EDGE & CAMPUS NETWORKING QUICK REFERENCE GUIDE

D&LLTechnologies

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Series		PowerSwitch E3200 Series		PowerSwitch N3200 Series								
Overview	High performance open networking 1	GbE and 10GbE multigigabit switches for	modern workloads at the network edge	Power-efficient and resilient 1GbE and 1/2.5/5/10GbE Multigig range of switching solution with PoE options, for advanced Layer 3 distribution in enterprise campus and retail networks.								
Models (all sized 1RU)	E3224F-ON	E3248P-ON	E3248PXE-ON	N3248P-ON	N3248PXE-ON	N3224F-ON						
NPU	Broadcon	1 Trident3-X3	Broadcom Trident3-X5	Broadcom Trident3-X3	Broadcom Trident3-X5	Broadcom Trident3-X3						
Form factor		1U	1	1 U								
Performance												
Switch capacity (Gbps)	528	576	1560	576	1560	528						
Forwarding capacity (Mpps)	733	800	2167	800	2167	733						
Buffer size	8 MB	8 MB	32 MB	8 MB	32 MB	8 MB						
Ports												
1GBase-T	24 (SFP)	48	-	48	-	24 (SFP)						
5GBase-T Multigig (1/2.5/5G)		-										
10GBase-T Multigig (1/2.5/5/10G)	-	-	48	-	48	-						
10G (SFP+)	4	4	-	4	-	4						
25G (SFP28)	-	-	4	-	4	-						
100GbE (QSFP28)		2 (Rear side)	1	2 (Rear side) - Default for stacking								
Power-over-Ethernet ports	-	48x 802.3at (30W) PoE	48x 802.3bt Type-4 (90W) PoE	48x 802.3at (30W) PoE	48x 802.3bt Type-4 (90W) PoE	-						
Power and cooling												
Max power consumption (watts)	230	1683	4869	1677	5344	224						
Power options	AC	AC	AC	AC	AC	AC or DC						
Internal power supplies			2 hot swappable redundant power sup	plies. 1 PSU included, 2nd PSU optiona	al.							
Redundant power	550W AC	1050W AC	1600W AC	1050W AC	1600W AC	550W AC or DC						
Airflow	I/O to power supply. Supports field replaceable fans with N+1 redundancy. I/O to power supply. Supports field replaceable fans with N+1 redundancy. I/O options. Supports field replace. fans with N+1 redundancy.											
Features												
Operating Systems	Dell SmartFabric OS10	Enterprise SONiC Distrit	oution by Dell Technologies	Dell OS6	Enterprise SONiC Distribution by Dell Technologies, Dell OS6	Dell OS6						
VLANs	4094											
VLAN support		Voice VLAN, Private Edge, Protocol and MAC-based, GVRP, 802.11x, Auto VLAN										
Layer 2 and 3	Layer 3 Advanced											
Jumbo frames	9216 bytes											
IPv4/IPv6 routing	IPv4 and IPv6 functionality including BGP, VRF, BFD, OSPFv2/v3											
Multicast routing		PIM-SM, PIM-DM, PIM-SSM										
Rapid Deployment	Deploy switch configuration files and firmware updates by simply inserting a USB device.											
Management and security												
Switch security	AAA authorization, TACACS+ accounting and RADIUS support for comprehensive secure access support. Port security 802.1x in N3248PXE, N3248X, N3248TE, E3248PXE, E3248PXE, MACsec support in E3248PXE-ON, N3248PXE-ON											
SNMP support	SNMPv1/2/3											
sFlow	Yes											
Management	CLI via console, Telnet or serial connection. GUI access via http/https. CLI via console, Telnet or serial connection.											

Carias		N11100								
Series	Dewer officient (N1100								
Overview					ith PoE options, for advanced Layer 3 distribution in enterprise campus and retail networks.		Fully managed 1GbE Layer 2 switching			
Models (all sized 1RU)	N3208PX-ON	N3224P-ON	N3224PX-ON	N3224T-ON	N3248TE-ON	N3248X-ON	N1108EP-ON			
NPU	Broadcom® Hurricane3-MG	Broadcom	Broadcom Trident3-X3		Broadcom Trident3-X3 Broadcom Trident3-X5					
Form factor	1 U compact			1 U			1 U compact			
Performance										
Switch capacity (Gbps)	88	528	1080	528	576	1560	24			
Forwarding capacity (Mpps)	122	733	1500	733	800	2167	18			
Buffer size	4 MB	8 /	8 MB		8 MB		1.5 MB			
Ports										
1GBase-T	4	24		24	48	-	8			
5GBase-T Multigig (1/2.5/5G)	4			-		·	2 (RJ45) & 2 (SFP)			
10GBase-T Multigig (1/2.5/5/10G)	-	-	24	-	-	48	-			
10G (SFP+)	2	4	-	4	4	-	-			
25G (SFP28)		-	4	-	-	4	-			
100GbE (QSFP28)	-			2 (Rear side) - Default for stacking	3		-			
Power-over-Ethernet ports	8x 802.3bt Type-4 (90W) PoE	24x 802.3at (30W) PoE	24x 802.3bt Type-4 (90W) PoE	-	-	-	8			
Power and cooling										
Max power consumption (watts)	900	944	2740	201	212	480	19.51			
Power options	AC	AC	AC	AC or DC	AC or DC	AC or DC	AC			
Internal power supplies	1 PSU included		2 hot swappable redu	undant power supplies. 1 PSU includ	ded, 2nd PSU optional.		-			
Redundant power	320W AC	1050W AC	1600W AC	550W AC or DC	550W AC or DC	550W AC or DC	-			
Airflow	I/O to power supply. Fixed fans.	D to power supply. Fixed fans. I/O to power supply. Supports field replaceable fans with N+1 redundancy. I/O to power supply & power supply to I/O options. Supports field replaceable fans with N+1 redundancy.								
Features										
Operating Systems		Dell	II OS6		Enterprise SONiC Distribution	by Dell Technologies, Dell OS6	Dell OS6			
VLANs		4094								
VLAN support		Voice VLAN, Private Edge, Protocol- based, Auto VLAN								
Layer 2 and 3		Layer 2 only								
Jumbo frames	9216 bytes									
IPv4/IPv6 routing	IPv4 and IPv6 functionality including BGP, VRF, BFD, OSPFv2/v3									
Multicast routing	PIM-SM -									
Rapid Deployment		Yes								
Management and security										
Switch security	AAA authorization, TACACS+ ac	Strong passwords, password masking, management access control - privilege levels. RADIUS and TACACS+ support, 802.1x port-based authentication.								
SNMP support	SNMPv1/2/3									
sFlow		v1.3 draft 5								
Management		GUI access via http/https. CLI via console, Telnet, SSH								

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Dell Technologies Campus Switching Quick Reference Guide | December 2022 | Version 6.9 For aggregation choices, including Dell PowerSwitch S4100 and S5200 series, please see <u>Data Center Networking Quick Reference Guide</u>