

Ruckus ICX Product Family



SALES-GUIDE

CUSTOMER VALUE

Ruckus® ICX® product family offers a complete line of switches designed to work together and deliver a scalable, high-performance network solution critical to ensuring high user productivity with the most demanding applications. Ruckus unique stacking features and innovative Campus Fabric Technology provides simplified network deployment and management, scale-out networking and investment protection at the industry lowest TCO. With ICX switches, Ruckus wireless APs and SmartZone network controller, Ruckus delivers the most performant and cost effective unified wired & wireless access solutions on the market today.

THE RUCKUS ICX ADVANTAGE

Unique Stacking Capabilities

- **Stacking on standard Ethernet ports:** Ruckus ICXs uses 10G/40G/100G standard SFP+/QSFP+/QSFP28 ports for stacking, eliminating proprietary cables. Stacking links can be aggregated to maximize stacking bandwidth and redundancy with up to 12x 40G on the ICX 7750.
- **Long Distance Stacking:** ICX switches can use standard SFP+/QSFP+/QSFP28 optics for stacking over distance up to 10KM for stacking across wiring closets in a building or even between buildings.
- **In service Software Upgrade (ISSU):** A unique capability that enables a stack of ICX switches to go through a software upgrade without taking down the stack.

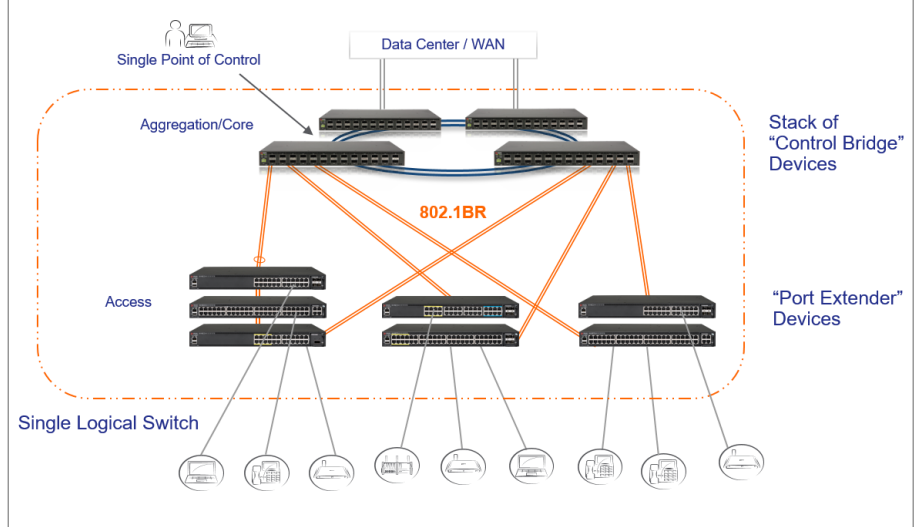
Innovative Campus Fabric

- **Simplified management:** An entire Ruckus fabric, up to 40 switches, is managed as a single logical switch. The network administrator can deploy network policies across the campus from a single point.
- **Elimination of STP inefficiency:** A Ruckus fabric runs from a unified control and forwarding plane, eliminating the need to deploy spanning tree. All links between switches are active at all times.
- **Pay as you grow™ design:** The fabric fixed form factor based design enables cost-effective scale-out networking. Unlike traditional chassis-based aggregation switches, no excess idle capacity is required, and no “fork-lift” upgrade is needed to advance to the next capacity level

Seamless Wired and Wireless Networks

- **All-in-one simplicity:** Single user interface and single Network Operating System for deploying, managing, and troubleshooting, Ruckus access points and ICX switches with Ruckus SmartZone.
- **Network Automation API:** A large set of well documented APIs enables DevOps and 3rd party applications and scripts to invoke provisioning, configuration and real-time monitoring of APs, switches and all devices under management.

RUCKUS CAMPUS FABRIC










PRODUCT SELLING POINTS

Products	Better Value	Advanced Features	Competitive Products
Ruckus ICX 7150 and Ruckus ICX 7150 Compact	<ul style="list-style-type: none">• Stacking included, Software upgradable port speed up to 4x 10 GbE ports• Silent operation with fanless design or fanless mode setting• Highest PoE budget in its class (740W 1RU, 124W Compact), Limited Lifetime Warranty,	Layer 3 features, Stack up to 12 across 7150 family, Campus Fabric	Cisco 2960L, Cisco 2960X, HP 2530/2540, HP 2930F, HP 2920, Juniper EX2300. Compact: Cisco 2960L-8, Cisco 3650CX, HP 2930F-8G, Juniper EX2300-C
Ruckus ICX 7150 Z-Series	<ul style="list-style-type: none">• Stacking included, Software upgradable port speed up to 8x 10 GbE ports• Highest PoE budget in its class (1480W), Limited Lifetime Warranty,	16x 2.5 GbE Multigig and PoH ports, Hot Swappable power supplies/fans, Layer 3 features, Stack up to 12 across 7150 family, Campus Fabric	Cisco 2960X-R, Cisco 3650 Multigig, HP 3810 SmartRate, Juniper EX3200
Ruckus ICX 7250	<ul style="list-style-type: none">• Stacking included, Software upgradable 8 x 1GbE to 8x 10 GbE ports• Limited Lifetime Warranty, free three year support,	Layer 3 features, up to 480 Gbps aggregated stacking bandwidth, stack up to 12, external power supply option. Campus Fabric PE	Cisco 2960S, Cisco 2960-X, HP 5120/2920, Juniper EX3300
Ruckus ICX 7450	<ul style="list-style-type: none">• Ultimate flexibility with 3 modular slots for up to 12 x 10 GbE or 3 x 40 GbE ports, Limited Lifetime Warranty.	Hot Swappable power supplies/fans, PoH with up to 95W per port, Advanced Layer 3, BGP, GRE tunneling. Campus Fabric, IPsec, MACsec	Cisco 3750-X, Cisco 3850, HP E3500, HP 3810, Juniper EX4200/4300
Ruckus ICX 7650	<ul style="list-style-type: none">• 40GbE and 100GbE for maximum performance and future-proofing• Up to 24x 1/2.5/5/10GbE Multigigabit Ethernet ports or 24x 10GbE SFP+ ports	MACsec* 256-bit data encryption ensures compliance and data confidentiality Campus Fabric*	Cisco 3850, Cisco 9300, Cisco 9500, HP 3820M
Ruckus ICX 7750	<ul style="list-style-type: none">• Unprecedented 1RU port density with 96 x 10 GbE or 32 x 40 GbE ports.• Copper port model offers 48x 10 GBase-T RJ45 ports.• Low-latency, non-blocking architecture, Limited Lifetime Warranty.	Advanced L3 enterprise features such as VRRPe, BGP, IPv6 support, and Multi-Chassis Trunking (MCT). Support distributed chassis architecture/ stacking for scale-out networking. Campus Fabric	Cisco Catalyst 4500 and 6500, Arista 7050X, Juniper QFX5100

Ruckus CAMPUS SOLUTIONS KEY DIFFERENTIATORS

	Scalability	Automation	Open Standards	High-Performance Delivery	Cost Efficiency
Ruckus	<ul style="list-style-type: none"> Scale-out networking with Distributed Chassis Industry leading 10/40 GbE port density Up to 96 x 10 GbE and 32 x 40 GbE ports Software licensable port speed Campus Fabric shared services 	<ul style="list-style-type: none"> Consolidated management across the campus with Campus Fabric SDN Network Programmability Network Automation with SmartZone open API 	<ul style="list-style-type: none"> OpenFlow with Hybrid Port Mode End to End sFlow based monitoring Standard stacking ports (SFP/SFP+/QSFP+) Open unified wired & wireless solution 	<ul style="list-style-type: none"> Line rate, non blocking Up to 2.56 Tbps switching capacity per 1RU switch Active/Active fabric links Up to 10 Gbps IPsec throughput 	<ul style="list-style-type: none"> 30-75% lower TCO Stacking included Lifetime warranty Integrated IPsec VPN eliminates dedicated appliances
Competition	<ul style="list-style-type: none"> Planning for growth requires over-purchasing or over-provisioning, or rip-and-replace required Extra hardware for stacking and 10 GbE 	<ul style="list-style-type: none"> Can't stack over distance Complex 3-tier network design 	<ul style="list-style-type: none"> Proprietary programmability Proprietary stacking ports/cables Proprietary monitoring protocols Wireless controllers locked-in 	<ul style="list-style-type: none"> Oversubscribed architecture Limited stacking Bandwidth/ Distance and uplinks No L2 multipathing 	<ul style="list-style-type: none"> Additional stacking charges Pay for support Rip and replace upgrade model Expensive chassis design

ICX SWITCH FAMILY		ACCESS				ACCESS / AGGREGATION		CORE
								
Switch Capacity		ICX 7150 Compact	ICX 7150	ICX 7150 Z-Series	ICX 7250	ICX 7450	ICX 7650	ICX 7750
Switching capacity (max)		68 Gbps	180 Gbps	304 Gbps	256 Gbps	336 Gbps	1.128 Tbps	2.56 Tbps
RJ45 ports (max)	Gigabit (1GbE)	12 + 2	24 or 48 + 2	48	24 or 48	24 or 48	48	48
	Multigigabit (1/2.5/5/10 GbE)			16 (2.5 GbE)			24	
	10 GbE					12	24	48 (96) ³
Fiber ports (max)	1 GbE SFP	2	4	8	8	48	48	48
	10 GbE SFP/SFP+	2	4	8	8	12	24 + 4	48
	40 GbE QSFP+					3	2	32
	100 GbE QSFP28						2	
PoE Power Budget (max))		124 W	740 W	1480 W	1480 W	1496 W	1500W	
Switches per stack (max)		12	12	12	12	12	12	12
Aggregated Stacking bandwidth (max)		240 Gbps	480 Gbps	480 Gbps	480 Gbps	960 Gbps	2.4 Tbps	5.76 Tbps
Key Features								
PoE / PoE+		✓	✓	✓	✓	✓	✓	
Stacking		✓	✓	✓	✓	✓	✓	✓
sFlow		✓	✓	✓	✓	✓	✓	✓
Layer 3 (STATIC, RIP, OSPF)		✓	✓	✓	✓	✓	✓	✓
OpenFlow with Hybrid Port Mode		✓	✓	✓	✓	✓	✓	✓
Ruckus Campus Fabric		✓	✓	✓	✓	✓	✓	✓
Redundant power option				✓	✓	✓	✓	✓
Hot Swap Internal power supplies & fans				✓		✓	✓	✓
802.3bt ² (95W PoE power per port)				✓		✓	✓	
VRF					✓	✓	✓	✓
EEE (Energy Efficient Ethernet)					✓	✓	✓	
IPsec VPN (with service module)						✓		
MACsec						✓	✓	
BGP						✓	✓	✓
Reversible airflow option						✓	✓	✓
VXLAN								✓
Multi Chassis Trunking (MCT)								✓

¹ To be supported in a future software release. ² Pending IEEE 802.3bt standard. Compatible with PoE++. ³ With breakout cables

Contact an Account Manager for more information.



1.800.800.0014
www.connection.com/ruckus