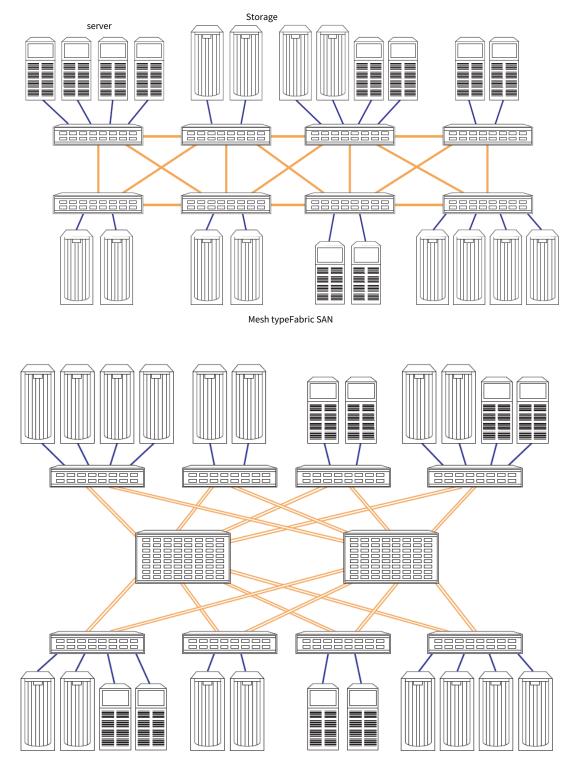
Please contact us separately regarding installation and maintenance services for products not listed here.

- ◆ When building large-scale or complex configurations, we recommend using our storage design consultation service. Please contact us for details.
- ◆HPE SAN (Storage Area Network)For details, see below.WebPlease refer to the site. <a href="http://www.hpe.com/jp/ja/storage/networking.html">http://www.hpe.com/jp/ja/storage/networking.html</a>



[SANExample of an expanded configuration

As with general networks, the number of devices in a Fibre Channel switch increases. SANIt is possible to expandCore-EdgeBy using a multi-stage configuration called a "system configuration," it is possible to minimize business interruptions due to an increase in equipment, and also to minimize the need for restructuring. SANThis reduces the management and operational costs.

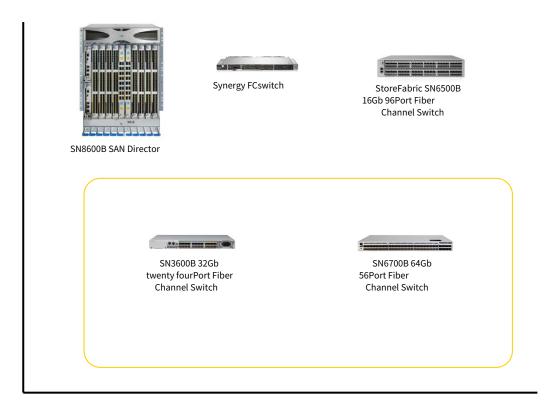


Core-EdgeTypeFabric SAN

<sup>◆</sup>SANFor configuration examples and details on configuration, <u>SAN Design Reference Guide</u> See



# **Fibre Channel Switch Lineup**



**BSeries Switches** 

Scope of this system configuration diagram



# **Fibre Channel Switch Comparison Chart**

	SN3600B 32Gb 24portFCswitch				
Bseries	8Port Active16Gb	8Port Active32Gb	twenty fourPort Active	twenty fourPort Active	
(32Gb FCswitch)	SFP+Attached Model	SFP28Attached Model	PowerPack+ 16Gb SFP+Included	PowerPack+ 32Gb SFP28Included	
	R4G55B	R7R97A	R8P29A	R8P28A	
Standard Active Ports	8poi	rt	twenty	fourport	
Port Expansion		twenty	fourport		
SFPtransceiver	8Standard attachment (B-series 16Gb SFP+short wavelengthSecure transceiver)	8Standard attachment (B-series 32Gb SFP28short wavelengthSecure transceiver)	twenty fourStandard attachment (B-series 16Gb SFP+short wavelengthSecure transceiver)	twenty fourStandard attachment (B-series 32Gb SFP28short wavelengthSecure transceiver)	
Long Wavecorrespondence	support				
FCIP	-				
iSCSI	-				
Cascade Connection	Standards Support				
Trunking function	option				
Zoning		Standard	s Support		
SAN Full Fabric		Standard	s Support		
OS		Fabr	ic OS		
software	option PowerPack+Software package included*1				
Management Software	Advanced Web Tools,HPE SANnav Management Software				
Hot-pluggableRPS*2	-				
Hot-pluggable fans	-				
Form Factor	1URack-mounted				

<sup>\*1:</sup>ISL Trunking,Extended fabric,Fabric VisionAttached \*2: RPS=Redundant Power Supply



#### **Fibre Channel Switch Comparison Chart (continued)**

	SN6700B 64Gb 56portFCswitch			
Bseries (64Gb FCswitch)	twenty fourPort Active32Gb SFP28Attached Model	Port Side Intake 24Port Active32Gb SFP28Attached Model		
	R6B05A	R6B06A		
Standard Active Ports	twenty four	rport(SFP56)		
Port Expansion	56port(SFP56×48+	-SFP-DD*1×8)		
SFPtransceiver	twenty four Std (B-series 32Gb SFP28short wa	andard attachment veelengthSecuretransceiver)		
Long Wavecorrespondence	sup	port		
FCIP	-			
iSCSI	-			
Cascade Connection	Standards Support			
Trunking function	Standards Support			
Zoning	Standards Support			
SAN Full Fabric	Standards Support			
OS	Fabr	ric OS		
software	PowerPack+Software package included*2			
Management Software	Advanced Web Tools,HPE SANnav Management Software			
Hot-pluggableRPS*3	Standari	d equipment		
Hot-pluggable fans	Standard equipment			
Form Factor	1URack-mounted			

<sup>\*1:</sup>SFP-DDTo use the portFOS 9.1Requires

	SN6700B 64Gb 56portFCswitch			
Bseries (64Gb FCswitch)	twenty fourPort Active64Gb SFP56Attached Model	Port Side Intake 24Port Active64Gb SFP56Attached Model		
	R7M13A	R7M14A		
Standard Active Ports	twent	y fourport(SFP56)		
Port Expansion	56port(SFP56×	48+SFP-DD*1×8)		
SFPtransceiver		yfourstandard attachment t wavelengthSecuretransceiver)		
Long Wavecorrespondence		support		
FCIP	-			
iSCSI	•			
Cascade Connection	Standards Support			
Trunking function	Standards Support			
Zoning	Sta	ndards Support		
SAN Full Fabric	Standards Support			
OS	ŀ	Fabric OS		
software	PowerPack+Software package included*2			
Management Software	Advanced Web Tools, HPE SANnav Management Software			
Hot-pluggableRPS*3		Standard equipment		
Hot-pluggable fans	Standard equipment			
Form Factor	1URack-mounted			

<sup>\*1:</sup>SFP-DDTo use the portFOS 9.1Requires

<sup>\*2:</sup>ISL Trunking,Extended fabric,Fabric Vision,Integrated RoutingAttached \*3:RPS= Redundant Power Supply



#### StoreFabric SN3600B 32Gb 24portFCSwitch Product Overview

 $SN3600B is\ the 6 generation 32 Gb Entry-level\ Fibre\ Channel\ compatible SANIt's\ a\ switch.$ 

1UIn the casetwenty fourThe port is standard and 8Port available entry model, twenty fourThere are higher-end models that can use ports, and depending on the license, 8The port active model is 16, twenty four Expandable to multiple ports. Bundled or optional supplementary service softwarePower Pack+The functionality can be expanded.



SN3600B 32Gb 24portFCswitch

tem Specifications						
Product name	SN3600B 32Gb 24port FCswitch8port active16Gb SFP+ Attached Model	SN3600B 32Gb 24port FCswitch8port active32Gb SFP28 Attached Model	SN3600B 32Gb 24port FC switchtwenty fourport activePowerPack+ 16Gb SFP+Attached Model	SN3600B 32Gb 24port FCswitchtwenty fourport activePowerPack+ 32Gb SFP28Attached Model		
Product Number	R4G55B	R7R97A	R8P29A	R8P28A		
Fibre Channel Port	standard8Active, Maxtwen	ity four, Universal Port	standardtwenty fourActive, Max	ktwenty four, Universal Port		
	B-series 16Gb SFP+	B-series 32Gb SFP28	B-series 16Gb SFP+	B-series 32Gb SFP28		
IncludedSFPtransceiver	short wavelengthSecure	short wavelengthSecure	short wavelengthSecure	short wavelengthSecure		
	transceiver,8pieces	transceiver,8pieces	transceiver,twenty fourpieces	transceiver,twenty fourpieces		
Certified Maximum Switch Configuration  interoperability	SANswitch8/8, Switch,SN8000B 8-Slot 9 SN6500B 16Gb I Brocade 8Gb SANswit	SAN Backbone Director, SN8000E	606 Extension SAN Switch, SN40 3 4-Slot SAN Director, ch,SN3000B 16Gb FCswitch, Blad e 16Gb SANswitch, N3600B 32Gb FCswitch,			
performance		Auto-sensing,4,8,16,32 Gbp	sPort Speed			
ISLTrunking		m per trunk8pieces32 GbpsFran 56 Gbps,DPSExchange-basedISL	ne-based trunking on the port, Load balancing betweenFabric (	DSEquipped with		
Fabric Latency	900nan	oseconds (local switch port,Forv	vard Error Correction (FEC)includ	de)		
Maximum Frame Size		2112Bytes P	Payload			
Class of Service		class2,class3,classF(Inter-switch frame)				
Port Type	Dport (diagnostic port),Eport,Fport,Mport(Mirrorport), FPort andNPIV CorrespondingNControl the port (Access Gateway mode					
USB	1Ports (for downloading system log files and firmware upgrades)					
Data Traffic Types	Fabric switches that support unicast					
Media Type	BFor seriesSFP(Small Form-Factor Pluggable)					
Fabric Services	Monitoring and Alerting Policy Suite (MAPS), Flow Vision, Adaptive Networking (Ingress Rate Limiting, Traffic Isolation, QoS), Fabric Performance Impact (FPI) Monitoring, Slow Drain Device Quarantine (SDDQ), Advanced Zoning (default zoning, port/WWN zoning, broadcast zoning, peer zoning, target-driven zoning), Dynamic Fabric Provisioning (DFP), Dynamic Path Selection (DPS), Extended Fabrics, Enhanced BB credit recovery, FDMI, Frame Redirection, Frame-Based Trunking, FSPF, ISL Trunking, Management Server, NPIV, NTP v3, registration status change notification (RSCN), Reliable Commit Service (RCS), Simple Name Server (SNS), Read Diagnostics Parameter (RDP), VM Insight					
option	SFPTransceiv	ers, Fibre Channel cables, mana	gement software,USBmemory			
Support Software	HTTP,SNMP v1/v3 (FE MIB, FC Management MIB),SSH,Auditing,Syslog, Advanced Web Tools,HPE SANnav Management Software, SAN Network Advisor Enterprise or SAN Network Advisor Professional/Professional Plus, Command Line Interface (CLI),SMI-S compliant,Administrative Domains,trial licenses for add-on capabilities, Power Pack+ (Fabric Vision, Extended Fabric, ISL Trunking)					
Management Access	10/100/1000 Ether	rnet (RJ-45),In-band over Fibre C	hannel, serial port (RJ-45),USBp	ort		
diagnoss	D_PortElectrical/optical loopback for offline diagnostic functions,link traffic /Waiting time/distance, Flow mirroring, built-in flow generator, POSTand built-in online/offline diagnostics, environmental monitoring,FCpingandPathinfo (FC traceroute), Frame viewer, non-disruptive daemon restart,optics health monitoring,power monitoring, RAS trace logging,Rolling Reboot Detection (RRD)					
power supply		Rating:90~264 VAC	C (47 Hz – 63 Hz)			
Power consumption	76.52 W (24Fully equipped port,32 Gbps SWL(When using a transceiver)					
$size(H \times W \times D)$		4.3 cm×42.9 cm×30.7 cm				
weight	5.76 kg (Power1(Basic equipment, excluding transceivers)					
Form Factor	1U(From the back (cooling fa	an side) to the front (FCport side), and	the power connectorFCport side),19in	ch,EIACompliance		
	1U(From the back (cooling fan side) to the front (FCport side), and the power connectorFCport side),19inch,EIACompliance					



#### StoreFabric SN6700B 64Gb 56portFCSwitch Product Overview

SN6700Bis the latestFC SANProviding technologyBrocade GEN7Equipped with a chip,64Gb/sCompatible with next-generation mid-range FC SANIt's a switch.

No.6Approximately 100 times faster than the previous generation chip40%lt improves latency.NVMe over FabricBy combining it with compatible products, you can maximize its high-performance storage capabilities.

The physical port is 48 pieces SFP56 Port and 8 pieces SPD-DDIt has a port and comes standard with twenty four ports are activated and a port upgrade license allows up to 64 FCIt can be expanded to up to 1000 ports. 32 Gb SFP28 or 64 Gb SFP56 Short wavelength Secure The walkie-talkiet wenty four 1 piece is included as standard.



SN6700B 64Gb 56portFCswitch

System Specifications

Media Type  BFor seriesSFP(Small Form-Factor Pluggable)  Monitoring and Alerting Policy Suite (MAPS), Flow Vision, Fabric Performance Impact (FPI) Monitoring, Adaptive Networking (QoS), Slow Drain Device Quarantine (SDDQ), Dynamic Fabric Provisioning (DFP), Advanced Zoning (default zoning, port/WNN zoning, broadcast zoning, peer zoning, target-driven zoning), Dynamic Path Selection (DPS), Extended Fabrics, Enhanced BB credit recovery, FDMI, Frame Redirection, Frame-Based Trunking, FSPF, Integrated Routing, IPoFC, ISL Trunking, Management Server, NPIV, Time Server, registration status change notification (RSCN), Reliable Commit Service (RCS), Simple Name Server (SNS), Virtual Fabrics (Logical Switch, Logical Fabric), Read Diagnostics Parameter (RDP), FICON CUP  Option  SFPTransceivers, Fibre Channel cables, management software, USB memory  HTTPS/HTTP,NTP v3,SNMP v1/v3 (FE MIB, FC Management MIB), SSH, Auditing, Syslog, Advanced Web Tools, HPE SANnav Management Software, HPE Network Orchestrator, EZ Switch, Command Line Interface (CLI), SMI-S compliant, REST API, Administrative Domains, trial licenses for add-on capabilities  Management Access  10/100/1000 Ethernet (RJ-45), In-band over Fibre Channel, serial port (mini-USB), USBport  D_PortElectrical/optical loopback for offline diagnostic functions, link traffic /Waiting time/distance, Flow mirroring, built-in flow generator, POSTand built-in online/offline diagnostics, environmental monitoring, FCpingandPathinfo (FC traceroute), Frame viewer, non-disruptive daemon restart, optics health monitoring, power monitoring, RAS trace logging, Rolling Reboot Detection (RRD)  Power committee  264 W (56Fully equipped port, 64 Gbps SWL/When using an optical transceiver)  3264 W (56Fully equipped port, 64 Gbps SWL/When using an optical transceiver)  4264 W (56Fully equipped port, 64 Gbps SWL/When using an optical transceiver)  Form Factor  1U(From the back (cooling fan side) to the front (FCport side)  1U(Front the back (cooling fan side) to the front (FCport side)	Product name	SN6700B 64Gb 56portFCswitch twenty four Port Active32Gb SFP28Attached Model	SN6700B 64Gb 56portFCswitchPort Side Intake twenty fourPort Active32Gb SFP28Attached Model		
Included SFPtranscelver  Beseries 320b SFP28short wavelengthisecuretransceiver, twenty four pieces  maximum Switch Configuration  SANSwitch Big, SANSwitch Big/24, 85 SANSwitch, 1506 Extension SAN Switch, SN4000B 4-Slot SAN Backbone Director, SN8000B 4-Slot SAN Backbone Director, SN8000B 4-Slot SAN Direct Power Pack+, SN8000B 4-Slot SAN Backbone Director, SN8000B 4-Slot SAN Director, SN800B 4-Slot SAN Director, SN8000B 4-Slot SAN Director, SN800B 4-Slo	Product Number	R6B05A	R6B06A		
Certifice Hastmann Switch Configuration	Fibre Channel Port	physics56Port, Standardtwenty fourActive, Max	x48 SFP56+8 SFP-DD*1, Universal Port		
SANSwitchs/93_SANswitchs/93_8/8_SANswitch, 1506 Extension SAN Switch, SN8000B AS ISO SAN Director Power Packe, SN8000B 16Gb FCswitch, SN8000B 16Gb FCswitch, SN8000B 16Gb FCswitch, SN800B 16Gb	IncludedSFPtransceiver	B-series 32Gb SFP28short wavelengthSe	curetransceiver,twenty fourpieces		
SNA000B SAN Extension Switch, SN8000B 8-Siot SAN Backbone Director, SN8000B 4-Siot SAN Director Power Pack+, SN8000B 4-Siot SAN Director Power Pack+, SN8000B 4-Siot SAN Director, SN8000B 4-Siot SAN SN800B 4-Siot SN800B	Certified Maximum Switch Configuration	maximum5	56Switches		
ISLMaximum per trunk8pieces64 GbpsFrame-based trunking on the port,ISLMaximum per trunk512 Gbps, DPSExchange-basedISLLoad balancing betweenFabric OSEquipped with, Three is no limit to the number of trunk groups that can be configured within a switch.   Fabric Latency	interoperability	SN4000B SAN Extension Switch, S SN8600B 8-Slot SAN Director Power Pack+, SN8000B 4-Slot SAN Director, SN8600B 4 SN3000B 16Gb FCswitch, SN3600B 32Gb FCswitch, SN6600B 16Gb SN6650B 32Gb FCswitch, SN6600B 32Gb FCswitc Brocade 8Gb SANswitch, BladeSystem c-Class Brocade	N8000B 8-Slot SAN Backbone Director,  -Slot SAN Director Power Pack+,  D FCswitch,SN6500B 16Gb FCswitch,  h,SN6700B 64Gb FCswitch, BladeSystem c-Class  16Gb SANswitch,		
DPSExchange-basedISLLoad balancing betweenFabric OSEquipped with, There is no limit to the number of trunk groups that can be configured within a switch.    Fabric Latency	performance				
Maximum Frame Size  Class of Service  Class of Service  Class of Service  Doort (diagnostic port), Eport, Export, Fport, FPort and NPIPVCorresponding McOntrol the port (Access Gateway mode, option)  USB  1Ports (for downloading system log files and firmware upgrades)  Data Traffic Types  Fabric switches that support unicast  Media Type  BFor seriesSFP(Small Form-Factor Pluggable)  Monitoring and Alerting Policy Suite (MAPS), Flow Vision, Fabric Performance Impact (FPI) Monitoring, Adaptive Networking (QoS), Slow Drain Device Quarantine (SDDQ), Dynamic Fabric Provisioning (DFP), Advanced Zoning (default zoning, port/WMY zoning, broadast zoning, peer zoning, target-driven zoning), Dynamic Path Selection (DPS), Extended Fabrics, Enhanced BB credit recovery, FDMI, Frame Redirection, Frame-Based Trunking; ESPF, Integrated Routing, IPDFC, ISL Trunking, Management Server, MPIV, Time Server, registration status change notification (RSCN), Reliable Commit Service (RCS), Simple Name Server (SNS), Virtual Fabrics (Logical Switch, Logical Fabric), Read Diagnostics Parameter (RDP), FICON CUP  Option  SFTransceivers, Fibre Channel cables, management software, USB memory  HTTPS/HTTP,NTP v3,SNMP v1/v3 (FE MIB, FC Management MIB),SSH, Auditing, Syslog, Advanced Web Tools, HPE SANnav Management Software, HPE Network Orchestrator, EZ Switch, Command Line Interface (CLI), SMI-S compliant, REST API, Administrative Domains, trial licenses for add-on capabilities  10/100/1000 Ethernet (RJ-45), In-band over Fibre Channel, serial port (mini-USB), USBport  D_PortElectrical/optical loopback for offline diagnostic functions, link traffic (Waiting time/distance, Flow mirroring, built-in flow generator, POST and built-in online/offline diagnostics, environmental monitoring, Popingan/Pathinfo (FC traceroute), Frame viewer, non-disruptive daemon restart, optics health monitoring, power monitoring, RAS trace logging, Rolling Reboot Detection (RRD)  Rating-90-264 VAC (47 Hz - 63 Hz)  10(From the back (cooling fan side) to the front (FCport side	ISLTrunking	DPSExchange-basedISLLoad balancing	betweenFabric OSEquipped with,		
Class of Service  Port Type  Port Type  Doport (diagnostic port), Eport, Export, Export, Eport, Export, Export	Fabric Latency	The inter-port delay is460 nsMinimize to (FEC),	using cut-through frame switching		
Port Type  Dort (diagnostic port), Eport, EXport, Fport, FPort andNPIVCorrespondingNControl the port (Access Gateway mode, option)  USB  1Ports (for downloading system log files and firmware upgrades)  Data Traffic Types  Fabric switches that support unicast  Media Type  Monitoring and Alerting Policy Suite (MAPS), Flow Vision, Fabric Performance Impact (FPI) Monitoring, Adaptive Networking (QoS), Slow Drain Device Quarantine (SpOD), Dynamic Fabric Provisioning (DFP), Advanced Zoning (default zoning, port/WWN zoning, broadcast zoning, peer zoning, target-driven zoning), Dynamic Path Selection (DPS), Extended Fabrics, Enhanced BB credit recovery, FDMI, Frame Redirection, Frame-Based Trunking, FSPF, Integrated Routing, IPoFC, ISL Trunking, Management Server, NPIV, Time Server, registration status change notification (RSCN), Reliable Commit Service (RCS), Simple Name Server (SNS), Virtual Fabrics (Logical Switch, Logical Fabric), Read Diagnostics Parameter (RDP), FICON CUP  Option  SFPTransceivers, Fibre Channel cables, management software, USBmemory  HTTPS/HTTP, NTP v3, SNMP v1/v3 (FE MIB, FC Management MIB), SSIA, Auditing, Syslog, Advanced Web Tools, HPE SANnaw Management Software, HPE Network Orchestrator, EZ Switch, Command Line Interface (CUI), SMI-S compliant, REST API, Administrative Domains, trial licenses for add-on capabilities  Management Access  10/100/1000 Ethernet (RJ-45), In-band over Fibre Channel, serial port (mini-USB), USBport  D_PortElectrical/optical loopback for offline diagnostic functions, link traffic /Waiting time/distance, Flow mirroring, built-in flow generator, POST and built-in online/offline diagnostics, environmental monitoring, FCpingand Pathinfo (FC traceroute), Frame viewer, non-disruptive daemon restancy pots had monitoring, power monitoring, RAS trace logging, Rolling Reboot Detection (RRD)  Rating:90-264 VAC (47 Hz - 63 Hz)  At cm×44 cm×35.6 cm  1U(Fromt He back (cooling fan side) to the front (FCport side)  1U(Front FCairflow from the port side to the rear (cooling fan side)	Maximum Frame Size	2112Bytes P	ayload		
Port Type	Class of Service	class2,class3,classF(Inter-s	switch frame)		
Data Traffic Types  Fabric switches that support unicast  BFor seriesSFP(Small Form-Factor Pluggable)  Monitoring and Alerting Policy Suite (MAPS),Flow Vision,Fabric Performance Impact (FPI) Monitoring, Adaptive Networking (QoS),Slow Drain Device Quarantic (SDDQ), Dynamic Fabric Provisioning (DFP), Advanced Zoning (default zoning, port/WWN zoning, broadcast zoning, peer zoning, target-driven zoning), Dynamic Path Selection (DPS),Extended Fabrics,Enhanced BB credit recovery,FDMI,Frame Redirection, Frame-Based Trunking,FSPP,Integrated Routing,IPSPC,ISI. Trunking,Management Server, NPIV,Time Server, registration status change notification (RSCN),Reliable Commit Service (RCS), Simple Name Server (SNS), Virtual Fabrics (Logical Switch, Logical Fabric),Read Diagnostics Parameter (RDP),FICON CUP  option  SFPTransceivers, Fibre Channel cables, management software, USBmemory  HTTPS/HTTP,NTP v3,SNMP v1/v3 (FE MIB, FC Management MIB),SSH,Auditing,Syslog,Advanced Web Tools, HPE SANnav Management Software,HPE Network Orchestrator,EZ Switch,Command Line Interface (CLI), SMI-S compliant,REST API,Administrative Domains,trial licenses for add-on capabilities  Management Access  10/100/1000 Ethernet (R1-45),In-band over Fibre Channel, serial port (mini-USB),USBport  D_PortElectrical/optical loopback for offline diagnostic functions,link traffic /Waiting time/distance, Flow mirroring, built-in flow generator,  POSTand built-in online/offline diagnostics, environmental monitoring,FopingandPathinfo (FC traceroute), Frame viewer, non-disruptive daemon restart,optics health monitoring,power monitoring, RAS trace logging,Rolling Reboot Detection (RRD)  **Rating:90~264 VAC (47 Hz – 63 Hz)**  **Rating:90~264 VAC (47 Hz – 63 Hz)*  **Rating	Port Type				
Media Type  BFor seriesSFP(Small Form-Factor Pluggable)  Monitoring and Alerting Policy Suite (MAPS), Flow Vision, Fabric Performance Impact (FPI) Monitoring, Adaptive Networking (QoS), Slow Drain Device Quarantine (SDDQ), Dynamic Fabric Provisioning (DFP), Advanced Zoning (default zoning, port/WMX zoning, broadcast zoning, per zoning, target-driven zoning), Dynamic Path Selection (DPS), Extended Fabrics, Enhanced BB credit recovery, FDMI, Frame Redirection, Frame-Based Trunking, FSPF, Integrated Routing, IPoFC, ISL Trunking, Management Server, NPIV, Time Server, registration status change notification (RSCN), Reliable Commit Service (RCS), Simple Name Server, (SNS), Virtual Fabrics (Logical Switch, Logical Fabric), Read Diagnostics Parameter (RDP), FICON CUP  Option  SFPTransceivers, Fibre Channel cables, management Software, USB memory  HTTPS/HTTP,NTP v3, SNMP v1/v3 (FE MIB, FC Management MIB), SSH, Auditing, Syslog, Advanced Web Tools, HPE SANnav Management Software, HPE Network Orchestrator, EZ Switch, Command Line Interface (CLI), SMI-S compliant, REST API, Administrative Domains, trial licenses for add-on capabilities  Management Access  10/100/1000 Ethernet (RJ-45), In-band over Fibre Channel, serial port (mini-USB), USBport  D_PortElectrical/optical loopback for offline diagnostic functions, link traffic /Waiting time/distance, Flow mirroring, built-in flow generator, POSTand built-in online/offline diagnostics, environmental monitoring, FCpingandPathinfo (FC traceroute), Frame viewer, non-disruptive daemon restart, optics health monitoring, power monitoring, RAS trace logging, Rolling Reboot Detection (RRD)  Power committee  Rating:90-264 VAC (47 Hz – 63 Hz)  264 W (56Fully equipped port, 64 Gbps SWL/When using an optical transceiver)  4.4 cm×44 cm×35.6 cm  1U(From the back (cooling fan side) to the front (FCport side)  1U(Front the back (cooling fan side) to the front (FCport side)	USB				
Monitoring and Alerting Policy Suite (MAPS), Flow Vision, Fabric Performance Impact (FPI) Monitoring, Adaptive Networking (QoS), Slow Drain Device Quarantine (SDDQ), Dynamic Fabric Provisioning (DFP), Advanced Zoning (default zoning, port/WNN zoning, broadcast zoning, peer zoning, target-driven zoning), Dynamic Path Selection (DPS), Extended Fabrics, Enhanced BB credit recovery, FDMI, Frame Redirection, Frame-Based Trunking, FSPF, Integrated Routing, IPoFC, ISL Trunking, Management Server (SNS), Wirtual Fabrics (Logical Switch, Logical Fabric), Read Diagnostics Parameter (RDP), FICON CUP  option SFPTransceivers, Fibre Channel cables, management software, USBmemory  HTTPS/HTTP, NTP v3, SNMP v1/v3 (FE MIR, FC Management MIB), SSH, Auditing, Syslog, Advanced Web Tools, HPE SANnav Management Software, HPE New Nor Orchestrator, EZ Switch, Command Line Interface (CLI), SMI-S compliant, REST API, Administrative Domains, trial licenses for add-on capabilities  Management Access 10/100/1000 Ethernet (RJ-45), In-band over Fibre Channel, serial port (mini-USB), USBport  D_PortElectrical/optical loopback for offline diagnostic functions, link traffic /Waiting time/distance, Flow mirroring, built-in flow generator, POSTand built-in online/offline diagnostics, environmental monitoring, FCpingandPathinfo (FC traceroute), Frame viewer, non-disruptive daemon restart, optics health monitoring, power monitoring, RAS trace logging, Rolling Reboot Detection (RRD)  power supply Rating: 90-264 VAC (47 Hz – 63 Hz)  Rating: 90-264 VAC (47 Hz – 63 Hz)  4.4 cm×44 cm×35.6 cm  weight 7.17 kg (power supplyFRUof2(Basic equipment, excluding transceivers)  1U(From the back (cooling fan side) to the front (FCport side)	Data Traffic Types	Fabric switches that support unicast			
Networking (QoS), Slow Drain Device Quarantine (SDDQ), Dynamic Fabric Provisioning (DFP), Advanced Zoning (default zoning, port/WWN zoning, broadcast zoning, peer zoning, target-driven zoning), Dynamic Path Selection (DPS), Extended Fabrics, Enhanced BB credit recovery, FDMI, Frame Redirection, Frame-Based Trunking, FSPF, Integrated Routing, IPoFC, ISL Trunking, Management Server, NPIV, Time Server, registration status change notification (RSCN), Reliable Commit Service (RCS), Simple Name Server (SNS), Virtual Fabrics (Logical Switch, Logical Fabric), Read Diagnostics Parameter (RDP), FICON CUP  option SFPTransceivers, Fibre Channel cables, management software, USB memory  HTTPS/HTTP,NTP v3,SNMP v1/v3 (FE MIB, FC Management MIB),SSH,Auditing, Syslog,Advanced Web Tools, HPE SANnav Management Software, HPE Network Orchestrator, EZ Switch, Command Line Interface (CLI), SMI-S compliant, REST API, Administrative Domains, trial licenses for add-on capabilities  10/100/1000 Ethernet (RJ-45), In-band over Fibre Channel, serial port (mini-USB), USBport  D_PortElectrical/optical loopback for offline diagnostic functions, link traffic /Waiting time/distance, Flow mirroring, built-in flow generator, POSTand built-in online/offline diagnostics, environmental monitoring, FCpingandPathinfo (FC traceroute), Frame viewer, non-disruptive daemon restart, optics health monitoring, power monitoring, RAS trace logging, Rolling Reboot Detection (RRD)  Power commentation  Rating:90~264 VAC (47 Hz – 63 Hz)  Power commentation  264 W (56Fully equipped port,64 Gbps SWL(When using an optical transceiver)  4.4 cm×44 cm×35.6 cm  7.17 kg (power supplyFRUof2(Basic equipment, excluding transceivers)  1U(From the back (cooling fan side) to the front (FCport side)  1U(From the port side to the rear (cooling fan side),	Media Type				
Support Software  HTTPS/HTTP,NTP v3,SNMP v1/v3 (FE MIB, FC Management MIB),SSH,Auditing,Syslog,Advanced Web Tools, HPE SANnav Management Software,HPE Network Orchestrator,EZ Switch,Command Line Interface (CLI), SMI-S compliant,REST API,Administrative Domains,trial licenses for add-on capabilities  10/100/1000 Ethernet (RJ-45),In-band over Fibre Channel, serial port (mini-USB),USBport  D_PortElectrical/optical loopback for offline diagnostic functions,link traffic /Waiting time/distance, Flow mirroring, built-in flow generator, POSTand built-in online/offline diagnostics, environmental monitoring,FCpingandPathinfo (FC traceroute), Frame viewer, non-disruptive daemon restart, optics health monitoring, power monitoring, RAS trace logging,Rolling Reboot Detection (RRD)  Power consumption  Rating:90~264 VAC (47 Hz – 63 Hz)  264 W (56Fully equipped port,64 Gbps SWL (When using an optical transceiver)  size(H×W×D)  4.4 cm×44 cm×35.6 cm  Veight  7.17 kg (power supplyFRUof2(Basic equipment, excluding transceivers)  1U(From the back (cooling fan side) to the front (FCport side)  1U(front(FCairflow from the port side to the rear (cooling fan side),	Fabric Services	Monitoring and Alerting Policy Suite (MAPS),Flow Vision,Fabric Performance Impact (FPI) Monitoring, Adaptive Networking (QoS),Slow Drain Device Quarantine (SDDQ),Dynamic Fabric Provisioning (DFP), Advanced Zoning (default zoning, port/WWN zoning, broadcast zoning, peer zoning, target-driven zoning), Dynamic Path Selection (DPS),Extended Fabrics,Enhanced BB credit recovery,FDMI,Frame Redirection, Frame-Based Trunking,FSPF,Integrated Routing,IPoFC,ISL Trunking,Management Server, NPIV,Time Server, registration status change notification (RSCN),Reliable Commit Service (RCS), Simple Name Server (SNS),			
Support Software  HPE SANnav Management Software, HPE Network Orchestrator, EZ Switch, Command Line Interface (CLI), SMI-S compliant, REST API, Administrative Domains, trial licenses for add-on capabilities  10/100/1000 Ethernet (RJ-45), In-band over Fibre Channel, serial port (mini-USB), USBport  D_PortElectrical/optical loopback for offline diagnostic functions, link traffic /Waiting time/distance, Flow mirroring, built-in flow generator, POSTand built-in online/offline diagnostics, environmental monitoring, FCpingandPathinfo (FC traceroute), Frame viewer, non-disruptive daemon restart, optics health monitoring, power monitoring, RAS trace logging, Rolling Reboot Detection (RRD)  Power consumption  Size(H×W×D)  4.4 cm×44 cm×35.6 cm  Weight  7.17 kg (power supplyFRUof2(Basic equipment, excluding transceivers)  1U(From the back (cooling fan side) to the front (FCport side)  1U(front(FCairflow from the port side to the rear (cooling fan side),	option	SFPTransceivers, Fibre Channel cables, mana	gement software,USBmemory		
D_PortElectrical/optical loopback for offline diagnostic functions, link traffic /Waiting time/distance, Flow mirroring, built-in flow generator, POSTand built-in online/offline diagnostics, environmental monitoring, FCpingandPathinfo (FC traceroute), Frame viewer, non-disruptive daemon restart, optics health monitoring, power monitoring, RAS trace logging, Rolling Reboot Detection (RRD)  Power consumption Rating:90~264 VAC (47 Hz - 63 Hz)  Power consumption Size(H×W×D) 4.4 cm×44 cm×35.6 cm  weight 7.17 kg (power supplyFRUof2(Basic equipment, excluding transceivers)  1U(From the back (cooling fan side) to the front (FCport side) 1U(front(FCairflow from the port side to the rear (cooling fan side),	Support Software	HPE SANnav Management Software, HPE Network Orchest	rator,EZ Switch,Command Line Interface (CLI),		
Flow mirroring, built-in flow generator, POSTand built-in online/offline diagnostics, environmental monitoring, FCpingandPathinfo (FC traceroute), Frame viewer, non-disruptive daemon restart, optics health monitoring, power monitoring, RAS trace logging, Rolling Reboot Detection (RRD)  power supply Rating:90~264 VAC (47 Hz - 63 Hz)  Power consumption Size(H×W×D) 4.4 cm×44 cm×35.6 cm  weight 7.17 kg (power supplyFRUof2(Basic equipment, excluding transceivers)  1U(From the back (cooling fan side) to the front (FCport side) 1U(front(FCairflow from the port side to the rear (cooling fan side),	Management Access	10/100/1000 Ethernet (RJ-45),In-band over Fibre Cha	annel, serial port (mini-USB),USBport		
Power consumption  264 W (56Fully equipped port,64 Gbps SWL(When using an optical transceiver)  4.4 cm×44 cm×35.6 cm  weight  7.17 kg (power supplyFRUof2(Basic equipment, excluding transceivers)  1U(From the back (cooling fan side) to the front (FCport side)  1U(front(FCairflow from the port side to the rear (cooling fan side),	dagnosis	Flow mirroring, built-in flow generator, POSTand built-in online/offline diagnostics, environmental monitoring,FCpingandPathinfo (FC traceroute), Frame viewer, non-disruptive daemon restart,optics health monitoring,power monitoring,			
size(H×W×D)  4.4 cm×44 cm×35.6 cm  7.17 kg (power supplyFRUof2(Basic equipment, excluding transceivers)  1U(From the back (cooling fan side) to the front (FCport side)  1U(front(FCairflow from the port side to the rear (cooling fan side),	power supply	Rating:90~264 VAC	Rating:90~264 VAC (47 Hz – 63 Hz)		
weight 7.17 kg (power supplyFRUof2(Basic equipment, excluding transceivers)  1U(From the back (cooling fan side) to the front (FCport side) 1U(front(FCairflow from the port side to the rear (cooling fan side),	Power consumption	264 W (56Fully equipped port,64 Gbps SV	NL(When using an optical transceiver)		
Form Factor 1U(From the back (cooling fan side) to the front (FCport side) 1U(front(FCairflow from the port side to the rear (cooling fan side),	$size(H \times W \times D)$	4.4 cm×44 c	m×35.6 cm		
Form Factor 1 ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	weight	7.17 kg (power supplyFRUof2(Basic e	quipment, excluding transceivers)		
Power supply from the rear), is included and it is a compliance from the rear), is including the rear in the rear	Form Factor	1U(From the back (cooling fan side) to the front (FCport side) Power supply from the rear),19inch,EIACompliance	1U(front(FCairflow from the port side to the rear (cooling fan side), Power supply from the rear),19inch,EIACompliance		

<sup>\*1:</sup>SFP-DDTo use the portFOS 9.1Requires



# **Fibre Channel Switch**

System Specifications

Product name	SN6700B 64Gb 56portFCswitch twenty four Port Active64Gb SFP56Attached Model	SN6700B 64Gb 56portFCswitchPort Side Intake twenty fourPort Active64Gb SFP56Attached Model	
Product Number	R7M13A	R7M14A	
Fibre Channel Port	physics56Port, Standardtwenty fourActive, Max	x48 SFP56+8 SFP-DD*1, Universal Port	
IncludedSFPtransceiver	B-series 64Gb SFP56short wavelengthSec	curetransceiver,twenty fourpieces	
Certified Maximum Switch Configuration	maximum5	56Switches	
interoperability	SN4000B SAN Extension Switch, S SN8600B 8-Slot SAN Director Power Pack+, SN8000B 4-Slot SAN Director, SN8600B 4 SN3000B 16Gb FCswitch, SN3600B 32Gb FCswitch, SN6000B 16Gb	p FCswitch,SN6500B 16Gb FCswitch, h,SN6700B 64Gb FCswitch, BladeSystem c-Class 16Gb SANswitch,	
performance	Auto-sensing,8,16,32,64 Gbp programmable to a fixed port sp	sPort Speed 10 GbpsOptionally peed of	
ISLTrunking	ISLMaximum per trunk8pieces64 GbpsFrame-based trunking o DPSExchange-basedISLLoad balancing There is no limit to the number of trunk grou	betweenFabric OSEquipped with,	
Fabric Latency	The inter-port delay is460 nsMinimize to (FEC),	using cut-through frame switching	
Maximum Frame Size	2112Bytes P	ayload	
Class of Service	class2,class3,classF(Inter-s	switch frame)	
Port Type	Dport (diagnostic port),Epport,Export,Fport, FPort andNPIVCorrespondingNControl the port (Access Gateway mode,option)		
USB	1Ports (for downloading system log files and firmware upgrades)		
Data Traffic Types	Fabric switches that support unicast		
Media Type	BFor seriesSFP(Small Form-Factor Pluggable)		
Fabric Services	Monitoring and Alerting Policy Suite (MAPS), Flow Vision, Fabric Performance Impact (FPI) Monitoring, Adaptive Networking (QoS), Slow Drain Device Quarantine (SDDQ), Dynamic Fabric Provisioning (DFP), Advanced Zoning (default zoning, port/WWN zoning, broadcast zoning, peer zoning, target-driven zoning), Dynamic Path Selection (DPS), Extended Fabrics, Enhanced BB credit recovery, FDMI, Frame Redirection, Frame-Based Trunking, FSPF, Integrated Routing, IPOFC, ISL Trunking, Management Server, NPIV, Time Server, registration status change notification (RSCN), Reliable Commit Service (RCS), Simple Name Server (SNS), Virtual Fabrics (Logical Switch, Logical Fabric). Read Diagnostics Parameter (RDP), FICON CUP		
option	SFPTransceivers, Fibre Channel cables, mana	gement software,USBmemory	
Support Software	HTTPS/HTTP,NTP v3,SNMP v1/v3 (FE MIB, FC Management MIB),SSH,Auditing,Syslog,Advanced Web Tools, HPE SANnav Management Software,HPE Network Orchestrator,EZ Switch,Command Line Interface (CLI), SMI-S compliant,REST API,Administrative Domains,trial licenses for add-on capabilities		
Management Access	10/100/1000 Ethernet (RJ-45),In-band over Fibre Cha	annel, serial port (mini-USB),USBport	
diagnosis	D_PortElectrical/optical loopback for offline diagnostic functions,link traffic /Waiting time/distance, Flow mirroring, built-in flow generator, POSTand built-in online/offline diagnostics, environmental monitoring,FCpingandPathinfo (FC traceroute), Frame viewer, non-disruptive daemon restart,optics health monitoring,power monitoring, RAS trace logging,Rolling Reboot Detection (RRD)		
power supply	Rating:90~264 VAC (47 Hz - 63 Hz)		
Power consumption	264 W (56Fully equipped port,64 Gbps SV	NL(When using an optical transceiver)	
$size(H \times W \times D)$	4.4 cm×44 cm×35.6 cm		
weight	7.17 kg (power supplyFRUof2(Basic e	quipment, excluding transceivers)	
Form Factor	1U(From the back (cooling fan side) to the front (FCport side)  Power supply from the rear),19inch,EIACompliance  1U(front(FCairflow from the port side to the rear (cooling fan side), Power supply from the rear),19inch,EIACompliance		

<sup>\*1:</sup>SFP-DDTo use the portFOS 9.1Requires



#### Highly available storage requires SN6600B 32Gb FCI recommend the switch

3PAR StoreServ, MSAEven if you have high-availability storage such as SANIf the availability of switches, which are the core of the infrastructure, is poor, the storage performance and investment will be wasted.

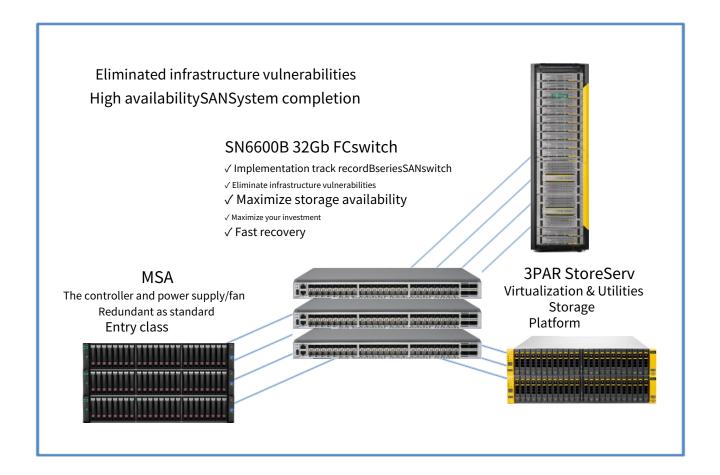
SoHPEteeth, BSeries SN6600B 32Gb FCI recommend a switch.

BSeriesFCThe switch has been used by many users for many years and is recommended for customers who value a proven track record.

SN6600B 32Gb FCThe switch includes hot-swappable power supplies and fans.2This is standard equipment for all units. Therefore, in terms of fault tolerance, even if one power supply or fan fails and stops, operation will continue on the other power supply. On the other hand, a single power switch will stop operation, increasing the risk of business interruption.

In addition, recovery work can be done quickly. With a single power switch, the chassis needs to be replaced, and the settings have to be re-set, which takes time to recover. On the other hand, with a single power switch, the power supply can be hot-swapped. SN6600B 32Gb FCThe switch can be quickly restored by replacing only the power supply unit.

SN6600B 32Gb FCThis resilience and rapid recovery allows the switch toSANThis increases the availability of your infrastructure and maximizes the fault tolerance of your storage.



# Cent A Stom By - blo Channel Switch Fils is Temgico figuration itch Entry/Mid-range Class BSeries Switch >

#### Fibre Channel Cable

Fibre Channel Host Bus Adapter



#### **SANFor switches**

(Host Bus Adapter, SAN (for connecting switches and storage)

Multimode Fibre Channel Cable



OM3/OM4Multimode FC Cable (Aqua Blue)

#### **SFPFibre Channel Cable for Port**

	Fibre Channel cable (LC-LC)				
PremierFlex OM4cable			OM3cable		
Cable length	Model number	Price excluding tax	Cable length	Model number	Price excluding tax
1 m	QK732A	13,000circle	-	-	-
2 m	QK733A	17,000circle	2 m	AJ835A	14,000circle
5 m	QK734A	19,000circle	5 m	AJ836A	15,000circle
15 m	QK735A	24,000circle	15 m	AJ837A	19,000circle
30 m	QK736A	38,000circle	30 m	AJ838A	30,000circle
50 m	QK737A	61,000circle	50 m	AJ839A	50,000circle

#### **QSFPFibre Channel Cable for Port**

Fibre Channel cable (MPO/MPO)			Fibre Channe	l cable (MPO to 4xL	.C	
Pre	PremierFlex OM4cable			PremierFlex OM4cable		
Cable length	Model number	Price excluding tax	Cable length	Model number	Price excluding tax	
1 m	Q1H63A	27,000circle	-	-	-	
2 m	Q1H64A	41,000circle	-	-	-	
5 m	Q1H65A	54,000circle	5 m	K2Q46A	110,000circle	
15 m	Q1H66A	95,000circle	15 m	K2Q47A	190,000circle	
30 m	Q1H67A	128,000circle	30 m	Q1H68A	212,000circle	

#### SFP-DDFibre Channel Cable for Port

Fibre Channel cable (SN to SN)			Fibre Chan	nel cable (SN to LC	)
PremierFlex OM4cable			Pre	mierFlex OM4cable	e
Cable length	Model number	Price excluding tax	Cable length	Model number	Price excluding tax
1 m	R8U68A	25,000circle	1 m	R8U73A	18,000circle
2 m	R8U69A	28,000circle	2 m	R8U74A	19,000circle
5 m	R8U70A	31,000circle	5 m	R8U75A	22,000circle
15 m	R8U71A	38,000circle	15 m	R8U76A	29,000circle
30 m	R8U72A	49,000circle	30 m	R8U77A	41,000circle

- ◆ Select the number of Fibre Channel cables required for connections between the server and the Fibre Channel switch, and between the Fibre Channel switch and the storage.
- ◆BladeSystem c-CalssforBrocade 4Gb/8Gb/16Gb SANFor Switch (all discontinued)BLServer and SANThis is unnecessary because the switches are internally connected.BladeSystem c-CalssforBrocade 4Gb/8Gb/16Gb SANSwitches (all discontinued) Select the number required for connections between external ports and storage.
- ◆ Fibre ChannelPremierFlexThe cable is a more powerful cable than conventional cables and has the following features: High flexibility makes it easier to handle (recommended radius15mmbut2mm2)
  - OM4teeth4700 MHzProvides high-speed signal transmission with excellent bandwidth (PremierFlexNotOM3The cable is2000 MHz) Signal transmission quality when bent10Double improvement
- ◆ Long wave Fibre Channel cableHPEIt is not provided by.

#### Fibre Channel Transceiver

#### **BFor series switches**

SFPtransceiver

#### By switchSFP/SFP+transceiver

by switcher   State   Charles				
	Product name	Model number	Price excluding tax	
	16Gbshort wavelengthB-Series SFP+transceiver*1*3*4	QK724A	50,000circle	
	B-series 16Gb SFP+short wavelength1-pack Securetransceiver*1*2*5	R6B10A	191,000circle	
	B-series 16Gb SFP+short wavelength8-pack Securetransceiver*1*2	R6W28A	1,368,000circle	
	B-series 32Gb SFP28short wavelength1-pack Securetransceiver*1*2*7	R6B12A	264,000circle	
	B-series 32Gb SFP28short wavelength8-pack Securetransceiver*1*2	R6W26A	2,014,000circle	
32Gb/s For switches	B-series 32Gb SFP28long wavelength10km 1-pack Securetransceiver*1*2	R6B13A	868,000circle	
FOI SWITCHES	B-series 32Gb SFP Extendedlong wavelength25km 1-pack Securetransceiver*1*2	R7M17A	3,631,000circle	
	B-series 10Gb SFP+short wavelength1-pack Securetransceiver*2	R6B14A	199,000circle	
	B-series 10Gb SFP+long wavelength10km 1-pack Securetransceiver*2	R6B15A	633,000circle	
	B-series 4x32Gb QSFP28short wavelength100m 1-pack Securetransceiver*2	R6B20A	2,492,000circle	
	B-series 32Gb SFP28 Extendedlong wavelength25km 1-pack Securetransceiver*2*8	R9S31A	5,046,000circle	
	B-series 32Gb SFP28short wavelength1-pack Securetransceiver*7*8	R6B12A	264,000circle	
	B-series 32Gb SFP28short wavelength8-pack Securetransceiver*8	R6W26A	2,014,000circle	
	B-series 32Gb SFP28long wavelength10km 1-pack Securetransceiver*8	R6B13A	868,000circle	
	B-series 32Gb SFP Extendedlong wavelength25km 1-pack Securetransceiver*8	R7M17A	3,631,000circle	
	B-series 10Gb SFP+short wavelength1-pack Securetransceiver*8	R6B14A	199,000circle	
64Gb/s	B-series 10Gb SFP+long wavelength10km 1-pack Securetransceiver*8	R6B15A	633,000circle	
For switches	B-series 64Gb SFP56short wavelength1-pack Securetransceiver*8*9*10	R7M15A	650,000circle	
	B-series 64Gb SFP56short wavelength8-pack Securetransceiver*8	R7M16A	4,729,000circle	
	B-series 64Gb SFP56 Extendedlong wavelength25km 1-pack Securetransceiver*8	R9S28A	6,810,000circle	
	B-series 64Gb SFP56long wavelength10km 1-pack Securetransceiver*8	R9S29A	2,121,000circle	
	B-series 64Gb SFP56long wavelength10km 8-pack Securetransceiver*8	R9S30A	15,396,000circle	

<sup>\*</sup>Gray color is limited stock

SN3600BAll models

\*2:the below described32Gb/sUsed with switches.

SN6600BAll models

\*3:the below described32Gb/sUsed with switches.

SN6600Bof,R6V47AandQ0U58CModels other than \*4:

SN3600B (R4G55A#05Y)to8Standard attachment

\*5:SN3600B (R4G55B)to8piece,SN3600B (R8P29A)totwenty fourpiece,SN6600B (R6V47A)totwenty fourpiece, SN6600B 16Gb SFPIncluded12Port Upgrade License Kit (R6V48A)to12piece, SN3600B 16Gb SFP

Included8Port Upgrade License Kit (R7M10A)to8Standard attachment

 $^{\star} 6: SN6600B \ (Q0U58B\#05Y/Q0U59B\#05Y) to twenty four piece, SN6600B \ (Q0U60B\#05Y/Q0U61B\#05Y) to 48S tandard \ attachment \ ^{\star} 7: SN3600B \ (Q0U58B\#05Y/Q0U58B\#05Y) to 48S tandard \ attachment \ ^{\star} 7: SN3600B \ (Q0U58B\#05Y/Q0U58B\#05Y) to 48S tandard \ attachment \ ^{\star} 7: SN3600B \ (Q0U58B\#05Y/Q0U58B\#05Y) to 48S tandard \ attachment \ ^{\star} 7: SN3600B \ (Q0U58B\#05Y/Q0U58B\#05Y) to 48S tandard \ attachment \ ^{\star} 7: SN3600B \ (Q0U58B\#05Y/Q0U58B\#05Y) to 48S tandard \ attachment \ ^{\star} 7: SN3600B \ (Q0U58B\#05Y/Q0U58B\#05Y) to 48S tandard \ attachment \ ^{\star} 7: SN3600B \ (Q0U58B\#05Y/Q0U58B\#05Y) to 48S tandard \ attachment \ ^{\star} 7: SN3600B \ (Q0U58B\#05Y/Q0U58B\#05Y) to 48S tandard \ attachment \ ^{\star} 7: SN3600B \ (Q0U58B\#05Y/Q0U58B\#05Y) to 48S tandard \ attachment \ ^{\star} 7: SN3600B \ (Q0U58B\#05Y/Q0U58B\#05Y) to 48S tandard \ attachment \ ^{\star} 7: SN3600B \ (Q0U58B\#05Y/Q0U58B\#05Y) to 48S tandard \ attachment \ ^{\star} 7: SN3600B \ (Q0U58B\#05Y/Q0U58B\#05Y) to 48S tandard \ attachment \ ^{\star} 7: SN3600B \ (Q0U58B\#05Y/Q0U58B\#05Y) to 48S tandard \ attachment \ ^{\star} 7: SN3600B \ (Q0U58B\#05Y/Q0U58B\#05Y) to 48S tandard \ attachment \ ^{\star} 7: SN3600B \ (Q0U58B\#05Y/Q0U59BW05Y/Q0U59BW05Y/Q0U58BW05Y/Q0U59BW05Y/Q0U59BW05Y/Q0U59BW05Y/Q0U59BW05Y/Q0U59BW05Y/Q0U59BW05Y/Q0U59BW05Y/Q0U59BW05Y/Q0U59BW05Y/Q0U59BW05Y/Q0U59BW05Y/Q0U59BW05Y/Q0U59BW05Y/Q0U59BW05Y/Q0U59BW05Y/Q0U59BW05Y/Q0U59BW05$ 

(R7R97A)to8piece,SN3600B (R8P28A)totwenty fourpiece,SN6600B (Q0U58C),SN6700B(R6B05A / R6B06A)totwenty fourpiece,

SN3600B 32Gb SFP28Included8Port Upgrade License Kit (R7M09A)to8piece, SN6600B 32Gb SFP

 $Included 12 Port\ Upgrade\ License\ Kit\ (R6V49A) to 12 piece,\ SN6700B\ 32Gb\ SFP28 Included 8 Port\ Upgrade$ 

License Kit (R6B09A)to8Standard attachment \*8:the below described64Gb/sUsed with switches.

SN6700BAll models

 $^\star 9$ :SN6700B (R7M13A / R7M14A)totwenty fourStandard attachment

\*10:SN6700B 64Gb SFP56Included8Port Upgrade License Kit (R7M18A)to8Standard attachment

- ◆32Gb/sFor Switch16Gb SFPteeth4,8,16GbSupports:32Gb SFPteeth8,16,32GbSupports:
- •64Gb/sFor Switch32Gb SFPteeth8,16,32GbSupports:
- ♦64Gb/sFor Switch64Gb SFPteeth16,32,64GbSupports:
- lack 32Gb/sswitch /64Gb/sFor Switch10Gb SFPteeth10Gb/sOnly supported for switch-to-switch communication.
- ◆SANThe number of Fibre Channel cables connected to the switchSFPA walkie-talkie is required.
- ◆SFPThe transceiverSANRequired for each port on the switch.



SFPtransceiver

<sup>\*1:</sup>the below described32Gb/sUsed with switches.

#### **BFor series switches**

SFP-DDtransceiver

#### SFP-DDtransceiver

	Product name	Model number	Price excluding tax
64Gb/sswitch	B-series 64Gb SFP56-DD SN SR 1-pack Securetransceiver*1*2	R8U66A	2,249,000circle
SPF-DDFor port	B-series 64Gb SFP56-DD SN SR 8-pack Securetransceiver*1	R8U67A	16,356,000circle

<sup>\*1:</sup>SN6700BAll modelsSPD-DDCan be used in ports. Primarily for spare use.

- SFP-DD (Double Density)The port isSFP56connector1Secondly2BookFCIt is a double density transmission standard that allows for pluggable cables.
- •64Gb/sFor Switch64Gb SFP56-DDThe transceiver isSFF-DDPort connection only,1With one transceiver2BookSNTypeFCYou can plug in the cable.1one SFP56-DDBy walkie-talkie2You can create two Fibre Channel links (fabrics).
- ◆64Gb/sswitchSN6700BinSFP-DDTo use the port,SN6700B 64Gb SFP56-DDIncluded16Port Upgrade License Kit (R8U65A) Therefore,SFP-DDThe port must be activated.SFP-DDTo use the portFOS 9.1or later)In addition, the same upgrade license kit (R8U65A)to8pieces64Gb SFP56-DD SN SRA transceiver is included, soSFP56-DDThere is no need to purchase a transceiver. The above is basically a spare.

<sup>\*2:</sup>SN6700B 64Gb SFP56-DDIncluded16Port Upgrade License Kit (R8U65A)to8Standard attachment

#### 32GbFibre Channel Switch



- ◆SN3600B 32Gb 24portFCThe switch has100VPower cord not included. Please
- select from the power cord options below as needed.
- ◆SN3600B 32Gb 24portFCOn the switch,200VFor (IEC320 C13-C14,2.4m)The power cord1This standard attachment
- lacklacklack For power cords other than the standard ones, please refer to the power cord options below.

#### SN3600B 32Gb 24portFCswitch (8Port Active)

SN3600B 32Gb 24portFCswitch 8Port Active16Gb SFP+Attached model (1U) R4G55B 1,429,000circle(Price excluding tax)

\*32Gb/sSupported ports8Standard equipment \*16Gb/scorrespondenceSFP+ transceiver8Standard attachment \*32Gb/s,16Gb/s,8Gb/s,4Gb/sSupports (automatic switching) \*SAN Full FabricSupport \*200V PDUPower cord for connection1\*Rack mount kit included as standard (HPE(Compatible with the Fujitsu rack series) \*The following software is included as standard

Frame Filtering, Advanced Zoning, Web Tools, Adaptive Networking \* SN6600B (R6V47A, Q0U58C), SN6700BWhen cascading with FOS 8.1or later is required.

SN3600B 16Gb SFPIncluded8Port Upgrade License Kit R7M10A 1,373,000circle(Price excluding tax)

 ${\rm ^*Number\ of\ active\ ports8 from 16to,\ or 16 from twenty\ four Upgrade\ to\ {\rm ^*B-series\ 16Gb\ SFP+short\ wavelength Secure transceiver 8 Standard\ attachment}$ 

SN3600B 32Gb SFP28Included8Port Upgrade License Kit R7M09A 2,115,000circle(Price excluding tax)

 $^*$ Number of active ports8from16to, or16fromtwenty fourUpgrade to  $^*$ B-series 32Gb SFP28short wavelengthSecuretransceiver8Standard attachment

#### SN3600B 8portFCUpgrade Entitlement

Q1Z10A 880,000circle(Price excluding tax)

\*Limited stock

 ${\small ^{\star}} Number of active ports 8 from 16 to, or 16 from twenty four Upgrade to \\$ 

BFor series4GB USBmemory N9Y63A 50,000circle(Price excluding tax)

\*USBDownloading system log files from a port Used for firmware upgradesUSBmemory

SN3600B 32Gb 24portFCswitch 8Port Active32Gb SFP28Attached model (1U)

 $R7R97A\ 2,022,000 circle ({\sf Price\ excluding\ tax})$ 

\*32Gb/sSupported ports8Standard equipment

\*32Gb/scorrespondenceSFP28transceiver8Standard attachment \*32Gb/s,16Gb/s ,8Gb/s,4Gb/sSupports (automatic switching) \*SAN Full FabricSupport \*200V PDU Power cord for connection1\*Rack mount kit included as standard (HPE (Compatible with the Fujitsu rack series) \*The following software is included as standard

Frame Filtering, Advanced Zoning, Web Tools, Adaptive Networking \* SN6600B (R6V47A, Q0U58C), SN6700B When cascading with FOS 8.1 or later is required.

- ◆ Fibre Channel switch software requires a license for each switch.
- ◆Fabric OSThe software included as standard varies depending on the version. Fabric OSPlease refer to the release notes.
- ◆Full fabricAbout<u>SAN Design Reference Guide</u> (Please refer to the English version.
- When installing the switch in a rack, make sure to mount it on the front side (FCThe rear of the rack is facing the port side. The airflow is from the rear of the switch to the front (FCport side)

For Fibre Channel switches software (not required)





SN3600B 32Gb 24portFCswitch (8Port Active)

- ◆SN3600B 32Gb 24portFCThe switch has100VPower cord not included. Please select from the power cord options below as needed.
- ◆SN3600B 32Gb 24portFCOn the switch,200VFor (IEC320 C13-C14,2.4m)The power cord1This standard attachment
- lacklacklack For power cords other than the standard ones, please refer to the power cord options below.

#### SN3600B 32Gb 24portFCswitch PowerPack+ (24Port Active (cont.)

SN3600B 32Gb 24portFCswitchtwenty fourPort Active PowerPack+ 16Gb SFP+Attached model (1U)

R8P29A 4,396,000circle(Price excluding tax)

\*32Gb/sSupported portstwenty fourStandard equipment

\*16Gb/scorrespondenceSFP+transceivertwenty fourStandard attachment \* 32Gb/s,16Gb/s,8Gb/s,4Gb/sSupports (automatic switching) \*SAN Full Fabric Support \*200V PDUPower cord for connection1\*Rack mount kit included as standard (HPE(Compatible with the Fujitsu rack series) \*The following software is included as standard

Frame Filtering, Advanced Zoning, Web Tools, Adaptive Networking Power Pack+ (Fabric Vision, Extended Fabric, ISL Trunking \*SN6600B (R6V47A, Q0U58C), SN6700BWhen cascading with FOS 8.1 or later is required.

BFor series4GB USBmemory N9Y63A

50,000circle(Price excluding tax)

\*USBDownloading system log files from a port Used for firmware upgradesUSBmemory

SN3600B 32Gb 24portFCswitchtwenty fourPort Active
PowerPack+ 32Gb SFP28Attached model (1U)
R8P28A 5,529,000circle(Price excluding tax)

\*32Gb/sSupported portstwenty fourStandard equipment

\*32Gb/scorrespondenceSFP28transceivertwenty fourStandard attachment \* 32Gb/s,16Gb/s,8Gb/s,4Gb/sSupports (automatic switching) \*SAN Full Fabric Support \*200V PDUPower cord for connection1\*Rack mount kit included as standard (HPE(Compatible with the Fujitsu rack series) \*The following software is included as standard

Frame Filtering, Advanced Zoning, Web Tools, Adaptive Networking Power Pack+ (Fabric Vision, Extended Fabric, ISL Trunking \*SN6600B (R6V47A, Q0U58C), SN6700BWhen cascading with FOS 8.1 or later is required.

- ◆ Fibre Channel switch software requires a license for each switch.
- ◆ Fabric OSThe software included as standard varies depending on the version. Fabric OSPlease refer to the release notes.
- ◆Full fabricAbout<u>SAN Design Reference Guide</u> (Please refer to the English version.
- ♦ When installing the switch in a rack, make sure to mount it on the front side (FCThe rear of the rack is facing the port side. The airflow is from the rear of the switch to the front (FCport side).

For Fibre Channel switches software (not required)





SN3600B 32Gb 24portFCswitch PowerPack+ (24Port Active)

- ◆SN6700B 64Gb 56portFCThe switch has100VPower cord not included. Please select from the power cord options below as needed.
- ◆SN6700B 64Gb 56portFCOn the switch,200VFor (IEC320 C13-C14,2m)The power cord2This standard attachment.
- For power cords other than the standard ones, please refer to the power cord options below.

#### SN6700B 64Gb 56portFCswitchtwenty fourPort Active32Gb SFP28Attached Model

SN6700B 64Gb 56portFCswitch
twenty fourPort Active32Gb SFP28Attached model (1U)
R6B05A 6.122.000circle!Price excluding tax)

For Fibre Channel switches software (not required)

 ${}^{\star} 64 Gb/s correspondence SFP+Port \times 48+SFP56-DDPort \times 8 Comes \ as \ standard \ equipment \ {}^{\star} 24 FCP orts \ are \ standard \ active \ ports$ 

 ${\rm ^*B-series\,32Gb\,SFP28short\,wavelength1-pack\,SecureWalkie-talkietwenty\,fourStandard\,attachment\,^*64Gb/s,32Gb/s,16Gb/s,8Gb/sSupports\,(automatic switching),}$ 

10Gb/sis supported for switch-to-switch connections (10Gb/scorrespondenceSFP(Transceiver required) \*SAN Full Fabric\*Rack rail kit included as standard (HPE(Compatible with the Fujitsu rack series) \*The following software is included as standard

Frame Filtering, Advanced Zoning, Web Tools, In-flight Encryption, In-flight Compression, Adaptive Networking, Fabric Vision and IO Insight, Extended Fabric, ISL Trunking, Integrated Routing, Ficon CUP ISL Trunking \*FOS 9.00 nly supported from SFP-DDTo use the portFOS 9.1 Requires

SN6700B 32Gb SFP28Included 8Port Upgrade License Kit R6B09A 2,017,000circle(Price excluding tax

\*Number of active ports8Upgrade kit for adding ports maximum48Upgradeable to ports

\*B-series 32Gb SFP28short wavelength1-pack Securetransceiver8Standard attachment

SN6700B 64Gb SFP56Included 8Port Upgrade License Kit R7M18A 2,791,000circle(Price excluding tax)

\*Number of active ports8Upgrade kit for adding ports maximum48Upgradeable to ports

 ${}^\star B\text{-series 64Gb SFP56} short wavelength 1-pack Secure transceiver 8 Standard attachment$ 

SN6700B SFP56-DDIncluded 16Port Upgrade License Kit R8U65A 10,871,000circle(Price excluding tax)

\*SDP-DD 8Port16FCPort activation for additional ports (Upgrade) Kit

\*B-series SFP56-DD SN SR 1-pack Secure transceiver 8 Standard attachment

BFor series4GB USBmemory N9Y63A 50,000circle(Price excluding tax)

\*USBDownloading system log files from a port Used for firmware upgradesUSBmemory

SN6700B 64Gb 56portFCswitchPort Side Intake twenty fourPort Active32Gb SFP28Attached model (1U) R6B06A 6,122,000circle(Price excluding tax)

\*A model designed to take in air from the front of the case and exhaust it to the rear.FCThe switch and airflow are reversed. \*64Gb/s correspondenceSFP+Port ×48+SFP56-DDPort ×8Comes as standard equipment \*24FCPorts are standard active ports

\*B-series 32Gb SFP28short wavelength1-pack SecureWalkie-talkietwenty fourStandard attachment \*64Gb/s,32Gb/s,16Gb/s,8Gb/sSupports (automatic switching),

10Gb/sis supported for switch-to-switch connections (10Gb/scorrespondenceSFP(Transceiver required) \*SAN Full Fabric\*Rack rail kit included as standard (HPE(Compatible with the Fujitsu rack series) \*The following software is included as standard

Frame Filtering, Advanced Zoning, Web Tools, In-flight Encryption, In-flight Compression, Adaptive Networking, Fabric Vision and IO Insight, Extended Fabric, ISL Trunking, Integrated Routing, Ficon CUP ISL Trunking \*FOS 9.00 nly supported from SFP-DDTo use the portFOS 9.1 Requires

- ◆ Fibre Channel switch software requires a license for each switch.
- ◆Fabric OSThe software included as standard varies depending on the version.Fabric OSPlease refer to the release notes.
- Full fabricAbout<u>SAN Design Reference Guide</u> (Please refer to the English version.





SN6700B 64Gb 56portFCswitch twenty four Port Active32Gb SFP28Attached Model

- ◆SN6700B 64Gb 56portFCThe switch has100VPower cord not included. Please select from the power cord options below as needed.
- ◆SN6700B 64Gb 56portFCOn the switch,200VFor (IEC320 C13-C14,2m)The power cord2This standard attachment.
- For power cords other than the standard ones, please refer to the power cord options below.

#### SN6700B 64Gb 56portFCswitchtwenty fourPort Active64Gb SFP56Attached Model

SN6700B 64Gb 56portFCswitch
twenty fourPort Active64Gb SFP56Attached model (1U)
R7M13A 7.863.000circle(Price excluding tax)

For Fibre Channel switches software (not required)

 ${}^{\star} 64Gb/s correspondence SFP+Port \times 48+SFP56-DDPort \times 8 Comes \ as \ standard \ equipment \ {}^{\star} 24FCPorts \ are \ standard \ active \ ports$ 

 $\label{thm:continuous} $$\$-$series 32Gb SFP28short wavelength1-pack SecureWalkie-talkietwenty fourStandard attachment $$64Gb/s,32Gb/s,16Gb/s,8Gb/sSupports (automatic switching),$ 

10Gb/sis supported for switch-to-switch connections (10Gb/scorrespondenceSFP(Transceiver required) \*SAN Full Fabric\*Rack rail kit included as standard (HPE(Compatible with the Fujitsu rack series) \*The following software is included as standard

Frame Filtering, Advanced Zoning, Web Tools, In-flight Encryption, In-flight Compression, Adaptive Networking, Fabric Vision and IO Insight, Extended Fabric, ISL Trunking, Integrated Routing, Ficon CUP ISL Trunking \*FOS 9.0 Only supported from SFP-DDTo use the portFOS 9.1 Requires

SN6700B 32Gb SFP28Included 8Port Upgrade License Kit R6B09A 2,017,000circle(Price excluding tax)

\*Number of active ports8Upgrade kit for adding ports maximum48Upgradeable to ports

\*B-series 32Gb SFP28short wavelength1-pack Securetransceiver8Standard attachment

SN6700B 64Gb SFP56Included 8Port Upgrade License Kit R7M18A 2,791,000circle(Price excluding tax)

\*Number of active ports8Upgrade kit for adding ports maximum48Upgradeable to ports

\*B-series 64Gb SFP56short wavelength1-pack Securetransceiver8Standard attachment

SN6700B SFP56-DDIncluded 16Port Upgrade License Kit R8U65A 10,871,000circle(Price excluding tax

\*SDP-DD 8Port16FCPort activation for additional ports (Upgrade) Kit

\*B-series SFP56-DD SN SR 1-pack Securetransceiver8Standard attachment

BFor series4GB USBmemory N9Y63A 50,000circle(Price excluding tax)

\*USBDownloading system log files from a port Used for firmware upgradesUSBmemory

SN6700B 64Gb 56portFCswitchPort Side Intake twenty fourPort Active64Gb SFP56Attached model (1U) R7M14A 7,863,000circle(Price excluding tax)

\*A model designed to take in air from the front of the case and exhaust it to the rear.FCThe switch and airflow are reversed. \*64Gb/s correspondenceSFP+Port ×48+SFP56-DDPort ×8Comes as standard equipment \*24FCPorts are standard active ports

\*B-series 32Gb SFP28short wavelength1-pack SecureWalkie-talkietwenty fourStandard attachment \*64Gb/s,32Gb/s,16Gb/s,8Gb/sSupports (automatic switching), 10Gb/sis supported for switch-to-switch connections (10Gb/scorrespondenceSFP(Transceiver

10Gb/sis supported for switch-to-switch connections (10Gb/scorrespondenceSFP(Transceiver required) \*SAN Full Fabric\*Rack rail kit included as standard (HPE(Compatible with the Fujitsu rack series) \*The following software is included as standard

Frame Filtering, Advanced Zoning, Web Tools, In-flight Encryption, In-flight Compression, Adaptive Networking, Fabric Vision and IO Insight, Extended Fabric, ISL Trunking, Integrated Routing, Ficon CUP ISL Trunking \*FOS 9.00 nly supported from SFP-DDTo use the portFOS 9.1 Requires

- Fibre Channel switch software requires a license for each switch.
- ◆ Fabric OSThe software included as standard varies depending on the version. Fabric OSPlease refer to the release notes.
- ◆Full fabricAbout<u>SAN Design Reference Guide</u> (Please refer to the English version.



SN6700B 64Gb 56portFCswitch twenty four Port Active64Gb SFP56Attached Model

#### Fibre Channel Switch Software



**Fibre Channel Switch License** channel switch \*This is not a required option. SN6700B SN3600B SN3600B Power Pack+ License package product Power Pack+ Please contact us separately. • ISL Trunking, Extended fabric, Fabric Vision Software set software package Please contact us separately Bfor integrated management of fabrics consisting of series switches Client-Server Software **HPE SANnav** GUIIntegrated configuration management, topology management, incident management, performance management, 00 Management Please contact us separately Call HomeProvides functionality Software RHELorCentOSA separate server is required. GUIThe client isHTML5Compatible web browsers (FireFox/Chromeetc.) Features of each license SANIn order to achieve high throughput,8GbThe switch is up to8Grouping ports64Gb/slink,16GbThe switch is up to8Group the ports ISL Trunking  $128 Gb/s link, 32 Gb The \ switch \ is \ up \ to 8 port (SFP+) or 2 port (QSFP) Group \ the 25 GGb/s Software \ license \ for \ the \ switch \ to \ configure \ the \ link \ (100 G) \ the \ t$ 4GbThe switch is up to4port16Gb/s) Wavelength division multiplexing transmission device (WDM) etc.FCA switch software license required when connecting to a remote switch using a **Extended Fabric** protocol-transparent transmission device.10kmEnd100kmDepending on the specifications of the transmission equipment, it is possible to connect at a Usage Rights distance of SFP transceiver, 9Micron-core single-mode fiber may be required. Fabric Watch Switch software license that provides notification of switch failures and proactive maintenance (Fabric OS 7.4From now on Fabric Vision Advanced Server/storage on the switchEnd-to-EndSwitch software license (Fabric OS 7.4From now onFabric Vision Performance MonitorUsage Rights Adaptive Guaranteed bandwidth for specific communications (QoS)Switch software license for defining bandwidth, transfer rate limits, and preferred paths (Fabric OS 7.2(It will be standard Networking equipment from now on.) Usage Rights Server Application  $VMV in tual\ servers\ and SN1000Q\ HBAOptimize\ communication\ between QoS) Software\ license\ to\ (Fabric\ OS\ 7.2 (It\ will\ between QoS\ 1.2 (It\ will\ between QoS\$ Optimization standard equipment from now on.) Usage Rights

 $\bullet \cdots \mathsf{Standard} \ \mathsf{equipment} \bigcirc \cdots \mathsf{Optional}$ 

◆ For Fibre Channel switch software, a license is required for each switch. (HPE SANnav Management SoftwarePlease contact us for more information.)

<sup>\*</sup>Gray color is limited stock

# **Common Options**

## Power cord

## **ACPower Cord Options**

♦ For power cords other than the standard ones, please select from the table below.

100VforC13 – NEM	100VforC13 – NEMA 5-15PPower cord					
2m,black	AF572A	2,000circle				
200VforC13-1	4power cable					
4.5feet (1.35m),black	142257-006	2,000circle				
2m,black	A0K02A	2,000circle				
2m,gray	AF573A	3,000circle				
10feet (3m),black	142257-003	2,000circle				
200VforC13 – NEMA 6-15PPower cord						
3.6m,black A0N33A 6,000circle						

<sup>\*</sup>Prices in this table do not include tax.

# **Support Services**

#### **Installation Services**



#### **Installation Services**

			ApplicableHPEInstallation Services				
Products covered by this service			Service Product Name (Standard time for hardware installation)	Service Product Number	Price excluding tax		
	R4G55B	SN3600B 32Gb 24portFCswitch 8Port Active 16Gb SFP+Attached Model					
Bseries (SN3600B)	R7R97A	SN3600B 32Gb 24portFCswitch 8Port Active 32Gb SFP28Attached Model	SANFor switch box type	U5988E	57,500circle		
	R8P29A	SN3600B 32Gb 24portFCswitchtwenty fourPort ActivePowerPack+ 16Gb SFP+Attached Model	SAM of Switch box type	033001	31,300circle		
	R8P28A	SN3600B 32Gb 24portFCswitchtwenty fourPort ActivePowerPack+ 32Gb SFP28Attached Model					
	R6B05A	SN6700B 24Port Active32Gb SFP28Attached Model					
Bseries (SN6700B)	R6B06A	SN6700B Port Side Intake 24Port Active 32Gb SFP28Attached Model		U5988E	57,500circle		
	R7M13A	SN6700B 64Gb 56portFCswitch twenty fourPort Active64Gb SFP56Attached Model	SANFor switch box type				
	R7M14A	SN6700B 64Gb 56portFCswitchPort Side Intake 24Port Active64Gb SFP56Attached Model					

#### ◆The work involves the following:

- Racking and cabling to the switch (not including routing or wiring)
- Power Pack+If software is included, license application will be carried out.
- ◆Installation service hours

Monday to Friday/8:45~17:30 ((Excluding public holidays, weekends, and the New Year holidays) If you wish to have the service performed outside of the above hours, an overtime fee will be charged. Please contact us separately.

#### **SANSwitch Settings Startup Services**

			ApplicableHPEStartup Services				
Products covered by this service			Service Product Name (Standard time for hardware installation)	Service Product Number	Price excluding tax		
Number of ports implemented96Port and belowHPEMadeSANSwitch Products							
	R4G55B	SN3600B 32Gb 24portFCswitch 8Port Active 16Gb SFP+Attached Model	Start-up Standard Time				
Bseries	R7R97A	SN3600B 32Gb 24portFCswitch 8Port Active 32Gb SFP28Attached Model	SANSwitch Settings Box typeSANswitch	U1XZ8E	230,000circle		
(SN3600B)	R8P29A	SN3600B 32Gb 24portFCswitchtwenty fourPort ActivePowerPack+ 16Gb SFP+Attached Model	twenty fourFor ports below				
	R8P28A SN3600B 32Gb 24portFCswitchtwenty fourPort ActivePowerPack+ 32Gb SFP28Attached Model						
	R6B05A	SN6700B 24Port Active 32Gb SFP28Attached Model					
Bseries (SN6700B)	R6B06A	SN6700B Port Side Intake 24Port Active 32Gb SFP28Attached Model	Start-up Standard Time SANSwitch Settings				
	R7M13A	SN6700B 64Gb 56portFCswitch twenty fourPort Active64Gb SFP56Attached Model	Box type HPE SANswitch	U7PD3E	460,000circle		
	R7M14A	SN6700B 64Gb 56portFCswitch Port Side Intake twenty fourPort Active64Gb SFP56Attached Model	implementation 49~96For ports below				

- ◆HPEWhen connecting Fibre Channel between a disk array and a server product manufactured byHPEMadeSANThis is a service product that performs configuration work on switch products. By purchasing and requesting this service in conjunction with the above installation service, SANFrom hardware installation of switch productsSANWe even handle the setup work
- ◆HPEMadeSANThis applies when installing new switch products (box-type entry/mid-range class as mentioned above).
- ◆ Service targetHPEMadeSANSwitch Products1Supported service products for each unit1You need pieces.
- ◆This service applies to HPEInstallation Services Requires sales and service requests in conjunction with hardware installation.
- ◆This service is applicableSANThe operating environment for the connected server and the connected disk array are as follows:

Connected Server HardwareIntegrity Server, ProLiant Server

Connection Server operating systemHP-UX,Microsoft Windows Server,Red Hat Enterprise Linux,VMware ESXi

Disk arrays (all Fibre ChannelSAN(applies to connections via 3PAR StoreServseries, StoreVirtualseries, MSAseries Other Fibre ChannelSANConnected products Tape autoloader, MSLTape libraries, Storage File Controller

- ◆The work involves the following:
  - Customer specifiedSANChecking requirements for build settings
  - SANSwitch product basic settings
  - Management Port Network Settings (IPaddress, Network Mask, SANSwitch name setting, Domain IDsetting
  - SANSwitch product option license (Power Pack+Application support and registration of bundled software
  - SANSwitch port settings (type, speed), SANZoning settings, SNMPNotification settings, Inter Switch LinkSettings (including trunking)
  - SANGet switch configuration information

- Connection confirmation attendance

- $\ SANS witch \ Settings SAN Connection \ configuration \ diagram SANS witch \ configuration \ file \ submission$
- ◆Service hours

Monday to Friday/8:45~17:30 ((Excluding public holidays, weekends, and the New Year holidays) If you wish to have the service performed outside of the above hours, an overtime fee will be charged. Please contact us separately.

# **Fibre Channel Switch**





Standard warranty

- ♦ Hardware standard warranty1Year parts warranty,1Annual next business day onsite service.
- however, SN3600B (Q1H70A#05Y / Q1H71A#05Y / Q1H72A#05Y), SN6600B (Q0U54A#ACF / Q0U58A#ACF / Q0U55A#ACF / Q0U59A#ACF / Q0U56A#ACF / Q0U56A#ACF / Q0U56A#ACF / Q0U57A#ACF / Q0U61A#ACF), SN6700Bteeth3Year parts warranty, 3Annual next business day on-site service; SN3600B (R7R97A, R4G55B, R8P29A, R8P28A) The lifetime warranty is valid until the product is discontinued. 5Year parts warranty, 3Annual next business day onsite service.
- 3After one year has passed, after receiving the repair request, HPEWe will send the parts to you, and after you have replaced them, you will be asked to return the defective parts. HPE(Return instructions will be included with the replacement part.)
- Repair reception hours, diagnostic service hours, and on-site service hours are Monday to Friday.9:00-17:00((Excluding public holidays and the New Year holidays)
- ♦ If you require urgent support, HPEPurchase maintenance services below.
- ◆HPEFor details of maintenance services, please see the support services on the right. WebPlease refer to the website. https://www.hpe.com/jp/ja/services/availability.html

#### **Tech Care**

#### HPEMaintenance service lineup: Helping customers choose the maintenance service that best suits them



Extended service hours, shorter on-site reception hours, and expanded support scop

\*Tech Care Basic\*Please refer to the right for details of each service.<u>https://www.hpe.com/jp/supportservices-proliant</u>

#### Comparison of each service's content

Support Content	Product warranty	Tech Care Basic *1 Tech Care Basic 4H*1	Tech Care Essential *1					
Failure prevention service/proactive service								
General Technical Guidance	×	0	0					
Video Library	×	0	0					
Expert forum support	×	0	0					
HPESupport Center4One dashboard*2,3	×	0	0					
Reactive services								
Initial response to serious problems	×	×	15Within minutes*4					
Automatic reporting's	0	0	0					
Maintenance services for software products								
License for new versions	×	0	0					
Phone support for installation instructions	After purchase90days*6	0	0					
Functional and operational support	×	0	0					
Providing known software solutions	X	0	0					
Escalation to the software vendor	×	0	0					
Maintenance services for hardware products	Maintenance services for hardware products							
On-site response time:4Time-sensitive options	×	0	0					
Service hours:24x7option	×	×	0					
Service period extension:4year/5year/6year/7Year Options	×	0	0					
No need to return failed drives option	×	0	0					
Remote fault diagnosis and support	0	0	0					
On-site support	○ ¾	0	0					
Parts provision	0	0	0					
Online Remote Support	0	0	0					
Hardware,ISVSoftware fault isolation assistance*6	×	0	0					
Providing known software solutions*₅	×	0	0					
Sending investigation requests to software vendors <sup>⋆</sup> <sub>6</sub>	×	0	0					

<sup>\*1:</sup> For some storage products, we provide software and hardware as a service.2To use the service:HPEYou will need a link to your support contract from the Support Center.

For details, see the rightWebPlease refer to the website.https://support.hpe.com/hpsc/doc/public/display?docId=emr\_na-c04070658

\*3: The target software product isMicrosoft Windows Server,Red Hat Enterprise Linux,SUSE Linux Enterprise Server,VMware vSphere ESX/ESXiis.

For details, see the rightWebPlease refer to the website.https://www.hpe.com/ip/supportlist-sw

For ucuals, see the rightwebrlease refer to the website.https://www.hpe.com/ip/supportlist-sw
4: Incident severity level is Severity1We will only respond when there is a significant business impact.

5: A remote support tool (GreenLake for Compute Ops Management,OneViewRemote support,Insight Remote Support,
3PARRemote support is required. Proactive services are delivered remotely using remote support tools, email, orFTP, provided via telephone etc.6:ProLiantThis service is limited to
servers and is not available for storage products.HPEinOEMI'm sellingMicrosoft,SUSE,Red Hat,
VMwareandInsightSoftware, etc.HPEIn ecessary, we will make a request to the software developer on your behalf.SUSE,Red Hat, VMwareFor details, see the rightWebPlease refer to
the website.https://www.hpe.com/ip/supportlist-sw

1: Only for products with the library to refer the rightWebPlease refer to the software developer.

 $<sup>{\</sup>bf *7}: Only for products with on-site warranty. For details, see the right WebPlease refer to the website. \underline{https://www.hpe.com/ip/supportservices-prolianty.} \\$ 

## FCFor the switch bodyTech Care

Products covered by this service		Service Product name	Service Hours	Years	Service Product Number	Price excluding tax			
	SN3600B 32Gb 24port FC switch 8Port Active 16Gb SFP+Attached Model	HPE Tech Care Basic 4H SN3600B 32Gb 24port FC switch 8Port Active 16Gb SFP+For included models		3year	HX2V0E	13,500circle			
			9×5	4year	HX2V8E	52,200circle			
R4G55B				5year	HX2W6E	90,800circle			
K4G35B		HPE Tech Care Essential SN3600B 32Gb 24port FC switch 8Port Active		3year	HX2V2E	34,800circle			
			24x7	4year	HX2W0E	80,500circle			
		16Gb SFP+For included models		5year	HX2W8E	126,100circle			
R7R97A	SN3600B 32Gb 24port FC switch 8Port Active	HPE Tech Care Basic 4H SN3600B FCswitch SFPFor included models		3year	HX2M3E	76,400circle			
	32Gb SFP28Attached Model		SN3600B FCswitch	SN3600B FCswitch	SN3600B FCswitch	9×5	4year	HX2N1E	138,000circle
R8P28A	SN3600B 32Gb 24port FC switch twenty fourPort Active			5year	HX2N9E	199,600circle			
	PowerPack+ 32Gb SFP28Attached Model	ed Model		3year	HX2M5E	108,500circle			
R8P29A	SN3600B 32Gb 24port FC switch twenty fourPort Active	HPE Tech Care Essential SN3600B FCswitch SFPFor included models	24x7	4year	HX2N3E	180,600circle			
	PowerPack+ 16Gb SFP+Attached Model			5year	HX2P1E	252,800circle			

## FCFor the switch bodyTech Care

Products covered by this service		Service Product name	Service Hours	Years	Service Product Number	Price excluding tax
	SN6700B 64Gb 56port FC switch twenty fourPort Active 32Gb SFP28Attached Model	HPE Tech Care Basic 4H SN6700B 64Gb 56portFCswitch twenty fourPort Active 32Gb SFP28For included models		3year	HU8Z7E	435,000circle
			9×5	4year	HU9A5E	835,800circle
R6B05A				5year	HU9B3E	1,236,400circle
ROBUSA		HPE Tech Care Essential SN6700B 64Gb 56portFCswitch twenty fourPort Active	24x7	3year	HU8Z9E	654,700circle
				4year	HU9A7E	1,127,600circle
		32Gb SFP28For included models		5year	HU9B5E	1,600,500circle
		HPE Tech Care Basic 4H SN6700B 64Gb 56port FC		3year	HY9T2E	435,000circle
	SN6700B 64Gb 56port FC switch Port Side Intake twenty fourPort Active 32Gb SFP28Attached Model	switch Port Side Intake	9×5	4year	HY9U2E	835,800circle
R6B06A		twenty fourPort Active 32Gb SFP28For included models		5year	HY9U9E	1,236,400circle
KOBOOA		HPE Tech Care Essential SN6700B 64Gb 56port FC switch Port Side Intake twenty fourPort Active 32Gb SFP28For included models		3year	HY9S7E	654,700circle
			24x7	4year	НҮ9Т6Е	1,127,600circle
				5year	HY9U3E	1,600,500circle
	SN6700B 64Gb 56port FC switch twenty fourPort Active 64Gb SFP56Attached Model	HPE Tech Care Basic 4H SN6700B 64Gb 56portFCswitch twenty fourPort Active 64Gb SFP56For included models	9×5	3year	HX2D3E	435,000circle
				4year	HX2E1E	835,800circle
R7M13A				5year	HX2E9E	1,236,400circle
KIWISA		HPE Tech Care Essential SN6700B 64Gb 56portFCswitch twenty fourPort Active 64Gb SFP56For included models	24x7	3year	HX2D5E	654,700circle
				4year	HX2E3E	1,127,600circle
				5year	HX2F1E	1,600,500circle
	SN6700B 64Gb 56port FC switch Port Side Intake twenty fourPort Active 64Gb SFP56Attached Model	HPE Tech Care Basic 4H SN6700B 64Gb 56portFCswitch Port Side Intake twenty fourPort Active 64Gb SFP56For included models		3year	HX2H3E	435,000circle
			9×5	4year	HX2J1E	835,800circle
R7M14A				5year	HX2J9E	1,236,400circle
KINITAN		HPE Tech Care Essential SN6700B 64Gb 56port FCswitch Port Side Intake		3year	HX2H5E	654,700circle
			24x7	4year	HX2J3E	1,127,600circle
		twenty fourPort Active 64Gb SFP56For included models		5year	HX2K1E	1,600,500circle

# **Fibre Channel Switch**

#### **HPEService Credits**

This is a prepaid service package that allows you to select and combine the services you need from our proactive service menu.

We offer a wide range of proactive services from our trained and experienced engineers to help you prevent problems before they occur. You can choose the service based on the number of credits you purchase.

Our remote credit advisors will help you choose from a menu of services.

For details of the service menu, please see the WebPlease see the site's menu of available services. <a href="https://www.hpe.com/jp/support-credit">https://www.hpe.com/jp/support-credit</a>

Service hours: Monday to Friday8:45~17:30 \* Public

holidays and New Year's holidays (12/30~1/3)Excluding

\*Remote credit advisors are available during standard business hours. \*Proactive services are

provided outside of the above hours.1.5 You need double the credits.

Maintenance service product name	Model number	Price excluding tax	Service details
HPEService Credits1Annual10credit	U7EN6E	324,100circle	1per year10Select the service you want for your credits
HPEService Credits1Annual30credit	U7EP0E	972,300circle	1per year30Select the service you want for your credits
HPEService Credits3Annual30credit	U7EN7E	934,400circle	3per year30Select the service you want for your credits
HPEService Credits3Annual90credit	U7EP1E	2,803,200circle	3per year90Select the service you want for your credits
HPEService Credits4Annual40credit	U7EN8E	1,220,000circle	4per year40Select the service you want for your credits
HPEService Credits4Annual120credit	U7EP2E	3,659,800circle	4per year120Select the service you want for your credits
HPEService Credits5Annual50credit	U7EN9E	1,494,200circle	5per year50Select the service you want for your credits
HPEService Credits5Annual150credit	U7EP3E	4,482,500circle	5per year150Select the service you want for your credits

<sup>\*</sup>Prices in this table do not include tax.