

# RUCKUS<sup>®</sup> ICX 8200

Enterprise-class stackable access switch with future-proof expandability

The RUCKUS ICX 8200 Switch series is purposely designed to handle next generation wireless first and IoT campus networks. These intelligent, scalable edge switches deliver enterprise-class functionality at an affordable price without compromising performance and reliability.

The RUCKUS ICX 8200 raises the bar with up to 8× 25 GbE ports for uplinks or stacking, PoE++ (802.3bt), VXLAN, advanced L2/L3 features and market-leading stacking density with up to 12 switches per stack. In addition, the RUCKUS ICX 8200 combines enterprise-class features, manageability, performance, and reliability with the flexibility, costeffectiveness, and "pay as you grow" scalability of stackable solution.



## Benefits

## Maximum flexibility: Gigabit, Multigigabit edge ports and Fiber to the Room

- Optimized for latest generation Wi-Fi 6/6E/7 AP deployments with multigigabit ports.
- 8, 24 and 48 Gigabit Ethernet ports
- Up to 24x 1/2.5G Multigigabit RJ45 ports
- Up to 4× 1/2.5/5/10 Gbps Multigigabit RJ-45 ports
- Up to 48x 1G SFP fiber ports
- Up to 24x 10G SFP+ fiber ports

#### Power next generation APs and PoE devices

- PoE+ 802.3at, 30W per port on all ports
- PoE++ 802.3bt, 60/90W on multigigabit ports
- Up to 1480W PoE budget with two power supplies

## 25 GbE uplinks/stacking for maximum performance and future-proofing

- Stacking comes standard with all ICX 8200
- Up to 8x 1/10/25GbE SFP28 fiber ports for uplink and/or stacking

#### Enhanced Security and data privacy

• VXLAN\* support for advanced network segmentation and data confidentiality

#### Advanced L3 routing delivers network design flexibility

- IPv4 and IPv6 L3 routing
- Static routes, RIP, OSPF, VRRP, VRF, GRE, PIM, PBR

## Broad range of unified management options for maximum flexibility

- On Premises: SmartZone
- Cloud Based: RUCKUS Cloud\*
- Controllerless: RUCKUS Unleashed\*
- RUCKUS Analytics

#### Enhanced availability

Redundant, load-sharing power supplies and fans on specific models

#### Services and Support Included

- 3 Years remote TAC support included with every ICX 8200 model
- Limited lifetime warranty

RUCKUS ICX 8200 with RJ45 Copper ports and	
These stackable RUCKUS ICX 8200 models offer a single in one USB Type-C port for console management, one RJ-45 p	tegrated power supply, one RJ-45 Ethernet port for out-of-band network management, port for serial console management, and one USB port for external file storage.
	ICX 8200-24 • 24× 10/100/1000 Mbps RJ-45 ports • 4× 1/10/25 GbE uplink/stacking SFP28 ports
	ICX 8200-24P PoE • 24× 10/100/1000 Mbps RJ-45 PoE+ ports • 4× 1/10/25 GbE uplink/stacking SFP28 ports • 370 W PoE budget. PoE+ 802.3at
	<ul> <li>ICX 8200-24ZP Multigigabit PoE</li> <li>24× 100/1000/2500 Mbps RJ-45 PoE++ 90W ports</li> <li>4× 1/10/25 GbE uplink/stacking SFP28 ports</li> <li>740 W PoE budget.</li> </ul>
	<b>ICX 8200-48</b> • 48× 10/100/1000 Mbps RJ-45 ports • 4× 1/10/25 GbE uplink/stacking SFP28 ports
	ICX 8200-48P PoE • 48× 10/100/1000 Mbps RJ-45 PoE+ ports • 4× 1/10/25 GbE uplink/stacking SFP28 ports • 370 W PoE budget. PoE+ 802.3at
	ICX 8200-48PF PoE • 48× 10/100/1000 Mbps RJ-45 PoE+ ports • 4× 1/10/25 GbE uplink/stacking SFP28 ports • 740 W PoE budget. PoE+ 802.3at

#### RUCKUS ICX 8200 with hot-swap power supplies and fans

These stackable RUCKUS ICX 8200 models offers 2 slots for redundant hot swappable load sharing power supplies, 2 slots for hot swappable fans, one RJ-45 Ethernet port for out-of-band network management, one USB Type-C port for console management, one RJ-45 port for serial console management, and one USB port for external file storage.

<ul> <li>ICX 8200-48PF2 PoE</li> <li>48× 10/100/1000 Mbps RJ-45 PoE+ ports</li> <li>4× 1/10/25 GbE uplink/stacking SFP28 ports</li> <li>1440 W PoE budget with two PSUs (740W with one PSU)</li> <li>Dual hot swappable power supplies and fans</li> </ul>
<ul> <li>ICX 8200-48ZP2 Multigigabit PoE</li> <li>32× 10/100/1000 Mbps RJ-45 PoE+ ports</li> <li>16× 100/1000/2500 Mbps RJ-45 PoE++ 90W ports</li> <li>4× 1/10/25 GbE uplink/stacking SFP28 ports</li> <li>1480 W PoE budget with two PSUs (740W with one PSU)</li> <li>Dual hot swappable power supplies and fans</li> </ul>

RUCKUS ICX 8200 Compact	
These RUCKUS ICX 8200 compact switches offer a single in Ethernet port for out-of-band network management, one I	ntegrated power supply, one USB Type-C port for console management, one RJ-45 RJ-45 port for serial console management, and one USB port for external file storage.
	ICX 8200-C08P PoE • 8× 10/100/1000 Mbps RJ-45 PoE+ ports • 2× 1/10GbE uplink/stacking SFP+ ports • 124 W PoE budget PoE+ 802.3at
	ICX 8200-C08ZP Multigigabit PoE • 4× 100/1000/2500 Mbps RJ-45 PoE++ 90W ports • 4× 1/2.5/5/10 Gbps RJ-45 PoE++ 90W ports • 2× 1/10/25 GbE uplink/stacking SFP28 ports • 240 W PoE budget

RUCKUS ICX 8200 Fiber	
	regrated power supply, one RJ-45 Ethernet port for out-of-band network management, port for serial console management, and one USB port for external file storage
( (H <b>) ++++++</b> (++++++ (H))	ICX 8200-24F Fiber • 24× 1GbE SFP ports • 4× 1/10/25 GbE uplink/stacking SFP28 ports
	ICX 8200-48F Fiber • 48× 1GbE SFP ports • 4× 1/10/25 GbE uplink/stacking SFP28 ports
	ICX 8200-24FX 10G Fiber • 16× 1/10GbE SFP+ ports • 8× 1/10/25 GbE uplink/stacking SFP28 ports

	Gigabit Compact		abit -PoE	Gigabit PoE			
	RUCKUS ICX 8200-C08PF	RUCKUS ICX 8200-24	RUCKUS ICX 8200-48	RUCKUS ICX 8200-24P	RUCKUS ICX 8200-48P	RUCKUS ICX 8200-48PF	RUCKUS ICX 8200-48PF2
Feature							
<b>Switching capacity</b> (data rate, full duplex)	56 Gbps	248 Gbps	296 Gbps	248 Gbps	296 Gbps	296 Gbps	296 Gbps
Forwarding capacity (data rate, full duplex)	42 Mpps	184 Mpps	220 Mpps	184 Mpps	220 Mpps	220 Mpps	220 Mpps
10/100/1000 Mbps RJ45	8	24	48	24	48	48	48
1 Gbps SFP uplinks							
1/10 Gbps SFP/SFP+ uplinks	2						
1/10/25 Gbps SFP/SFP+/SFP28 uplinks		4	4	4	4	4	4
PoE/PoE+ 802.3at ports	8			24	48	48	48
Dual hot-swap power supplies and fan modules							Yes
Max PoE Class 3 ports (15.4 W per port)	8			24	48	48	48
Max PoE+ Class 4 ports (30 W per port)	4			12	12	24	48 (2 PSU)
Energy Efficient Ethernet (802.3az)			,	Yes			
Base IPv4/v6 Layer 3 routing (static routing, RIP)				Yes			
Advanced IPv4/v6 Layer 3 (OSPF, VRRP, VRF, GRE, PIM, PBR)	With License						
Aggregated stacking bandwidth (data rate, full duplex)	240 Gbps			1.2	Tbps		
<b>Stacking density</b> (maximum switches in a stack)	12						
<b>Stacking ports</b> (maximum ports usable for stacking)	Up to 2×10 GbE SFP+				to DE SFP28		
Maximum stacking distance (distance between stacked switches)				10 km			

	Gigabit Compact		abit -PoE	Gigabit PoE			
	RUCKUS ICX 8200-C08PF	RUCKUS ICX 8200-24	RUCKUS ICX 8200-48	RUCKUS ICX 8200-24P	RUCKUS ICX 8200-48P	RUCKUS ICX 8200-48PF	RUCKUS ICX 8200-48PF2
Features				POWER			
Power inlet (AC)				C14			
Input voltage/frequency			AC: 100	to 240 VAC @ 50	to 60 Hz		
Power Supply Hold Time	10ms	10ms	10ms	20ms	20ms	10ms	10ms
Power supply rated max (AC)	240 W	65 W	100 W	525 W	525 W	880 W	920W x 2
PoE power budget (AC)	124 W			370 W	370 W	740 W	740W (1 PSU) 1440W (2 PSU)
Switch power usage (25°C) 10% traffic* (no PoE load) 100% traffic** (full PoE load)	18 W 150 W	31 W 38 W	47 W 54 W	36 W 445 W	49 W 451 W	51W 854 W	86 W 1667 W
Airflow	Fanless		s Mode. ide & back	F	Fanless Mode. Front to side & bac	:k	Front to Back
Switch power dissipation (25°C) 10% traffic* (no PoE load) 100% traffic** (full PoE load)	61 BTU/hr 514 BTU/hr	106 BTU/hr 132 BTU/hr	160 BTU/hr. 184 BTU/hr	124 BTU/hr 1518 BTU/hr	167 BTU/hr 1539 BTU/hr	174 BTU/hr 2914 BTU/hr	294 BTU/hr 5692 BTU/hr
Features						,	
Net Weight	2.27 kg 5.00 lb	3.74 kg 8.24 lb	4.96 kg 10.93 lb	4.34 kg 9.57 lb	5.57 kg 12.28 lb	5.51kg 12.15 lb	6.39 kg 14.08 lb
<b>Dimensions</b> Height	4.40 cm 1.73 Inches	4.40 cm 1.73 Inches	4.40 cm 1.73 inches	4.40 cm 1.73 inches	4.40 cm 1.73 inches	4.40 cm 1.73 inches	4.40 cm 1.73 inches
Width	27.00 cm 10.63 inches	44.00 cm 17.32 inches	44.00 cm 17.32 inches	44.00 cm 17.32 inches	44.00 cm 17.32 inches	44.00 cm 17.32 inches	44.00 cm 17.32 inches
Depth	21.40 cm 8.42 inches	28.00 cm 11.02 inches	37.00 cm 14.57 inches	28.00 cm 11.02 inches	37.00 cm 14.57 inches	37.00 cm 14.57 inches	37.00 cm 14.57 inches
Acoustics (25°C, min fan speed)	Fanless	40.0 dBA	40.0 dBA	41.0 dBA	41.0 dBA	41.0 dBA	51.0 dBA
MTBF (25°C)	2,007,096hr	1,543,328hr	1,136,723hr	1,550,360hr	1,297,288hr	1,070,987hr	561,966hr
Features			M	ANAGEMENT POF	RTS		
<b>USB Type-C port</b> (For console management)		Yes					
<b>RJ45 serial port</b> (For serial console management)		Yes					
<b>USB Type-A port</b> (For external file storage)		Yes					
<b>RJ45 Ethernet port</b> (For out of band network management)		Yes					

\* All downlink ports, stacking ports, and uplink ports are linked up with 10% traffic rate. No PoE load on PoE models. Fans are at nominal speed.

\*\* All downlink ports, stacking ports, and uplink ports are linked up with 100% traffic rate. 100% PoE load on PoE models. Fans are at high speed.

	Multigigabit Ethernet PoE++			Fiber Ethernet		
	RUCKUS ICX 8200-C08ZP	RUCKUS ICX 8200-24ZP	RUCKUS ICX 8200-48ZP2	RUCKUS ICX 8200-24F	RUCKUS ICX 8200-24FX	RUCKUS ICX 8200-48F
Features						
Switching capacity (data rate, full duplex)	200 Gbps	320 Gbps	344 Gbps	248 Gbps	720 Gbps	296 Gbps
<b>Forwarding capacity</b> (data rate, full duplex)	148 Mpps	237 Mpps	254 Mpps	184 Mpps	533 Mpps	219 Mpps
10/100/1000 Mbps RJ45			32			
100/1000 Mbps/2.5 Gbps RJ45 downlinks (full duplex only)	4	24	16			
100Mbps/1/2.5/5/10 Gbps RJ45 downlinks	4					
1 Gbps SFP				24		48
1/10 Gbps SFP+					16	
1/10/25 Gbps SFP/SFP+/SFP28 uplinks	2	4	4	4	8	4
PoE/PoE+ 802.3at ports			32			
PoH / PoE / PoE+ / PoE++ 802.3bt ports	8	24	16			
Dual hot-swap power supplies and fan modules			Yes			
Maximum PoE Class 3 ports (15.4 W per port)	8	24	48			
Maximum PoE+ Class 4 ports (30 W per port)	8	24	24 (1 PSU) 48 (2 PSU)			
Maximum PoE++ Class 6 ports (60 W per port)	4	12	12 (1PSU) 16 (2 PSU)			
Energy Efficient Ethernet (802.3az)		Yes				
Base IPv4/v6 Layer 3 routing (static routing, RIP)			Y	es		
Advanced IPv4/v6 Layer 3 routing (OSPF, VRRP, VRF, GRE, PIM, PBR)			With L	icense		
Aggregated stacking bandwidth (data rate, full duplex)	600 Gbps			1.2 Tbps		
<b>Stacking density</b> (maximum switches in a stack)	12					
Stacking ports (maximum ports usable for stacking)	Up to 2×25 GbE SFP28			Up to 4×25 GbE SFP28		
Maximum stacking distance (distance between stacked switches)			10	km		

	Ν	Multigigabit Ethernet PoE++			Fiber Ethernet		
	RUCKUS ICX 8200-C08ZP	RUCKUS ICX 8200-24ZP	RUCKUS ICX 8200-48ZP2	RUCKUS ICX 8200-24F	RUCKUS ICX 8200-24FX	RUCKUS ICX 8200-48F	
Features			PO	WER			
Power inlet (AC)			C	14			
Input voltage/frequency			AC: 100 to 240 V	AC @ 50 to 60 Hz			
Power supply hold time	20ms	10ms	10ms	10ms	10ms	10ms	
Power supply rated max (AC)	305W	950W	920W x 2	100W	150W	180W	
PoE power budget (AC)	240W	740W	800W (1 PSU) 1480W (2 PSU)				
Switch power usage (25°C) 10% traffic* (no PoE load) 100% traffic** (full PoE load)	41W 300W	69W 920W	90W 1839W	65W 78W	82W 93W	106W 118W	
Airflow	Fanless	Front to s	ide & back		Front to side & back		
Switch power dissipation (25°C) 10% traffic* (no PoE load) 100% traffic** (full PoE load)	140 BTU/hr. 1023 BTU/hr.	235 BTU/hr. 3139 BTU/hr.	305 BTU/hr. 6275 BTU/hr.	223 BTU/hr. 264 BTU/hr.	279 BTU/hr. 316 BTU/hr.	362 BTU/hr. 402 BTU/hr.	
Features							
Net Weight	3.23 Kg	5.22 Kg	6.64 Kg (2 PSUs)	3.77 Kg	3.81 Kg	4.30 Kg	
Dimensions							
Height	4.40 cm 1.73 Inches	4.40 cm 1.73 inches	4.40 cm 1.73 inches	4.40 cm 1.73 inches	4.40 cm 1.73 inches	4.40 cm 1.73 inches	
Width	27.00 cm 10.63 inches	44.00 cm 17.32 inches	44.00 cm 17.32 inches	44.00 cm 17.32 inches	44.00 cm 17.32 inches	44.00 cm 17.32 inches	
Depth	26.00 cm 10.24 inches	28.00 cm 11.02 inches	37.00 cm 14.57 inches	28.00 cm 11.02 inches	28.00 cm 11.02 inches	28.00 cm 11.02 inches	
Acoustics (25°C, min fan speed)	Fanless	41.0 dBA	51.0 dBA	41.0 dBA	41.0 dBA	41.0 dBA	
MTBF (25°C)	539,091hr	936,765hr	536,710hr	1,190,512hr	890,716hr	1,699,974hr	
Features							
<b>USB Type-C port</b> (For console management)		Yes					
<b>RJ45 serial port</b> (For serial console management)		Yes					
<b>USB Type-A port</b> (For external file storage)		Yes					
<b>RJ45 Ethernet port</b> (For out of band network management)			Y	es			

\* All downlink ports, stacking ports, and uplink ports are linked up with 10% traffic rate. No PoE load on PoE models. Fans are at nominal speed.

\*\* All downlink ports, stacking ports, and uplink ports are linked up with 100% traffic rate. 100% PoE load on PoE models. Fans are at high speed.

## **RUCKUS ICX 8200 Specifications**

Features	SPECIFICATIONS	
Connector options	<ul> <li>10/100/1000 Mbps RJ-45</li> <li>1/2.5 Gbps RJ-45</li> <li>1/2.5/5/10 Gbps RJ-45</li> <li>1 Gbps SFP ports</li> <li>1/10 Gbps SFP+ ports</li> <li>1/10/25 Gbps SFP28 ports</li> </ul>	<ul> <li>Out-of-band Ethernet management: 10/100/1000 Mbps RJ-45</li> <li>Console management: RJ45 serial port and USB Type-C port with serial communication device class support</li> <li>File transfer: USB port, standard-A plug</li> <li>For the latest information about supported optics, please visit www.commscope.com/ruckus.</li> </ul>
DRAM NVRAM (eMMC) Packet buffer size	• 4 GB • 8 GB • 4 MB	
Maximum MAC addresses	• 32K	
Maximum VLANs Maximum PVLANs	• 4,095 • 32	
Maximum STP (spanning trees instances)	• 253	
Maximum VEs	• 512	
Maximum ARP entries	• 8192	
Maximum routes (in hardware)	<ul><li>16k IPv4, 4k IPv6</li><li>Next hop address: 8k</li></ul>	
Trunking	<ul><li>Maximum ports per LAG : 8</li><li>Maximum Link Aggregation Groups : 128</li></ul>	
Maximum jumbo frame size	• 9,216 bytes	
QoS priority queues	• 8 per port	
Multicast groups	<ul> <li>4096 (Layer2 IGMP) 512 (Layer2 MLD)</li> <li>4096 (IPv4 PIM) 512 (IPv6 PIM)</li> </ul>	
Quality of Service (QoS	<ul> <li>ACL Mapping and Marking of ToS/DSCP (CoS)</li> <li>ACL Mapping and Marking of 802.1p</li> <li>ACL Mapping to Priority Queue</li> <li>Classifying and Limiting Flows Based on TCP Flags</li> <li>DiffServ Support</li> </ul>	<ul> <li>Honoring DSCP and 802.1p (CoS)</li> <li>MAC Address Mapping to Priority Queue</li> <li>Priority Queue Management using Weighted Round Robin</li> <li>(WRR), Strict Priority (SP), and a combination of WRR and SP</li> </ul>
Traffic management	<ul> <li>ACL-based inbound rate limiting and traffic policies</li> <li>Broadcast, multicast, and unknown unicast rate limiting</li> <li>Inbound rate limiting per port</li> <li>Outbound rate limiting per port and per queue</li> </ul>	
Security	<ul> <li>802.1X authentication</li> <li>MAC authentication</li> <li>Flexible authentication</li> <li>Web authentication</li> <li>DHCP snooping</li> <li>Dynamic ARP inspection</li> <li>Neighbor Discovery (ND) Inspection</li> <li>Bi-level Access Mode (Standard and EXEC Level)</li> <li>EAP pass-through support</li> <li>IEEE 802.1X username export in sFlow</li> <li>Protection against Denial of Service (DoS) attacks</li> <li>Authentication, Authorization, and Accounting (AAA)</li> </ul>	<ul> <li>MAC Address Locking MAC Port Security</li> <li>Advanced Encryption Standard (AES) with SSHv2</li> <li>RADIUS/TACACS/TACACS+</li> <li>Secure Copy (SCP)</li> <li>Secure Shell (SSHv2)</li> <li>Protected Ports</li> <li>Local Username/Password</li> <li>Change of Authorization (CoA) RFC 5176</li> <li>Trusted Platform Module</li> <li>RADSEC (RFC 6614)</li> <li>Encrypted Syslog (RFC 5425</li> </ul>
SDN features	<ul> <li>OpenFlow1 v1.0 and v1.3</li> <li>Operates with OpenDayLight Controller</li> <li>OpenFlow hybrid port mode (Supports both OpenFlow traffic forwarding and regular traffic forwarding on the same port)</li> </ul>	:

## **RUCKUS ICX 8200 Specifications**

Features	SPECIFICATIONS				
High availability	<ul> <li>Layer 3 VRRP/VRRP-E protocol redundancy</li> <li>Real-time state synchronization across the stack</li> <li>Hitless failover and switchover from master to standby stack controller</li> <li>Hot insertion and removal of stacked units</li> <li>Layer 2 VSRP switch redundancy</li> <li>In Service Software Update (ISSU</li> </ul>	k			
Layer 2 feature set	<ul> <li>802.1s Multiple Spanning Tree</li> <li>802.1x Authentication</li> <li>Auto MDI/MDIX</li> <li>BPDU Guard, Root Guard</li> <li>Dual-Mode VLANs</li> <li>MAC-based VLANs, Dynamic MAC-based VLAN activation</li> <li>Dynamic VLAN Assignment</li> <li>Dynamic Voice VLAN Assignment</li> <li>Fast Port Span</li> <li>GVRP : GARP VLAN Registration Protocol</li> <li>IGMP Snooping (v1/v2/v3)</li> <li>IGMP Proxy for Static Groups</li> <li>IGMP v2/v3 Fast Leave</li> <li>Inter-Packet Gap (IPG) adjustment</li> <li>Link Fault Signaling (LFS)</li> <li>MAC Address Filtering</li> <li>MAC Learning Disable</li> </ul>	<ul> <li>MLD Snooping (v1/v2)</li> <li>Multi-device Authentication</li> <li>Per-VLAN Spanning Tree (PVST/PVST+/PRST)</li> <li>Mirroring: Port-based, ACL-based, MAC Filter-based, and</li> <li>VLAN-based</li> <li>PIM-SM v2 Snooping</li> <li>Port Loop Detection</li> <li>Private VLAN</li> <li>Remote Fault Notification (RFN)</li> <li>Single-instance Spanning Tree</li> <li>Trunk Groups (static, LACP)</li> <li>Uni-Directional Link Detection (UDLD)</li> <li>Metro-Ring Protocol (MRP) (v1, v2)</li> <li>Virtual Switch Redundancy Protocol (VSRP)</li> <li>Q-in-Q and selective Q-in-Q</li> <li>VLAN Mapping</li> <li>Topology Groups</li> </ul>			
Base Layer 3 IP routing feature set	<ul> <li>IPv4 and IPv6 static routes</li> <li>RIP v1/v2, RIPng</li> <li>ECMP</li> <li>Port-based Access Control Lists</li> <li>Layer 3/Layer 4 ACLs</li> </ul>	<ul> <li>Host routes</li> <li>Virtual Interfaces</li> <li>Routed Interfaces</li> <li>Route-only Support</li> <li>Routing Between Directly Connected Subnets</li> </ul>			
Premium Layer 3 IP routing feature set with software license	<ul> <li>IPv4 and IPv6 dynamic routes</li> <li>OSPF v2, v3</li> <li>PIM-SM, PIM-SSM, PIM-DM, PIM passive (IPv4, IPv6)</li> <li>PBR</li> </ul>	<ul> <li>Virtual Route Redundancy Protocol VRRP (IPv4)</li> <li>VRRP v3 (IPv6)</li> <li>VRRP-E(IPv4/IPv6)</li> <li>VRF (IPv4 and IPv6</li> <li>GRE</li> </ul>			

Features	STANDARD COMPLIANCE				
IEEE standards compliance	<ul> <li>802.1AB LLDP/ LLDP-MED</li> <li>802.1D MAC Bridging</li> <li>802.1p Mapping to Priority Queue</li> <li>802.1s Multiple Spanning Tree (MST)</li> <li>802.1w Rapid Reconfiguration of Spanning Tree (RSTP)</li> <li>802.1x Port-based Network Access Control (PNAC)</li> <li>802.3 Carrier Sense Multiple Access/Collision Detection</li> <li>(CSMA/CD)</li> <li>802.3ab 1000BASE-T</li> <li>802.3 al Link Aggregation (Dynamic and Static)</li> <li>802.1 AX-2008 Link Aggregation</li> </ul>	<ul> <li>802.3ae 10 Gigabit Ethernet</li> <li>802.3af Power over Ethernet</li> <li>802.3at Power over Ethernet Plus</li> <li>802.3bz Multigigabit Ethernet</li> <li>802.3u 100Base-TX</li> <li>802.3x Flow Control</li> <li>802.3z 1000Base-SX/LX</li> <li>802.3 MAU MIB (RFC 2239)</li> <li>802.1Q VLAN Tagging</li> <li>802.1BR Bridge Port Extension</li> <li>802.3az Energy Efficient Ethernet</li> <li>802.3bt PoE++</li> </ul>			
RFC standards compliance	For a complete list of RFCs supported by the ICX 8200 produc please visit <u>www.commscope.com/ruckus</u> .	t family,			

## **RUCKUS ICX 8200 Specifications**

Features	FEATU	FEATURE SETS			
Management	<ul> <li>DHCP Auto-Configuration</li> <li>Configuration Logging</li> <li>Digital Optical Monitoring</li> <li>Display Log Messages on Multiple Terminals</li> <li>Embedded Web Management (HTTP/HTTPS)</li> <li>Embedded DHCP Server</li> <li>Industry-standard Command Line Interface (CLI)</li> <li>RUCKUS SmartZone, RUCKUS Cloud*, RUCKUS Unleashed*</li> <li>CLI activation of optional software features</li> <li>USB file management and storage</li> <li>Macro for batch execution</li> <li>Out-of-band Ethernet Management</li> <li>RSPAN</li> <li>TFTP</li> <li>TELNET Client and Server</li> <li>SSH / SSH V2</li> </ul>	<ul> <li>Bootp</li> <li>SNMPv1/v2c</li> <li>DHCP Server and DHCP Relay</li> <li>SNMPv3 Intro to Framework</li> <li>Architecture for Describing SNMP Framework</li> <li>SNMP Message Processing and Dispatching</li> <li>SNMPv3 Applications</li> <li>SNMPv3 User-based Security Model</li> <li>SNMP View-based Access Control Model SNMP</li> <li>sFlow</li> <li>Network Time Protocol (NTP)</li> <li>Multiple Syslog Servers</li> <li>SCP</li> <li>Virtual Cable Tester (VCT)</li> <li>From management MIB, please see the ICX technical documentation at <u>www.commscope.com/ruckus</u></li> </ul>			

Features	ENVIRONMENT
Ambient Temperature	<ul> <li>Operational: 0°C to 45°C (32°F to 113°F) at sea level</li> <li>Non-operational: 40°C to 70°C (-40°F to 158°F)</li> </ul>
Relative Humidity (non-condensing)	<ul> <li>Operational: 10% to 90% at 50°C (122°F)</li> <li>Non-operational: 10% to 90% at 70°C (158°F)</li> </ul>
Altitude (above sea level)	<ul> <li>Operational 0 to 3,048 m (10,000 ft)</li> <li>Non-operational: 0 to 12,000 m (39,370 ft)</li> </ul>

Features	COMPLIANCE/CERTIFICATION
Electromagnetic emissions	<ul> <li>FCC Part 15, Subpart B (Class A)</li> <li>EN 55032 (CE mark) (Class A)</li> <li>EN 55035 (CE mark) (Immunity) for Information Technology Equipment</li> <li>EN 55024 (CE mark) (Immunity) for Information Technology Equipment</li> <li>ICES-003 (Canada) (Class A)</li> <li>AS/NZ 55032 (Australia/New Zealand) (Class A)</li> <li>VCCI (Japan) (Class A)</li> <li>VCCI (Japan) (Class A)</li> <li>EN 300 386</li> <li>CNS 15936-1 (BSMI) (Taiwan) (Class A)</li> <li>KN 32 (South Korea) (Class A)</li> <li>KN 35 (South Korea) (Class A)</li> <li>TCVN 7189 / TCVN 7317 (Vietnam) (Class A)</li> <li>EN 61000-3-2</li> <li>EN 61000-3-3</li> </ul>
Safety	<ul> <li>CAN/CSA-C22.2 No. 62368-1/UL 62368-1 - Safety of Information Technology Equipment</li> <li>EN 60825 Safety of Laser Products - Part 1: Equipment Classification, Requirements and User's Guide</li> <li>EN 60950-1/IEC 60950-1/EN 62368-1/EC 62368-1 Safety of Information Technology Equipment</li> <li>CNS 15598-1 (BSMI) (Taiwan)</li> </ul>
Environmental regulatory compliance	<ul> <li>2014/35/EU and 2014/30/EU</li> <li>2011/65/EU – Restriction of the use of certain hazardous substance in electrical and electronic equipment (EU RoHS)</li> <li>2012/19/EU – Waste electrical and electronic equipment (EU WEEE)</li> <li>94/62/EC – packaging and packaging waste (EU)</li> <li>2006/66/EC – batteries and accumulators and waste batteries and accumulators (EU battery directive)</li> <li>1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (EU REACH)</li> <li>Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 – U.S. Conflict Minerals</li> <li>30/2011/TT-BCT – Vietnam circular</li> <li>SJ/T 11363-2006 Requirements for Concentration Limits for Certain Hazardous Substances in EIPs (China)</li> <li>SJ/T 11364-2006 Marking for the Control of Pollution Caused by EIPs (China)</li> <li>CNS 15663 (BSMI) (Taiwan)</li> </ul>
Vibration	• IEC 68-2-36, IEC 68-2-6
Shock and drop	• IEC 68-2-27, IEC 68-2-32
TAA (Trade Agreement Act)	All ICX 8200 SKUs are TAA compliant

## RUCKUS ICX 8200 Ordering Information

Part Number	RUCKUS ICX 8200 Switches with Three-Year Remote TAC support TAA-Compliant
ICX8200-C08PF	RUCKUS ICX 8200 Compact Switch, 8×10/100/1000 Mbps PoE+ ports, 2×10 GbE SFP+ stacking/uplink-ports, 124 W PoE budget, three-year remote TAC support. Power cord not included.
ICX8200-C08ZP	RUCKUS ICX 8200 Compact Switch, 4×100/1000/2500 Mbps PoE++ ports, 4× 1/2.5/5/10Mbps PoE++ ports, 2×25 GbE SFP28 stacking/ uplink-ports, 240 W PoE budget, three-year remote TAC support. Power cord not included.
ICX8200-24	RUCKUS ICX 8200 Switch, 24×10/100/1000 Mbps ports, 4×25 GbE SFP28 stacking/uplink-ports, three-year remote TAC support. Power cord not included.
ICX8200-24P	RUCKUS ICX 8200 Switch, 24×10/100/1000 Mbps PoE+ ports, 4×25 GbE SFP28 stacking/uplink-ports, 370 W PoE budget, three-year remote TAC support. Power cord not included.
ICX8200-24ZP	RUCKUS ICX 8200 Switch, 24×100/1000/2500 Mbps PoE++ ports, 4×25 GbE SFP28 stacking/uplink-ports, 740 W PoE budget, three-year remote TAC support. Power cord not included.
ICX8200-48	RUCKUS ICX 8200 Switch, 48×10/100/1000 Mbps ports, 4×25 GbE SFP28 stacking/uplink-ports, three-year remote TAC support. Power cord not included.
ICX8200-48P	RUCKUS ICX 8200 Switch, 48×10/100/1000 Mbps PoE+ ports, 4×25 GbE SFP28 stacking/uplink-ports, 370 W PoE budget, three-year remote TAC support. Power cord not included.
ICX8200-48PF	RUCKUS ICX 8200 Switch, 48×10/100/1000 Mbps PoE+ ports, 4×25 GbE SFP28 stacking/uplink-ports, 740 W PoE budget, three-year remote TAC support. Power cord not included.
ICX8200-48PF2-E	RUCKUS ICX 8200 Switch, 48×10/100/1000 Mbps PoE+ ports, 4×25 GbE SFP28 stacking/uplink-ports, 740 W PoE budget (with one PSU), hot swap power supplies and fans, one power supply and one fan included, three-year remote TAC support. Power cord not included.
ICX8200-48PF2-E2	RUCKUS ICX 8200 Switch, 48×10/100/1000 Mbps PoE+ ports, 4×25 GbE SFP28 stacking/uplink-ports, 1440 W PoE budget, hot swap power supplies and fans, two power supplies and two fans included, three-year remote TAC support. Power cords not included.
ICX8200-48ZP2-E	RUCKUS ICX 8200 Switch, 32×10/100/1000 Mbps PoE+ ports, 16×100/1000/2500 Mbps RJ-45 PoE++ ports, 4×25 GbE SFP28 stacking/ uplink-ports, 740 W PoE budget (with one PSU), hot swap power supplies and fans, one power supply and one fan included, three-year remote TAC support. Power cord not included.
ICX8200-48ZP2-E2	RUCKUS ICX 8200 Switch, 32×10/100/1000 Mbps PoE+ ports, 16×100/1000/2500 Mbps RJ-45 PoE++ ports, 4×25 GbE SFP28 stacking/ uplink-ports, 1480 W PoE budget, hot swap power supplies and fans, two power supplies and two fans included, three-year remote TAC support. Power cords not included.
ICX8200-24F	RUCKUS ICX 8200 Switch, 24×10/100/1000 Mbps SFP ports, 4×25 GbE SFP28 stacking/uplink-ports, three-year remote TAC support. Power cord not included.
ICX8200-48F	RUCKUS ICX 8200 Switch, 48×10/100/1000 Mbps SFP ports, 4×25 GbE SFP28 stacking/uplink-ports, three-year remote TAC support. Power cord not included.
ICX8200-24FX	RUCKUS ICX 8200 Switch, 16×1/10GbE SFP+ ports, 8×25 GbE SFP28 stacking/uplink-ports, three-year remote TAC support. Power cord not included.

Part Number	RUCKUS ICX 8200 Power Supplies, Fans and Accessories
ICX8200-PREM-LIC	ICX 8200 Layer 3 premium license. Enables advanced layer 3 features (OSPF, VRRP, PIM, PBR, VRF, GRE)
RPS23-E	Hot-swap 920 W AC PoE power supply, front to back airflow. Only applicable to the ICX8200 models with hot swap power supplies (up to 2 per switch) Power cord not included
ICX-FAN13-E	Hot-swap fan tray front to back airflow. Only applicable to the ICX8200 models with hot swap fans (up to 2 per switch)
XBR-R000295	1U, 1.5U, and 2U Universal Kit for Four-Post Racks
ICX7000-RMK	Two-post fixed rack mount kit
ICX7000-C12-RMK	Rack mount kit for compact switches
ICX7000-C12-WMK	Wall Mount Bracket Kit for compact switches
ICX-DIN-MNT	DIN rail mount kit
CC-USBC-USBA	USB 2.0 Cable, Type-C to Type-A, 1 meter (for USB Type-C console port)
CC-RJ45-DB9	Console cable RJ45-RJ45 with RJ-45-DB9 Adapter (for RJ-45 console port)

## **RUCKUS ICX 8200 Ordering Information**

Part Number	Power Cords
PCUSA2	C13 POWER CORD for USA, NEMA5-15/C13, 13A, 125V
PCEURO	C13 Power Cord for Europe
PCAUS	C13 POWER CORD FOR AUSTRALIA
PCCHINA2-IEC309	C13 Power Cord for China, 250V 10A
PCINDIA	C13 6 FOOT AC POWER CORD FOR INDIA
PCJAPAN	C13 Power Cord for Japan version
PCSWISS-C1312G-HF	C13 POWER CORD for Switzerland, SEV1011 TO C13, 10A, 250V, HALOGEN-FREE
PCUK	C13 Power Cord for United Kingdom
PC-C13C14	C13/C14 15A Power Cord

### Warranty

RUCKUS ICX 8200 Switches are covered by the RUCKUS Assurance Limited Lifetime Warranty. For details, visit <u>www.ruckusnetworks.</u> <u>com/warranty</u>.

### Best-in-Class Support

RUCKUS ICX 8200 switches are supported by next-business-day advance replacement where available, as well as software defect repairs and maintenance updates. 3 years remote TAC support is included with the product purchase. Many on-site and TAC support options are available and can be purchased bundled with the product or separately.

### Legal Disclaimer

Product features, functionality and specifications may change or be discontinued without notice. Nothing in this document shall be deemed to create a warranty of any kind, either express or implied, statutory or otherwise, including but not limited to, any implied warranties of merchantability, fitness for a particular purpose, noninfringement of third-party rights or availability with respect to any products and services.

Refer to <u>www.commscope.com/ruckus</u> for the latest version of this document.

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### About RUCKUS Networks

RUCKUS Networks builds and delivers purpose-driven networks that perform in the demanding environments of the industries we serve. Together with our network of trusted go-to-market partners, we empower our customers to deliver exceptional experiences to the guests, students, residents, citizens and employees who count on them.

#### www.ruckusnetworks.com

Visit our website or contact your local RUCKUS representative for more information.

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