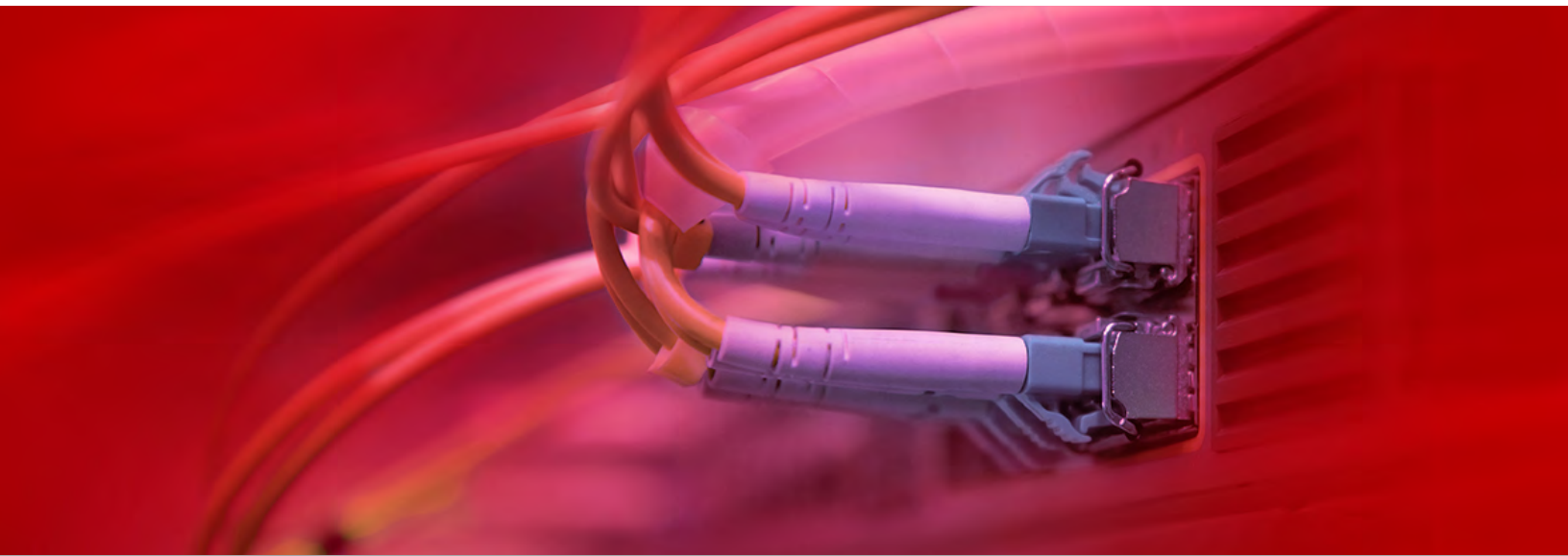




REFERENCE GUIDE

# Storage Area Networks



## Brocade Fibre Channel Products





## Storage Area Networks (SAN) Directors

BROCADE MODEL	X7-8	X7-4
		
Ports	Up to 384 64Gb/s ports Up to 512 32Gb/s ports Up to 32 UltraScale ICL Ports	Up to 192 64Gb/s ports Up to 256 32Gb/s ports Up to 16 UltraScale ICL Ports
Port Speed	4, 8, 10, 16, 32, 64 Gbps	4, 8, 10, 16, 32, 64 Gbps
Hitachi Vantara Models	HD-X78-0002-Z.P (OPSU, OFAN, 2CP, 2CORE, 0P, OSFP, EB) Customer to procure (3) fans and (4) PSUs with matching airflow direction. Power cords not included. Includes 14 months maintenance support	HD-X74-0002-Z.P (OPSU, OFAN, 2CP, 2CORE, 0P, OSFP, EB) Customer to procure (2) fans and (2) PSUs with matching airflow direction. Power cords not included. Includes 14 months maintenance support
Port Blade Options	BR-X764-2164.P (Port Blade, FC64-64, 32x64G SWL SFP-DDs) BR-X764-1148.P (Port Blade, FC64-48, 48x32G SWL SEC SFP+) BR-X764-2148.P (Port Blade, FC64-48, 48x64G SWL SEC SFP+) BR-X764-5148.P (Port Blade, FC64-48, 48x64G LWL SEC SFP+) BR-X732-2148.P (Port Blade, FC32-X7-48, 48P, 48x32G SEC SFP+) BR-X732-0148.P (Port Blade, FC32-X7-48, 48P, 0 SFP+) BR-X764-3148.P (Port Blade, FC64-48, 48x32G LWL SEC SFP) BR-X732-5148.P (Port Blade, FC32-X7-48, 48x32G LWL SEC SFP+) BR-X6-2164.P (Port Blade, FC32-64, 8 4X32G SWL QSFPs, BR) BR-X6-0148.P (Port Blade, FC32-48, 48P, 0 SFP, BR) BR-X6-2148.P (Port Blade, FC32-48, 48x32G SWL SFP+, BR)	BR-X764-2164.P (Port Blade, FC64-64, 32x64G SWL SFP-DDs) BR-X764-1148.P (Port Blade, FC64-48, 48x32G SWL SEC SFP+) BR-X764-2148.P (Port Blade, FC64-48, 48x64G SWL SEC SFP+) BR-X764-5148.P (Port Blade, FC64-48, 48x64G LWL SEC SFP+) BR-X732-2148.P (Port Blade, FC32-X7-48, 48P, 48x32G SEC SFP+) BR-X732-0148.P (Port Blade, FC32-X7-48, 48P, 0 SFP+) BR-X764-3148.P (Port Blade, FC64-48, 48x32G LWL SEC SFP) BR-X732-5148.P (Port Blade, FC32-X7-48, 48x32G LWL SEC SFP+) BR-X6-2164.P (Port Blade, FC32-64, 8 4X32G SWL QSFPs, BR) BR-X6-0148.P (Port Blade, FC32-48, 48P, 0 SFP, BR) BR-X6-2148.P (Port Blade, FC32-48, 48x32G SWL SFP+, BR)
Extension Blade Options	HD-SX6-0001-Z.P (SX6 EXTBLD, 16x32G SWLSFPs, 0 1/10/40GBE, 14 mo. support) HD-SX6-0002-Z.P (SX6 EXTBLD, 16x32G LWLSFPs, 0 1/10/40GBE, 14 mo. support)	HD-SX6-0001-Z.P (SX6 EXTBLD, 16x32G SWLSFPs, 0 1/10/40GBE, 14 mo. support) HD-SX6-0002-Z.P (SX6 EXTBLD, 16x32G LWLSFPs, 0 1/10/40GBE, 14 mo. support)
Interchassis Links (ICL) POD Kits	BR-X71CLKIT-100M-01-Z.P (X7 ICL POD KIT, Qty. 8 GEN 7 ICL QSFPs) BR-X7GEN6CLKIT-100M-01-Z.P (X7 32G ICL KIT, LIC, Qty. 8 4X32G QSFPs 100M) BR-X71CLKIT-2KM-01-Z.P (X7 2KM ICL KIT, LIC & 8 GEN-7 2KM ICL QSFPs) All SKUs include 14 months maintenance support Note: Minimum Qty. 1 x ICL POD kits and Maximum Qty. 4 x ICL POD kits per chassis	BR-X71CLKIT-100M-01-Z.P (X7 ICL POD KIT, Qty. 8 GEN 7 ICL QSFPs) BR-X7GEN6CLKIT-100M-01-Z.P (X7 32G ICL KIT, LIC, Qty. 8 4X32G QSFPs 100M) BR-X71CLKIT-2KM-01-Z.P (X7 2KM ICL KIT, LIC & 8 GEN-7 2KM ICL QSFPs) All SKUs include 14 months maintenance support Note: Minimum Qty. 1 x ICL POD kit and Maximum Qty. 2 x ICL POD kits per chassis
Power and Fan Options	BR-X6-RACNPIPSU-0104.P (1 PSU, NPI, 3000W, 240V AC INPUT) BR-X6-RACNPEPSU-0104.P (1 PSU, NPE, 3000W, 240V AC INPUT) BR-X6-HVNPPIPSU-0104.P (1 HV PSU, NPI, 3000W,240-380VDC, 277VAC) BR-X6-HVNPEPSU-0104.P (1 HV PSU, NPE, 3000W, 240-380VDC, 277VAC) BR-X6-FANNPI-0122.P (1 Fan Tray, NPI) BR-X6-FANNPE-0122.P (1 Fan Tray, NPE) BR-DCX-0132.P (C19 / L6-20 North America, 2 Power Cords, 3.0m, 20A, 250V) BR-DCX-0134.P (C19 / CEE 7/7 Europe/No UK, 2 Power Cords, 2.5m, 16A, 250V) BR-DCX-0135.P (C19 / AS 3112 Australia/NZ, 2 Power Cords, 2.5m, 20A, 250V) BR-DCX-0136.P (C19 / IEC 60309 UK, 2 Power Cords, 2.5m, 20A, 250V) BR-DCX-0137.P (C19 / NEMA 5-20 North America, 2 Power Cords, 3.0m, 20A, 125V) BR-DCX-0138.P (C19 / L6-20 North America, 2 Power Cords, 15FT, 20A, 250V) XBR-000123.P (C19 / C20 PDU extension cable, 2.5m, 20A, 250V)	BR-X6-RACNPIPSU-0104.P (1 PSU, NPI, 3000W, 240V AC INPUT) BR-X6-RACNPEPSU-0104.P (1 PSU, NPE, 3000W, 240V AC INPUT) BR-X6-HVNPPIPSU-0104.P (1 HV PSU, NPI, 3000W,240-380VDC, 277VAC) BR-X6-HVNPEPSU-0104.P (1 HV PSU, NPE, 3000W, 240-380VDC, 277VAC) BR-X6-FANNPI-0122.P (1 Fan Tray, NPI) BR-X6-FANNPE-0122.P (1 Fan Tray, NPE) BR-DCX-0132.P (C19 / L6-20 North America, 2 Power Cords, 3.0m, 20A, 250V) BR-DCX-0134.P (C19 / CEE 7/7 Europe/No UK, 2 Power Cords, 2.5m, 16A, 250V) BR-DCX-0135.P (C19 / AS 3112 Australia/NZ, 2 Power Cords, 2.5m, 20A, 250V) BR-DCX-0136.P (C19 / IEC 60309 UK, 2 Power Cords, 2.5m, 20A, 250V) BR-DCX-0137.P (C19 / NEMA 5-20 North America, 2 Power Cords, 3.0m, 20A, 125V) BR-DCX-0138.P (C19 / L6-20 North America, 2 Power Cords, 15FT, 20A, 250V) XBR-000123.P (C19 / C20 PDU extension cable, 2.5m, 20A, 250V)
Optional Hardware	XBR-X78-0105.P (FRU, HORIZONTAL CABLE MGMT COMB, BR) XBR-DCX-0120.P (FRU, RACK MOUNT KIT,14U (27"-31") - Default / Included XBR-DCX-0121.P (FRU, MID RACK MOUNT KIT, 14U) XBR-DCX-0152.P (FRU, 4-POST RACK MOUNT KIT, 14U (22-27 INCH)	XBR-X74-0105.P (FRU, X7-4 VERT CABLE MGMT, BR) XBR-X64-0126.P (FRU, Mid Mount Kit, X6-4, BR) XBR-DCX45-0120.P (FRU, RACK MOUNT KIT, 27-31 IN, DCX-4S, BR) XBR-DCX45-0121.P (FRU, 27-31", AIRFLOW DIVERSION KIT, 4 Slot) - Default / Included XBR-DCX45-0130.P (FRU, 18-24", AIRFLOW DIVERSION KIT, 4 Slot)
Included Software	Enterprise bundle (Trunking, Fabric Vision, Extended Fabric, Integrated Routing and FICON CUP)	Enterprise bundle (Trunking, Fabric Vision, Extended Fabric, Integrated Routing and FICON CUP)




## Storage Area Networks (SAN) Directors

BROCADE MODEL	X6-8	X6-4
		
Ports	Up to 512 32G Ports per Chassis Up to 32 UltraScale ICL Ports	Up to 256 32Gb/s ports per chassis Up to 16 UltraScale ICL Ports
Port Speed	4, 8, 10, 16, 32 Gbps	4, 8, 10, 16, 32 Gbps
Hitachi Vantara Models	<b>HD-X68-0002-2-Z.P</b> (OPSU, OFAN, 2CP, 2CORE, OP, OSFP, EB) Customer to procure (3) fans and (4) PSUs with matching airflow direction. Power cords not included. All SKUs include 14 months maintenance support	<b>HD-X64-0002-2-Z.P</b> (OPSU, OFAN, 2CP, 2CORE, OP, OSFP, EB) Customer to procure (2) fans and (2) PSUs with matching airflow direction. Power cords not included. All SKUs include 14 months maintenance support
Port Blade Options	<b>BR-X6-0148.P</b> (Port Blade, FC32-48, 48P, 0 SFP, BR) <b>BR-X6-2148.P</b> (Port Blade, FC32-48, 48x32G SWL SFP+, BR) <b>BR-X6-2164.P</b> (Port Blade, FC32-64, Bundled with Qty-8 4x32G QSFP SWL QSFPs)	<b>BR-X6-0148.P</b> (Port Blade, FC32-48, 48P, 0 SFP, BR) <b>BR-X6-2148.P</b> (Port Blade, FC32-48, 48x32G SWL SFP+, BR) <b>BR-X6-2164.P</b> (Port Blade, FC32-64, Bundled with Qty-8 4x32G QSFP SWL QSFPs)
Extension Blade Options	<b>HD-SX6-0001-Z.P</b> (SX6 EXTBLD, 16x32G SWLSFPs, 0 1/10/40GBE, 14 mo. support) <b>HD-SX6-0002-Z.P</b> (SX6 EXTBLD, 16x32G LWLSFPs, 0 1/10/40GBE, 14 mo. support)	<b>HD-SX6-0001-Z.P</b> (SX6 EXTBLD, 16x32G SWLSFPs, 0 1/10/40GBE, 14 mo. support) <b>HD-SX6-0002-Z.P</b> (SX6 EXTBLD, 16x32G LWLSFPs, 0 1/10/40GBE, 14 mo. support)
Interchassis Links (ICL) POD Kits	<b>HD-X68ICLKIT-100M-02-Z.P</b> (X6 ICL POD Kit, 100M, 16 4x32G QSFPs) <b>HD-X68GEN5ICLKIT-2KM-01-Z.P</b> (2KM Gen5 ICL Kit, LIC & 8 2KM 4x16 QSFP) All SKUs include 14 months maintenance support	<b>HD-X64ICLKIT-100M-02-Z.P</b> (X6-4 ICL POD Kit, 8 4x32G QSFPs w/ Breakout) <b>HD-X64GEN5ICLKIT-2KM-01-Z.P</b> (X64 Gen5 ICL Kit, LIC & 8 2KM 4x16G QSFP) All SKUs include 14 months maintenance support
Power and Fan Options	<b>BR-X6-RACNPIPSU-0104.P</b> (1 PSU, NPI, 3000W, 240V AC INPUT) <b>BR-X6-RACNPEPSU-0104.P</b> (1 PSU, NPE, 3000W, 240V AC INPUT) <b>BR-X6-HVNPISU-0104.P</b> (1 HV PSU, NPI, 3000W,240-380VDC, 277VAC) <b>BR-X6-HVNPEPSU-0104.P</b> (1 HV PSU, NPE, 3000W, 240-380VDC, 277VAC) <b>BR-X6-FANNPI-0122.P</b> (1 Fan Tray, NPI) <b>BR-X6-FANNPE-0122.P</b> (1 Fan Tray, NPE) <b>BR-DCX-0132.P</b> (C19 / L6-20 North America, 2 Power Cords, 3.0m, 20A, 250V) <b>BR-DCX-0134.P</b> (C19 / CEE 7/7 Europe/No UK, 2 Power Cords, 2.5m, 16A, 250V) <b>BR-DCX-0135.P</b> (C19 / AS 3112 Australia/NZ, 2 Power Cords, 2.5m, 20A, 250V) <b>BR-DCX-0136.P</b> (C19 / IEC 60309 UK, 2 Power Cords, 2.5m, 20A, 250V) <b>BR-DCX-0137.P</b> (C19 / NEMA 5-20 North America, 2 Power Cords, 3.0m, 20A, 125V) <b>BR-DCX-0138.P</b> (C19 / L6-20 North America, 2 Power Cords, 15FT, 20A, 250V) <b>XBR-000123.P</b> (C19 / C20 PDU extension cable, 2.5m, 20A, 250V)	<b>BR-X6-RACNPIPSU-0104.P</b> (1 PSU, NPI, 3000W, 240V AC INPUT) <b>BR-X6-RACNPEPSU-0104.P</b> (1 PSU, NPE, 3000W, 240V AC INPUT) <b>BR-X6-HVNPISU-0104.P</b> (1 HV PSU, NPI, 3000W,240-380VDC, 277VAC) <b>BR-X6-HVNPEPSU-0104.P</b> (1 HV PSU, NPE, 3000W, 240-380VDC, 277VAC) <b>BR-X6-FANNPI-0122.P</b> (1 Fan Tray, NPI) <b>BR-X6-FANNPE-0122.P</b> (1 Fan Tray, NPE) <b>BR-DCX-0132.P</b> (C19 / L6-20 North America, 2 Power Cords, 3.0m, 20A, 250V) <b>BR-DCX-0134.P</b> (C19 / CEE 7/7 Europe/No UK, 2 Power Cords, 2.5m, 16A, 250V) <b>BR-DCX-0135.P</b> (C19 / AS 3112 Australia/NZ, 2 Power Cords, 2.5m, 20A, 250V) <b>BR-DCX-0136.P</b> (C19 / IEC 60309 UK, 2 Power Cords, 2.5m, 20A, 250V) <b>BR-DCX-0137.P</b> (C19 / NEMA 5-20 North America, 2 Power Cords, 3.0m, 20A, 125V) <b>BR-DCX-0138.P</b> (C19 / L6-20 North America, 2 Power Cords, 15FT, 20A, 250V) <b>XBR-000123.P</b> (C19 / C20 PDU extension cable, 2.5m, 20A, 250V)
Optional Hardware	<b>XBR-X68-0105.P</b> (FRU, Horizontal cable mgmt combo, BR) <b>XBR-DCX-0120.P</b> (FRU, RACK MOUNT KIT, 14U (27"-31") - Default / Included) <b>XBR-DCX-0121.P</b> (FRU, MID RACK MOUNT KIT, 14U) <b>XBR-DCX-0152.P</b> (FRU, 4-POST RACK MOUNT KIT, 14U (22-27 INCH))	<b>XBR-X64-0105.P</b> (FRU, Vertical cable mgmt, BR) <b>XBR-X64-0126.P</b> (FRU, Mid Mount Kit, X6-4, BR) <b>XBR-DCX45-0120.P</b> (FRU, RACK MOUNT KIT, 27-31 IN, DCX-4S, BR) <b>XBR-DCX45-0121.P</b> (FRU, 27-31", AIRFLOW DIVERSION KIT, 4 Slot - Default / Included) <b>XBR-DCX45-0130.P</b> (FRU,18-24", AIRFLOW DIVERSION KIT, 4 Slot)
Optional Software	<b>HD-CHASIR128POD1-Z.P</b> (SW, PP, Integrated Routing, 128 ports, X6, 14 months support)	<b>HD-CHASIR128POD1-Z.P</b> (SW, PP, Integrated Routing, 128 ports, X6, 14 months support)
Included Software	Enterprise bundle (Trunking, Fabric Vision, Extended Fabric, and FICON CUP)	Enterprise bundle (Trunking, Fabric Vision, Extended Fabric, and FICON CUP)

## Storage Area Networks (SAN) Switches

BROCADE MODEL	GEN 7 (64GB) SWITCH	
	G730	G720
		
Ports	48-128 Ports	24-64 Ports
Ports Speed	8, 10, 16, 32, 64 Gbps	8, 10, 16, 32, 64 Gbps
Hitachi Vantara Models	<p>HD-G730-48-64G-R-Z.P (G730, 48P, 64G SWL SFP, AC, PORTSD EXH, ENT Bundle)</p> <p>HD-G730-48-64G-F-Z.P (G730, 48P, 64G SWL SFP, AC, PRTSD INTK, ENT Bundle)</p> <p>All SKUs include 14 months maintenance support</p>	<p>HD-G720-24-32G-R-Z.P (G720, 24P, 32G SEC SWL SFP, AC, PORTSD EXH, ENT Bundle)</p> <p>HD-G720-24-32G-F-Z.P (G720, 24P, 32G SEC SWL SFP, AC, PRTSD INTK, ENT Bundle)</p> <p>HD-G720-24-64G-R-Z.P (G720, 24P, 64G SEC SWL SFP, AC, PORTSD EXH, ENT Bundle)</p> <p>HD-G720-24-64G-F-Z.P (G720, 24P, 64G SEC SWL SFP, AC, PRTSD INTK, ENT Bundle)</p> <p>All SKUs include 14 months maintenance support</p>
Ports on Demand (POD) Kits	<p>XBR-MENT24G7POD-64G.P (S/W 24 PORT ON DEMAND WITH 24 64G SWL SFPs)</p> <p>XBR-MENT32DDG7POD-64G.P (S/W 32 PORT ON DEMAND WITH 16 64G SWL SFP-DDs)</p>	<p>XBR-MIDR8PTPOD-32G.P (S/W 8 PORT ON DEMAND WITH 8 32G SEC SWL SFP)</p> <p>XBR-MIDR8PTPOD-64G.P (S/W 8 PORT ON DEMAND WITH 8 64G SEC SWL SFP)</p> <p>XBR-MIDR16DDG7POD-64G.P (S/W 16 PORT-ON-DEMAND, WITH 8 BR 64G SWL SFP-DDs)</p>
Rail Kits	<p>XBR-R000296.P (Fixed Rack Mount Kit for 4 post racks) – Included with HD-G730 Switch</p> <p>XBR-R000294.P (Mid-Mount Rack Kit for 2 post racks)</p>	<p>XBR-R000296.P (Fixed Rack Mount Kit for 4 post racks) – Included with HD-G720 Switch</p> <p>XBR-R000294.P (Mid-Mount Rack Kit for 2 post racks)</p>
Included Accessories	Two 6' C13 / NEMA 5-15 power cords (PCUSA2) Serial cable with RJ-45 connector	Two 6' C13 / NEMA 5-15 power cords RJ45-Mini USB connector
Included Software	Enterprise License Bundle (Fabric Vision, ISL Trunking, Extended Fabrics, and Integrated Routing)	Enterprise License Bundle (Fabric Vision, ISL Trunking, Extended Fabrics, FICON CUP and Integrated Routing)
Optional Hardware and Power cords	<p>XBR-USB-4GB.P (USB Flash Drive, 4 GB)</p> <p>PC AUS.P (Australia/NZ Power Cord, AS 3112 to C13, 10A/250V, 2.5m)</p> <p>PC CHINA-250.P (China Power Cord, IEC 60309 to C13, 10A/250V, 2.5m)</p> <p>PC UK-EPS.P (UK Power Cord, BS89/13 TO C13, 13A/250V, 2.5m)</p> <p>PC USA2.P (North America Power Cord, NEMA 5-15 to C13, 13A/125V, 2m) - Qty-2 Included with HD-G730 switch</p>	<p>XBR-USB-4GB.P (USB Flash Drive, 4 GB)</p> <p>PC AUS.P (Australia/NZ Power Cord, AS 3112 to C13, 10A/250V, 2.5m)</p> <p>PC CHINA-250.P (China Power Cord, IEC 60309 to C13, 10A/250V, 2.5m)</p> <p>PC UK-EPS.P (UK Power Cord, BS89/13 TO C13, 13A/250V, 2.5m)</p> <p>PC USA2.P (North America Power Cord, NEMA 5-15 to C13, 13A/125V, 2m) - Qty-2 Included with HD-G720 switch</p>




## Storage Area Networks (SAN) Switches

BROCADE MODEL	GEN 6 (32GB) SWITCH		
	G630	G620	G610
			
<b>Ports</b>	48-128 Ports	48-64 Ports	8-24 Ports
<b>Ports Speed</b>	4, 8, 10, 16, or 32 Gbps	4, 8, 10, 16, or 32 Gbps	4, 8, 16, or 32 Gbps
<b>Hitachi Vantara Models</b>	<p><b>HD-G630-48-32G-R-Z.P</b> (48P 32G SWL SFP, Portside Exhaust)</p> <p><b>HD-G630-48-32G-F-Z.P</b> (48P 32G SWL SFP, Portside Intake)</p> <p><b>HD-G630-96-32G-R-Z.P</b> (96P 32G SWL SFP, ENT, Portside Exhaust)</p> <p><b>HD-G630-48-32G-R-1-Z.P</b> (48P 32G SWL SFP, Portside Exhaust)</p> <p><b>HD-G630-48-32G-F-1-Z.P</b> (48P 32G SWL SFP, Portside Intake)</p> <p><b>HD-G630-96-32G-R-1-Z.P</b> (96P 32G SWL SFP, ENT, Portside Exhaust)</p> <p>All SKUs include 14 months maintenance support</p>	<p><b>HD-G620-24-32G-F-1-Z.P</b> (24P, 32GB, SWLSFP, BR, AC, Non-Portside Exhaust)</p> <p><b>HD-G620-24-32G-R-1-Z.P</b> (24P, 32GB, SWLSFP, BR, AC, Portside Exhaust)</p> <p><b>HD-G620-48-32G-F-1-Z.P</b> (48P, 32GB SWLSFP, BR, AC, Non-Portside Exhaust, ENT)</p> <p><b>HD-G620-48-32G-R-1-Z.P</b> (48P, 32GB SWLSFP, BR, AC, Portside Exhaust, ENT)</p> <p><b>HD-G620-24-16G-F-1-Z.P</b> (24P, 16GB SWL SFP, AC, Non-Portside Exhaust)</p> <p><b>HD-G620-24-16G-R-1-Z.P</b> (24P, 16GB SWL SFP, AC, Portside Exhaust)</p> <p>All SKUs include 14 months maintenance support</p>	<p><b>HD-G610-8-16G-5-L.P</b> (8P, 8x16GB, SWL, SFP, AC, ENT)</p> <p><b>HD-G610-24-16G-5-L.P</b> (24P, 24x16GB, SWL, SFP, AC, ENT)</p> <p><b>HD-G610-8-32G-5-L.P</b> (8P, 8x32GB SWL SFP, AC, ENT)</p> <p><b>HD-G610-24-32G-5-L.P</b> (24P, 24x32GB, SWL, SFP, AC, ENT)</p> <p>All G610 SKUs (with -5-L) include Lifetime Warranty</p>
<b>Ports on Demand (POD) Kits</b>	<p><b>XBR-MENT24PTPOD-32G.P</b> (S/W 24 PORT ON DEMAND WITH 24 32G SWL SFP)</p> <p><b>XBR-MENT32QFLEX-32G.P</b> (S/W 32 PORT ON DEMAND WITH 8 4X32G SWL QSFP)</p>	<p><b>XBR-G6MIDR12PTPOD-32G.P</b> (S/W 12 PORT ON DEMAND WITH 12 32G SWL SFP)</p> <p><b>XBR-G6MIDR16QFLEX-32G-1.P</b> (S/W 16 PORT ON DEMAND WITH 4 4X32G SWL QSFP)</p> <p><b>XBR-G6MIDR12PTPOD-16G.P</b> (S/W 12 PORT ON DEMAND WITH 12 16G SWL SFP)</p>	<p><b>XBR-SMED8PTPOD-16G.P</b> (S/W, 8 Port-on-Demand, 8x16G SWL SFP)</p> <p><b>XBR-SMED8PTPOD-32G.P</b> (S/W, 8 Port-on-Demand, W/ 8 X 32G SWL)</p>
<b>Rail Kits</b>	<p><b>XBR-R000296.P</b> (Fixed Rack Mount Kit for 4 post racks) - Included with HD-G630 Switch</p> <p><b>XBR-R000294.P</b> (Mid-Mount Rack Kit for 2 post racks)</p>	<p><b>XBR-R000296.P</b> (Fixed Rack Mount Kit for 4 post racks) - Included with HD-G620 Switch</p> <p><b>XBR-R000294.P</b> (Mid-Mount Rack Kit for 2 post racks)</p>	<p><b>XBR-R000162.P</b> (4-post Fixed Rack Mount Kit) - Included with HD-G610 Switch</p> <p><b>XBR-000165.P</b> (Mid-Mount (TELCO) Rack Kit)</p> <p><b>XBR-R000070.P</b> (Slide Rack Mount Kit)</p>
<b>Included Accessories</b>	Two 6' C13 / NEMA 5-15 power cords (PCUSA2) RJ45-Mini USB connector	Two 6' C13 / NEMA 5-15 power cords (PCUSA2) Serial cable with RJ-45 connector	One 6' C13 / NEMA 5-15 power cords (PCUSA2) Serial cable with RJ-45 connector
<b>Optional Hardware</b>	<p><b>XBR-USB-4GB.P</b> (USB Flash Drive, 4 GB)</p> <p><b>PC AUS.P</b> (Australia/NZ Power Cord, AS 3112 to C13, 10A/250V, 2.5m)</p> <p><b>PC CHINA-250.P</b> (China Power Cord, IEC 60309 to C13, 10A/250V, 2.5m)</p> <p><b>PC UK-EPS.P</b> (UK Power Cord, BS89/13 TO C13, 13A/250V, 2.5m)</p> <p><b>PC USA2.P</b> (North America Power Cord, NEMA 5-15 to C13, 13A/125V, 2m) - Qty-2 Included with HD-G630 switch</p>	<p><b>XBR-USB-4GB.P</b> (USB Flash Drive, 4 GB)</p> <p><b>PC AUS.P</b> (Australia/NZ Power Cord, AS 3112 to C13, 10A/250V, 2.5m)</p> <p><b>PC CHINA-250.P</b> (China Power Cord, IEC 60309 to C13, 10A/250V, 2.5m)</p> <p><b>PC UK-EPS.P</b> (UK Power Cord, BS89/13 TO C13, 13A/250V, 2.5m)</p> <p><b>PC USA2.P</b> (North America Power Cord, NEMA 5-15 to C13, 13A/125V, 2m) - Qty-2 Included with HD-G620 switch</p>	<p><b>XBR-USB-4GB.P</b> (USB Flash Drive, 4 GB)</p> <p><b>PC AUS.P</b> (Australia/NZ Power Cord, AS 3112 to C13, 10A/250V, 2.5m)</p> <p><b>PC CHINA-250.P</b> (China Power Cord, IEC 60309 to C13, 10A/250V, 2.5m)</p> <p><b>PC UK-EPS.P</b> (UK Power Cord, BS89/13 TO C13, 13A/250V, 2.5m)</p> <p><b>PC USA2.P</b> (North America Power Cord, NEMA 5-15 to C13, 13A/125V, 2m) - Qty-1 Included with HD-G610 switch</p>
<b>Optional Software</b>	<p><b>HD-MENT128IRPODI-Z.P</b> (Integrated Routing, 14 months support)</p> <p><b>BR-MENTEBS-01.P</b> (Enterprise Bundle: Trunking Fabric Vision, Enterprise Fabric)</p>	<p><b>BR-MIDREBS-01.P</b> (S/W, Enterprise Bundle: Trunking, Fabric Vision, Enterprise Fabric)</p> <p><b>BR-MIDRMFEB-01-Z.P</b> (Mainframe Enterprise BNDL: TRK,FV,EF,CUP, 13 months support)</p> <p><b>BR-MIDRIR-01-Z.P</b> (S/W, Integrated Routing)</p>	<p><b>BR-SMEDEB4-01.P</b> (S/W, Enterprise Bundle: Trunking, Fabric Vision, Extended Fabrics)</p>

## Storage Area Networks (SAN) Management

Brocade SAN Management	Hitachi Vantara Part Number	Description
<b>SANnav Management Portal Base License</b> (Manage up to 600 Switch ports only)		
	BR-SSMPB1Y-01-OSUB.P	SANnav MP BSE 1YR 600 PRT, NO DIR, OEM
	BR-SSMPB3Y-01-OSUB.P	SANnav MP BSE 3YR 600 PRT, NO DIR, OEM
	HD-SSMPB5Y-01-OSUB.P	SANnav MP BSE 5YR 600 PRT, NO DIR, OEM
<b>SANnav Management Portal Enterprise License</b> (Manage up to 15,000 Switch & Director ports)		
	BR-SSMPE1Y-01-OSUB.P	SANnav MP ENT 1YR 15K PRT, DIR, OEM
	BR-SSMPE3Y-01-OSUB.P	SANnav MP ENT 3YR 15K PRT, DIR, OEM
	HD-SSMPE5Y-01-OSUB.P	SANnav MP ENT 5YR 15K PRT, DIR, OEM
<b>SANnav Global View</b> (Manage up to 20 SANnav Management Portal instances)		
	BR-SSGV1Y-01-OSUB.P	SANnav GLOBAL VIEW 1YR, OEM
	BR-SSGV3Y-01-OSUB.P	SANnav GLOBAL VIEW 3YR, OEM
	HD-SSGV5Y-01-OSUB.P	SANnav GLOBAL VIEW 5YR, OEM
<b>SANnav Subscription Renewals for Existing Customers</b>		
	BR-SSMPB-01-ROSUB.P	SANnav Management Portal Base, NO DIR, Renewal
	BR-SSMPE-01-ROSUB.P	SANnav Management Portal Enterprise, DIR, Renewal
	BR-SSGV-01-ROSUB.P	SANnav Global View, Renewal

## Storage Area Network (SAN) Extension

BROCADE MODEL	EXTENSION SWITCHES		
	7850	7840	7810
			
<b>Ports</b>	(24) 64G FC + (16) 1/10/25GbE + (2) 100GbE	(24) FC 16G with optics and (16) 1 or 10GbE no optics, (2) 40GbE no optics	(12) FC 32G + (6) 1GbE/10GbE + (2) 1GbERJ45 (maximum of 6 IP ports can be used)
<b>Port Speed</b>	8, 16, 32, and 64 Gbps FC 1, 10, 25 and 100 GbE	4, 8, and 16 Gbps FC 1, 10, and 40 GbE	8, 16, and 32 Gbps FC 1, and 10GbE
<b>Hitachi Vantara Models</b>	<b>HD-7850-0001-Z.P</b> 7850 Open Systems bundle, 16x 64G SWL SFP, 4x 10/1GE SR SFP, 4x 25/10GE SR SFP, 2x 100GE SR4 QSFP, ENT Bundle (TRK, FV, EF, IR) <b>HD-7850-0002-Z.P</b> 7850 Mainframe Bundle, 16x 64G LWL SFP, 4x 10/1GE SR SFP, 4x 25/10GE SR SFP, 2x 100GE SR4 QSFP, FICON ENT Bundle (TRK, FV, EF, IR, CUP), ADV Accelerator for FICON All SKUs are Portside Exhaust Air Flow All SKUs include 14 months maintenance support	<b>HD-7840-B-0001-Z.P</b> (42 Ports: 24x16 SW SFP, 0x1/10/40GbE, EB, AEX) <b>HD-7840-B-0002-Z.P</b> (42 Ports: 24x16 LW SFP, 0x1/10/40GbE, EB, AEX) All SKUs include 14 months maintenance support	<b>HD-7810-04X6-Z.P</b> (4 Ports: 4x16Gb SWL SFP, rail kit), IP Optics Not Included <b>HD-7810-12X6-Z.P</b> (12 Ports: 12x16Gb SWL SFP, rail kit), IP Optics Not Included All SKUs include 14 months maintenance support
<b>Rail Kits</b>	<b>XBR-R000296.P</b> (Fixed Rack Mount Kit for 4 post racks) - Included with HD-7850 <b>XBR-R000294.P</b> (Mid-Mount Rack Kit for 2 post racks)	<b>XBR-R000296.P</b> (Fixed Rack Mount Kit for 4 post racks) - Included with HD-7840 <b>XBR-R000294.P</b> (Mid-Mount Rack Kit for 2 post racks)	<b>XBR-R000296.P</b> (Fixed Rack Mount Kit for 4 post racks) - Included with HD-7810 <b>XBR-R000294.P</b> (Mid-Mount Rack Kit for 2 post racks)
<b>Included Accessories</b>	Two 6' C13 / NEMA 5-15 power cords (PCUSA2) Serial cable with RJ-45 to DB9F connector	Two 6' C13 / NEMA 5-15 power cords (PCUSA2) Serial cable with RJ-45 connector	Two 6' C13 / NEMA 5-15 power cords (PCUSA2) Serial cable with RJ-45 connector
<b>Optional Hardware</b>	<b>XBR-USB-4GB.P</b> (USB Flash Drive, 4 GB) <b>PC AUS.P</b> (Australia/NZ Power Cord, AS 3112 to C13, 10A/250V, 2.5m) <b>PC CHINA-250.P</b> (China Power Cord, IEC 60309 to C13, 10A/250V, 2.5m) <b>PC UK-EPS.P</b> (UK Power Cord, BS89/13 TO C13, 13A/250V, 2.5m) <b>PC USA2.P</b> (North America Power Cord, NEMA 5-15 to C13, 13A/125V, 2m) - Qty-2 Included with HD-7850	<b>XBR-USB-4GB.P</b> (USB Flash Drive, 4 GB) <b>PC AUS.P</b> (Australia/NZ Power Cord, AS 3112 to C13, 10A/250V, 2.5m) <b>PC CHINA-250.P</b> (China Power Cord, IEC 60309 to C13, 10A/250V, 2.5m) <b>PC UK-EPS.P</b> (UK Power Cord, BS89/13 TO C13, 13A/250V, 2.5m) <b>PC USA2.P</b> (North America Power Cord, NEMA 5-15 to C13, 13A/125V, 2m) - Qty-2 Included with HD-7840	<b>XBR-USB-4GB.P</b> (USB Flash Drive, 4 GB) <b>PC AUS.P</b> (Australia/NZ Power Cord, AS 3112 to C13, 10A/250V, 2.5m) <b>PC CHINA-250.P</b> (China Power Cord, IEC 60309 to C13, 10A/250V, 2.5m) <b>PC UK-EPS.P</b> (UK Power Cord, BS89/13 TO C13, 13A/250V, 2.5m) <b>PC USA2.P</b> (North America Power Cord, NEMA 5-15 to C13, 13A/125V, 2m) - Qty-2 Included with HD-7810
<b>Optional Software</b>		<b>BR-MIDRIR-01.P</b> (Integrated Routing) <b>BR-LEXTSUG1-01-Z.P</b> (WAN Rate Upgrade 1, 10Gbps, 14 months support) <b>BR-LEXTSUG2-01-Z.P</b> (WAN Rate Upgrade 2, >10Gbps; Upgrade 1 required, 14 months support) <b>BR-LEXTSAFI-01-Z.P</b> (Advanced Accelerator for FICON, 14 months support) <b>BR-MIDRCUP-01-Z.P</b> (CUP, FICON, In-Band Management for single switch, 14 months support)	<b>XHD-7810-UG-Z.P</b> (Upgrade License, with 8x16Gb SFP, 14 months support)

## Optics

Description	SKU (Qty)	Directors and Blades						Switches					Extension				
		X7 ICL	X6 ICL	FC64-64	FC64-48	FC32-X7-48	FC32-64	FC32-48	G730	G720	G630	G620	G610	SX6	7840	7810	7850
Fibre Channel Optics																	
SFP+, SWL, 64G, SECURE	XBR-000462.P (1PK) XBR-000463.P (8PK)			Yes	Yes				Yes	Yes							Yes
SFP+, LWL, 64G, 10KM, SECURE	XBR-000468.P (1PK) XBR-000469.P (8PK)			Yes	Yes				Yes	Yes							Yes
SFP+, ELWL 25KM, 64G, SECURE	XBR-000466.P (1PK)				Yes				Yes	Yes							Yes
SFP-DD, SWL, 64G, SECURE	XBR-000464.P (1PK) XBR-000465.P (8PK)			Yes					Yes	Yes							Yes
QSFP, SWL, GEN 7 ICL, SECURE	XBR-000420.P (1PK)	Yes															
QSFP, 2KM, GEN 7 ICL, SECURE	XBR-000476.P (1PK)	Yes															
SFP+, SWL, 32G	XBR-000212.P (1PK) XBR-000213.P (8PK)							Yes			Yes	Yes	Yes	Yes		Yes	
SFP+, SWL, 32G, SECURE	XBR-000412.P (1PK) XBR-000413.P (8PK)				Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
SFP+, LWL, 32G, 10KM	XBR-000238.P (1PK) XBR-000239.P (8PK)							Yes			Yes	Yes	Yes	Yes		Yes	
SFP+, LWL, 32G, 10KM, SECURE	XBR-000438.P (1PK) XBR-000439.P (8PK)			Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
SFP+, ELWL, 32G, 25KM	XBR-000278.P (1PK)							Yes			Yes	Yes	Yes	Yes			
SFP+, ELWL, 32G, 25KM, SECURE	XBR-000478.P (1PK)				Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes			
SFP+, ELWL, 32G, 25KM, SECURE	XBR-000479.P (1PK)			Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes				
QSFP, SWL, 4X32G, WITH BREAKOUT	XBR-000275.P (1PK)		Yes					Yes			Yes	Yes					
QSFP, SWL, 4X32G, WITH BREAKOUT, SECURE	XBR-000475.P (1PK)	Yes	Yes				Yes				Yes	Yes					
SFP+, SWL, 16G	XBR-000192.P (1PK) XBR-000193.P (8PK)							Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes
SFP+, SWL, 16G, SECURE	XBR-000492.P (1PK) XBR-000493.P (8PK)					Yes		Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes
SFP+, LWL, 16G, 10KM	XBR-000198.P (1PK) XBR-000199.P (8PK)							Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes
SFP+, LWL, 16G, 10KM, SECURE	XBR-000498.P (1PK) XBR-000499.P (8PK)					Yes		Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes
SFP+, ELWL 25KM, 16G	XBR-000258.P (1PK)							Yes			Yes	Yes	Yes	Yes	Yes	Yes	
SFP+, ELWL 25KM, 16G, SECURE	XBR-000458.P (1PK)					Yes		Yes			Yes	Yes	Yes	Yes	Yes	Yes	
SFP+, SWL, 8G	XBR-000163.P (1PK) XBR-000164.P (8PK)															Yes	
SFP+, LWL, 8G, 10KM	XHD-000153.P (1PK) XHD-000172.P (8PK)															Yes	
SFP+, ELWL 25KM, 8G	XBR-000174.P (1PK)															Yes	
QSFP, SWL, 4X16G, WITH BREAKOUT	XBR-000245.P (1PK)		Yes				Yes				Yes	Yes					
QSFP (4X16G), 2KM	XBR-000255.P (1PK)		Yes														
SFP+, SWL, 10GFC	XBR-000218.P (1PK)							Yes			Yes	Yes		Yes			
SFP+, SWL, 10GFC, SECURE	XBR-000418.P (1PK)				Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes			
SFP+, LWL, 10GFC, 10KM	XBR-000217.P (1PK)							Yes			Yes	Yes		Yes			
SFP+, LWL, 10GFC, 10KM, SECURE	XBR-000417.P (1PK)				Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes			

**Note:** Brocade Gen 7 products require Secure Fibre Channel optics (denoted by SECURE) in their description. Additional optics may be available. Please consult [Brocade's Transceiver Support Matrix](#) for the most current information.

## Optics

Description	SKU (Qty)	Directors and Blades						Switches					Extension				
		X7 ICL	X6 ICL	FC64-64	FC64-48	FC32-X7-48	FC32-64	FC32-48	G730	G720	G630	G620	G610	SX6	7840	7810	7850
Ethernet Optics for FCIP Ports																	
SFP, 1GE COPPER	XBR-000190.P (1PK)														Yes	Yes	Yes
SFP+, 1000BASE-SX, MMF	EIMG-SX-OM.P (1PK) EIMG-SX-OM-8.P (8PK)														Yes	Yes	Yes
SFP+, 1000BASE-LX, SMF	EIMG-LX-OM.P (1PK) EIMG-LX-OM-8.P (8PK)														Yes	Yes	Yes
SFP+, SR, 10G	XBR-000180.P (1PK) XBR-000181.P (8PK)														Yes	Yes	Yes
SFP+, LR, 10G	XBR-000182.P (1PK) XBR-000183.P (8PK)														Yes	Yes	Yes
SFP+, 10G USR OPTIC	10G-SFPP-USR.P (1PK) 10G-SFPP-USR-8.P (8PK)														Yes	Yes	Yes
QSFP+, 10GBASE-SR COMPATIBLE	XBR-40G-SR4-INT-0286.P (1PK)							Yes							Yes	Yes	
QSFP+, SR, 40GE, LC, BIDIRECTIONAL	XBR-40G-SR-BIDI-0287.P (1PK)							Yes							Yes	Yes	
QSFP+, 40GBASE-SR4	40G-QSFP-SR4.P (1PK)														Yes	Yes	
QSFP+, 40GBASE-LR4	40G-QSFP-LR4.P (1PK)														Yes	Yes	
QSFP+, 40GBASE-ER4, 40KM, LC	40G-QSFP-ER4.P (1PK)														Yes	Yes	
QSFP+, 100GBE QSFP28 (MTP 1X12), SR4, 100M	XBR-100G-SR4-0288.P (1PK)							Yes									
100GE QSFP SR4	XBR-100G-SR4-01.P (1PK)																Yes
10/1GE SFP+ SR	XBR-10G-SR-01.P (1PK)																Yes
25/10GE SFP+ SR	XBR-25G-SR-01.P (1PK)																Yes
25/10GE SFP+ LR	XBR-25G-LR-01.P (1PK)																Yes

Additional optics may be available. Please consult [Brocade's Transceiver Support Matrix](#) for the most current information.