Brocade ICX 7250
Enterprise-Class Stackable Access Switch

BROCADE

BENEFITS

8 PORTS OF 10 GBE FOR STACKING OR UPLINK CONNECTIVITY

FLEXIBLE LICENSING UPGRADE

- Upgrade from 1 GbE to 10 GbE for uplink and stacking

MARKET-LEADING STACKING SCALABILITY

- Up to 12 switches per stack
- Up to 10 km using standard optics or cables

FULL-POWER POE+ BUDGET TO POWER ADVANCED EDGE DEVICES

- Wireless APs and video surveillance equipment
- Option for redundant power and incremental PoE budget

ADVANCED L3 ROUTING SIMPLIFIES NETWORK DESIGN AND RELIABILITY

- RIP, OSPF, VRRP, PIM, PBR

CAMPUS FABRIC REDUCES COST OF OPERATIONS, INCREASES FLEXIBILITY

- Delivers the benefits of a chassis with the flexibility of stackables
- Scales to over 1800 ports

3-YEAR TECH SUPPORT INCLUDED

ENERGY EFFICIENT DESIGN

- Supports IEEE 802.3az standard

ENTERPRISE-CLASS SWITCH WITH FUTURE-PROOF EXPANDABILITY

The Brocade® ICX® 7250 switch combines enterprise-class features, manageability and the flexibility and "pay as you grow" scalability of a stackable solution. The switch delivers the performance required for enterprise Gigabit Ethernet (GbE) access deployment. It raises the bar with up to 8×10 GbE ports for uplinks or stacking and market-leading stacking density with up to 12 switches (576×1 GbE) per stack.

Brocade ICX 7250 switches also offer an external power supply for failover resiliency, as well as increased PoE/PoE+ port availability.

The Brocade ICX 7250 is easy to deploy, manage, and integrate into both new and existing networks. Organizations can buy only what they need today, and easily scale out as demand grows and new technologies emerge. Optimizing performance based on specific requirements is easy with flexible licensing upgrade which allows users to upgrade from 1 GbE to 10 GbE ports for uplink and stacking.

Deployed as a standalone switch, a stack, or a network fabric, organizations reap the benefits of a flexible platform and the assurance that their investments are protected.

PREMIUM PERFORMANCE

Designed for small to medium-size enterprises, branch offices, and distributed campuses, these scalable edge switches deliver enterprise-class functionality at an affordable price—without compromising performance and reliability. The Brocade ICX 7250 delivers wire-speed, non-blocking performance across all ports to support latency-sensitive applications, such as real-time voice/video streaming and Virtual Desktop Infrastructure (VDI). The switch is available in 24- and 48-port 10/100/1000 Mbps models with 1 GbE uplink or 10 GbE dual-purpose uplink/stacking ports (see Figure 1)—with or without PoE and PoE+—to support wireless mobility, and IP communications without the need for additional power outlets or power injectors.

Figure 1: Up to 12 Brocade ICX 7250 Switches can be stacked together using up to four full-duplex SFP+ 10 Gbps ports for a fully redundant backplane with 480 Gbps of aggregated stacking bandwidth.

BROCADE ICX 7250 SWITCHES

Except as noted, all Brocade ICX 7250 models offer eight uplink/stacking ports, a single integrated power supply and fan, one RJ-45 network management port, one mini USB serial management port, and one USB storage port on the front panel.

	Brocade ICX 7250-24G 24×10/100/1000 Mbps RJ-45 ports 4×1 GbE uplink ports; Not upgradable No EPS connector Premium Layer 3 licenses not applicable
	Brocade ICX 7250-24 24×10/100/1000 Mbps RJ-45 ports 8×1 GbE uplink/stacking ports; Upgradable to 10 GbE
	Brocade ICX 7250-24P 24×10/100/1000 Mbps RJ-45 PoE+ ports 370 W PoE budget 8×1 GbE uplink/stacking ports; Upgradable to 10 GbE
	Brocade ICX 7250-48 48×10/100/1000 Mbps RJ-45 ports 8×1 GbE uplink/stacking ports; Upgradable to 10 GbE
	Brocade ICX 7250-48P 48×10/100/1000 Mbps RJ-45 PoE+ ports 740 W PoE budget 8×1 GbE uplink/stacking ports; Upgradable to 10 GbE

FULL POWER SUPPORT FOR CONNECTED EDGE DEVICES

The Brocade ICX 7250 can deliver both power and data across network connections, supporting Power over Ethernet (PoE/PoE+) standards and providing a single-cable solution for edge devices, such as wireless access points, VoIP phones, video surveillance equipment, and VDI thin terminals. Carrying data and power through a single Ethernet wire reduces the number of power receptacles and power adapters while increasing reliability and wiring flexibility. The Brocade ICX 7250-24P provides 370 watts and can deliver PoE power to all 24 ports, while the Brocade ICX 7250-48P provides 740 watts and can deliver PoE+ power for up to 24 ports. Both switches can provide PoE and PoE+ (30 watts) power to all ports when an external power supply is used.

The optional Ruckus ICX-EPS 4000 is an external power supply source that delivers additional power for up to 16 Brocade ICX 7250 switches (see Figures 2 and 3). It can be used for system power redundancy and an increased PoE/PoE+ power budget to enable additional ports.

Figure 2: Ruckus ICX-EPS 4000 for the Brocade ICX 7250, shown with four AC power supplies.

Figure 3: Rear view of the Ruckus ICX-EPS 4000 connectivity.

ENERGY EFFICIENT DESIGN

The Brocade ICX 7250 Switch supports the IEEE 802.3az standard for Energy Efficient Ethernet (EEE), reducing power consumption during periods of low utilization. Ports are placed into a low power mode when no data is being transmitted.

DATA CENTER TOP-OF-RACK SERVER CONNECTIVITY

The Brocade ICX 7250 is designed to fit in server racks by consuming only one rack unit. In data center environments where most servers are 1 GbE-capable, the Brocade ICX 7250 provides a cost-effective 1 GbE Top-of-Rack (ToR) switch by simply connecting 1 GbE Network Interface Cards (NICs) in the servers to switch's 1 GbE ports. This configuration uses 10 GbE links to connect to data center aggregation switches.

ENTERPRISE-CLASS FEATURES ACROSS ALL RUCKUS ICX SWITCHES

The Ruckus ICX switch family delivers the enterprise class features for flexibility, scalability and simplified management.

- Ruckus Campus Fabric technology delivers unmatched flexibility, scalability and simplified management for campus network deployments. Incorporating all of the ICX 7000 switch families with up to 1800 ports in a single logical domain, Campus Fabric allows customers the benefits of a traditional chassis, with the flexibility of stackable switches at a dramatically reduced Total Cost of Ownership (TCO).

- Advanced stacking goes beyond traditional stacking with capabilities that take flexibility, ease of management and cost effectiveness to then next level, including:
  - Stacking on standard Ethernet ports
  - Long-distance stacking
  - No hardware module required for stacking
  - In Service Software Upgrade (ISSU) to minimize downtime
  - Superior scalability with the industry-leading number of switches per stack
  - Stacking at the access, aggregation and core layers

- Enterprise-Class Availability to improve resiliency and minimize downtime, including:
  - Hitless stack failover
  - Hot-insertion/removal of stack members
  - Redundant power supplies
  - In Service Software Upgrades for switch stacks

- On-boarding and security policies across ICX switches and wireless networks.

- OpenFlow 1.3 protocol support in hybrid mode allows user to deploy traditional Layer 2/3 forwarding with OpenFlow on the same port for Software Defined Network (SDN) enabled programmatic control of the network

- Open Standards based management, monitoring and authentication
  - sFlow-based network monitoring to help analyze traffic statistics and trends on every link and overcome unexpected network congestion
  - Open-standards management includes Command Line Interface (CLI), Secure Shell (SSHv2), Secure Copy (SCP), and SNMPv3
  - Support for Access Controller Access Control System (TACACS/TACACS+) and RADIUS authentication helps ensure secure operator access
  - LLDP and LLDP-MED protocol support for configuring, discovering, and managing network infrastructure such as QoS, security policies, VLAN assignments, PoE power levels, and service priorities

BROCADE ICX 7250 FEATURE/MODEL COMPARISON

FEATURE	24 RJ-45 Ports Ruckus ICX 7250-24G	24 or 48 Ports (Non-PoE) Ruckus ICX 7250-24	24 or 48 Ports (Non-PoE) Ruckus ICX 7250-48	24 or 48 PoE+ Ports Ruckus ICX 7250-24P	24 or 48 PoE+ Ports Ruckus ICX 7250-48P
Switching capacity (data rate, full duplex)	128 Gbps	208 Gbps	256 Gbps	208 Gbps	256 Gbps
Forwarding capacity (data rate, full duplex)	96 Mpps	154 Mpps	190 Mpps	154 Mpps	190 Mpps
Fixed ports: 10/100/1000 Mbps RJ-45	24	24	48	24	48
Fixed ports: 100/1000 Mbps SFP	4				
Fixed ports: 1/10 Gbps SFP+ (10 GbE SPF+ optional upgrade license)		8	8	8	8
PoE/PoE+ ports				24	48
Maximum PoE Class 3 ports (15.4 W per port with internal AC power supply only)				24	48
Maximum PoE+ ports (30 W per port, with internal AC power supply only)				12	24
Maximum PoE+ Class 4 ports (30 W per port with external power supply)				24	48
Base IPv4/IPv6 Layer 3 routing (static routing)		●	●	●	●
Advanced IPv4/IPv6 Layer 3 routing (RIP, OSPF, VRRP, PIM, PBR, VRF features)		With license	With license	With license	With license
Aggregated stacking bandwidth		480 Gbps	480 Gbps	480 Gbps	480 Gbps
Stacking density (maximum switches in a stack)		12	12	12	12
Stacking ports (maximum ports[1] usable for stacking)		Up to 4×10 GbE SFP+ per switch			
Maximum stacking distance (distance between stacked switches)		10 km	10 km	10 km	10 km

[1] 10 Gbps SFP+ ports are required for stacking.

BROCADE ICX 7250 FEATURE/MODEL COMPARISON

	24 RJ-45 Ports	24 or 48 Ports (Non-PoE)		24 or 48 PoE+ Ports	
	Ruckus ICX 7250-24G	Ruckus ICX 7250-24	Ruckus ICX 7250-48	Ruckus ICX 7250-24P	Ruckus ICX 7250-48P
FEATURE	POWER				
Power inlet (AC)	C14				
Input voltage/frequency	AC: 100 to 240 VAC @ 50 to 60 Hz				
Maximum current draw (at 100 VAC, one power supply)	1.69 Amp	1.69 Amp	1.69 Amp	6.56 Amp	11 Amp
Power supply rated maximum (AC)	135 W	135 W	135 W	525 W	880 W
PoE power budget (AC) (internal AC power supply only)	N/A	N/A	N/A	370 W	740 W
Switch power consumption (25°C) **Idle** (no PoE load) **10% traffic[2]** (full PoE load) **100% traffic[2]** (full PoE load)	33.6 W 42.6 W 44.4 W	42.6 W 51.6 W 57.6 W	50.64 W 63.55 W 69.51 W	50 W 63 W 73 W	66 W 84 W 96 W
Airflow	Front-to-back	Side-to-back	Side-to-back	Side-to-back	Side-to-back
Switch heat dissipation (25°C)[3] **Idle** (no PoE load) **10% traffic[2]** (full PoE load) **100% traffic[2]** (full PoE load)	114.6 BTU/hour 145.3 BTU/hour 151.4 BTU/hour	145.3 BTU/hour 176.06 BTU/hour 196.5 BTU/hour	172.7 BTU/hour 216.8 BTU/hour 237.1 BTU/hour	170.6 BTU/hour 214.9 BTU/hour 249.08 BTU/hour	225.2 BTU/hour 286.6 BTU/hour 327.5 BTU/hour

FEATURE	ENVIRONMENT				
Weight (kg)	3.58	3.76	4.84	4.73	5.86
Dimensions	**48 port:** 440 mm (17.323 in.), W×370 mm (14.56 in.), D×43.7 mm (1.720 in.), H — 1U **24 port:** 440 mm (17.323 in.), W×280 mm (11.02 in.), D×43.7 mm (1.720 in.), H — 1U				
Acoustics (25°C)	40 dB	41.9 dB	44.5 dB	44.7 dB	45.9 dB
MTBF (hours) (25°C)	767,718	676,362	665,319	429,209	411,187

[2] Traffic load on all ports connected with maximum possible PoE/PoE+ loads (if equipped). PoE power delivered to powered devices not included.

[3] PoE power not included in switch heat dissipation figures since the heat is not dissipated at the switch.

BROCADE ICX 7250 SPECIFICATIONS

FEATURES	SPECIFICATIONS
Connector options	• 10/100/1000 ports: RJ-45 • 1 GbE SFP ports (Brocade ICX 7250-24G only) • 1/10 GbE SFP+ ports (not available on Brocade ICX 7250-24G) • Out-of-band Ethernet management: 10/100/1000 Mbps RJ-45 • Console management: Mini-USB serial port (Mini-B plug) • File transfer: USB port (Standard-A plug) • For the latest information about supported optics, please visit www.ruckuswireless.com/optics.
DRAM NVRAM (Flash) Packet buffer size	• 2 GB (except for ICX 7250-24G: 1 GB) • 2 GB (except for ICX 7250-24G: 1 GB) • 24 port: 2 MB, 48 port: 4 MB
Maximum MAC addresses	• 16,384
Maximum VLANs Maximum PVLANs	• 4,096 • 32
Maximum STP (spanning trees)	• 254
Maximum VEs	• 255
Maximum routes (in hardware)	• 12,000 (IPv4) • 2,048 (IPv6) • 7000 (Next Hop Addresses)
Trunking	• Maximum ports per trunk: 16 • Maximum trunk groups: 128
Maximum jumbo frame size	• 9,216 bytes
Average latency	• 1.5 µs
QoS Priority Queues	• 8 per port
Multicast Groups	• 8,192 (Layer 2) • 8,192 (Layer 3)

FEATURES	FEATURE SETS	
Layer 2 switching	• 802.1s Multiple Spanning Tree • 802.1x Authentication • Auto MDI/MDIX • BPDU Guard, Root Guard • Dual-Mode VLANs • MAC-based VLANs, Dynamic MAC-based VLAN activation • Dynamic VLAN Assignment • Dynamic Voice VLAN Assignment • Fast Port Span • GVRP: GARP VLAN Registration Protocol • IGMP Snooping (v1/v2/v3) • IGMP Proxy for Static Groups • IGMP v2/v3 Fast Leave • IGMP Tracking • Inter-Packet Gap (IPG) adjustment • Link Fault Signaling (LFS) • MAC-Address Filtering	• MAC Learning Disable • MLD Snooping (v1/v2) • Multi-device Authentication • Per-VLAN Spanning Tree (PVST/PVST+/PVRST) • Mirroring—Port-based, ACL-based, MAC Filter-based, and VLAN-based • PIM-SM v2 Snooping • Port Loop Detection • Private VLAN • Remote Fault Notification (RFN) • Single-instance Spanning Tree • Trunk Groups (static, LACP) • Uni-Directional Link Detection (UDLD) • Metro-Ring Protocol MRP (v1, v2) • Virtual Switch Redundancy Protocol (VSRP) • Topology Groups • Q-in-Q and selective Q-in-Q

BROCADE ICX 7250 SPECIFICATIONS

Base Layer 3 IP routing	• IPv4 and IPv6 static routes • ECMP • Port-based Access Control Lists • Layer 3/Layer 4 ACLs • Host routes	• Virtual interfaces • Routed interfaces • Route-only support • Routing between directly connected subnets
Premium Layer 3 IP routing	• IPv4 and IPv6 dynamic routes • OSPF v2, v3 • PIM-SM, PIM-SSM, PIM-DM, PIM passive (IPv4/IPv6 multicast routing functionality) • PBR • Virtual Route Redundancy Protocol (VRRP)	• VRRP-E (IPv4/IPv6) • VRRP v3 (IPv6) • IPv6 over IPv4 tunnels • VRF (IPv4 and IPv6) • RIP v1/v2, RIPng
Quality of Service (QoS)	• ACL Mapping and Marking of ToS/DSCP • ACL Mapping and Marking of 802.1p • ACL Mapping to Priority Queue • Classifying and Limiting Flows Based on TCP Flags • DiffServ Support • Honoring DSCP and 802.1p	• MAC Address Mapping to Priority Queue • Priority Queue Management using Weighted Round Robin (WRR), Strict Priority (SP), and a combination of WRR and SP • Priority Flow Control
Traffic management	• ACL-based inbound rate limiting and traffic policies • Broadcast, multicast, and unknown unicast rate limiting	• Inbound rate limiting per port • Outbound rate limiting per port and per queue
Security	• 802.1X Accounting • MAC Authentication • Flexible authentication • Web authentication • DHCP snooping • Dynamic ARP inspection • ND Inspection (Neighbor Discovery) • Bi-level Access Mode (Standard and EXEC Level) • EAP pass-through support • IEEE 802.1X username export in sFlow	• Protection against Denial of Service (DoS) attacks • Authentication, Authorization, and Accounting (AAA) • MAC Address Locking; MAC Port Security • Advanced Encryption Standard (AES) with SSHv2 • RADIUS/TACACS/TACACS+ • Secure Copy (SCP) • Secure Shell (SSHv2) • Username/Password • Change of Authorization (CoA) RFC 5176 • RADSEC (RFC 6614) • Encrypted Syslog (RFC 5425)
SDN features	• Support for OpenFlow v1.0 and v1.3	• OpenFlow support with true hybrid port mode
IEEE standards compliance	• 802.1AB LLDP/LLDP-MED • 802.1D-2004 MAC Bridging • 802.1p Mapping to Priority Queue • 802.1s Multiple Spanning Tree • 802.1w Rapid Reconfiguration of Spanning Tree (RSTP) • 802.1x Port-based Network Access Control (PNAC) • 802.3 Carrier Sense Multiple Access/Collision Detection (CSMA/CD) • 802.3ab 1000Base-T • 802.3 10Base-T • 802.3ad Link Aggregation (Dynamic and Static)	• 802.1 AX-2008 Link Aggregation • 802.3ae 10 GbE • 802.3af Power over Ethernet • 802.3at Power over Ethernet Plus • 802.3u 100Base-TX • 802.3x Flow Control • 802.3z 1000Base-SX/LX • 802.3 MAU MIB (RFC 2239) • 802.3az-2010 – Energy Efficient Ethernet (EEE) • 802.1Q VLAN Tagging • 802.1BR Bridge Port Extension
RFC standards compliance	For a complete list of RFCs supported by the Ruckus ICX 7000 product family, please consult the "FastIron Features and Standards Support Matrix" document available from support.ruckuswireless.com.	
High availability	• Layer 3 VRRP protocol redundancy • Real-time state synchronization across the stack • Hitless failover from master to standby stack controller	• Hot insertion and removal of stacked units • Layer 2 VSRP switch redundancy • In-Service Software Update (ISSU)

BROCADE ICX 7250 SPECIFICATIONS

FEATURES	NETWORK AND DEVICE MANAGEMENT	
Management	• DHCP Auto Configuration • Configuration Logging • Digital Optical Monitoring • Display Log Messages on Multiple Terminals • Embedded Web Management (HTTP/HTTPS) • Embedded DHCP Server • Industry-standard Command Line Interface (CLI) • Brocade Network Advisor (sold separately) • Key-based activation of optional software features • USB file management and storage • Macro for batch execution • Out-of-band Ethernet Management • ERSPAN support for remote traffic monitoring • TFTP • TELNET Client and Server • Bootp	• SNMPv1/v2c • DHCP Server and DHCP Relay • SNMPv3 Intro to Framework • Architecture for Describing SNMP Framework • SNMP Message Processing and Dispatching • SNMPv3 Applications • SNMPv3 User-based Security Model • SNMP View-based Access Control Model SNMP • sFlow • NTP Network Time Protocol • Multiple Syslog Servers • SCP • Virtual Cable Tester (VCT) • For Management MIB, please consult the "FastIron MIB Reference" document available from support.ruckuswireless.com.
Ruckus Campus Fabric technology	• Brocade ICX 7250 can operate in fabric Port Extender (PE) mode • Up to 36 PEs per fabric • PE Cascade depth up to 6 units	• Zero-touch provisioning • High availability with ring topology

FEATURES	ENVIRONMENT
Temperature	Operating temperature: -5°C to 50°C/23°F to 122°F Storage temperature: −25°C to 70°C/−13°F to 158°F
Humidity	Operating relative humidity: 5% to 95% at 50°C, non-condensing Non-operating relative humidity: 0% to 95% at 70°C, non-condensing
Altitude	Operating altitude: 10,000 ft (3,000 m) maximum Storage altitude: 39,000 ft (12,000 m) maximum

FEATURES	COMPLIANCE/CERTIFICATION
Electromagnetic emissions	FCC Class A (Part 15); EN 55022/CISPR-22 Class A; VCCI Class A; ICES-003 Electromagnetic Emission; AS/NZS 55022; EN 61000-3-2 Power Line Harmonics; EN 61000-3-3 Voltage Fluctuation and Flicker; EN 61000-6-3 Emission Standard (supersedes: EN 50081-1)
Safety	CAN/CSA-C22.2 NO. 60950-1-07; UL 60950-1 Second Edition; IEC 60950-1 Second Edition; EN 60950-1:2006 Safety of Information Technology Equipment; EN 60825-1 Safety of Laser Products—Part 1: Equipment Classification, Requirements and User's Guide; EN 60825-2 Safety of Laser Products—Part 2: Safety of Optical Fibre Communication Systems
Immunity	EN 61000-6-1 Generic Immunity and Susceptibility (supersedes EN 50082-1); EN 55024 Immunity Characteristics (supersedes EN 61000-4-2 ESD); EN 61000-4-3 Radiated, Radio Frequency, Electromagnetic Field; EN 61000-4-4 Electrical Fast Transient; EN 61000-4-5 Surge; EN 61000-4-6 Conducted Disturbances Induced by Radio-Frequency Fields; EN 61000-4-8 Power Frequency Magnetic Field; EN 61000-4-11 Voltage Dips and Sags
Environmental regulatory compliance	RoHS-compliant (6 of 6); WEEE-compliant
Vibration	IEC 68-2-36, IEC 68-2-6
Shock and drop	IEC 68-2-27, IEC 68-2-32

BROCADE ICX 7250 ORDERING INFORMATION

PART NUMBER	BROCADE ICX 7250 SWITCHES WITH 1 GBE UPLINKS
ICX7250-24G	Brocade ICX 7250 Switch, 24×10/100/1000 ports, 4×1 GbE SFP uplink ports (non-upgradable), Layer 2 only, front-to-back airflow, no EPS connector
ICX7250-24	Brocade ICX 7250 Switch, 24×10/100/1000 ports, 8×1 GbE SFP upgradable to up to 8×10 GbE SFP+ uplink/stacking-ports with license, basic Layer 3 (static routing), side-to-back airflow
ICX7250-24P	Brocade ICX 7250 Switch, 24×10/100/1000 PoE+ ports, 8×1 GbE SFP upgradable to up to 8×10 GbE SFP+ uplink/stacking-ports with license, 370 W PoE budget, basic Layer 3 (static routing), side-to-back airflow
ICX7250-48	Brocade ICX 7250 Switch, 48×10/100/1000 ports, 8×1 GbE SFP upgradable to up to 8×10 GbE SFP+ uplink/stacking-ports with license, basic Layer 3 (static routing), side-to-back airflow
ICX7250-48P	Brocade ICX 7250 Switch, 48×10/100/1000 PoE+ ports, 8×1 GbE SFP upgradable to up to 8×10 GbE SFP+ uplink/stacking-ports with license, 740 W PoE budget, basic Layer 3 (static routing), side-to-back airflow

PART NUMBER	BROCADE ICX 7250 SWITCHES WITH 2×10 GBE UPLINKS
ICX7250-24-2X10G	Brocade ICX 7250 Switch, 24×10/100/1000 ports, 6×1 GbE SFP and 2×10 GbE SFP+ uplink/stacking-ports upgradable to up to 8×10 GbE SFP+ with license, basic Layer 3 (static routing), side-to-back airflow
ICX7250-24P-2X10G	Brocade ICX 7250 Switch, 24×10/100/1000 PoE+ ports, 6×1 GbE SFP and 2×10 GbE SFP+ uplink/stacking-ports upgradable to up to 8×10 GbE SFP+ with license, 370 W PoE budget, basic Layer 3 (static routing), side-to-back airflow
ICX7250-48-2X10G	Brocade ICX 7250 Switch, 48×10/100/1000 ports, 6×1 GbE SFP and 2×10 GbE SFP+ uplink/stacking-ports upgradable to up to 8×10 GbE SFP+ with license, basic Layer 3 (static routing), side-to-back airflow
ICX7250-48P-2X10G	Brocade ICX 7250 Switch, 48×10/100/1000 PoE+ ports, 6×1 GbE SFP and 2×10 GbE SFP+ uplink/stacking-ports upgradable to up to 8×10 GbE SFP+ with license, 740 W PoE budget, basic Layer 3 (static routing), side-to-back airflow

PART NUMBER	RUCKUS ICX-EPS 4000 EXTERNAL POWER SUPPLY OPTIONS FOR THE BROCADE ICX 7250 SWITCH The Ruckus ICX-EPS4000 supports up to four removable power supplies. Each power supply provides 920 W.
ICX-EPS4000-SHELF	1U External Power Supply shelf (EPS) can support up to four 920 W removable power supplies (purchased separately).
RPS17	EPS power supply, 920 W
ICX-EPS4000-CBL-01	Ruckus ICX-EPS4000 power cable 1:1
ICX-EPS4000-CBL-02	Ruckus ICX-EPS4000 power cable 1:2

PART NUMBER	UPGRADE LICENSES AND ACCESSORIES
ICX7250-PREM-LIC	License to upgrade any Brocade ICX 7250 (except ICX7250-24G) to Layer 3 Premium Features (RIP, OSPF, VRRP, PIM, PBR, VRF), non-node lock license.
ICX7250-2X10G-LIC-POD	License to upgrade any Brocade ICX 7250 (except ICX7250-24G) from 8×1 GbE SFP to 6×1 GbE SFP and 2×10 GbE SFP+ uplink/stacking ports, node-lock license.
ICX7250-8X10G-LIC-POD	License to upgrade any Brocade ICX 7250 (except ICX7250-24G) from 6×1 GbE SFP and 2×10 GbE SFP+ to 8×10 GbE SFP+ uplink/stacking ports, node-lock license. Only switches that already have 2×10 GbE ports can be upgraded to 8×10 GbE ports.
ICX7000-RMK	FRU, rack mount kit, two-post, Brocade ICX 7250/7450/7750
XBR-R000295	FRU, rack mount kit, four-post, 24 in. to 32 in. depth rack
BR-NTWADV-IP-BASE	Brocade Network Advisor IP management software license for up to 50 devices; required for initial purchase of IP–only management; minimum of one year of support required

BROCADE ICX 7250 ORDERING INFORMATION

PART NUMBER	OPTICS (FOR BROCADE ICX 7250-24G ONLY)
E1MG-BXD	1000BASE-BXD SFP optic SMF, transmits at 1,490 nm and receives at 1,310 nm, LC connector, single-strand SMF fiber. This optic should only be connected to an E1MG-BXU at the far end.
E1MG-BXU	1000BASE-BXU SFP optic SMF, transmits at 1,310 nm and receives at 1,490 nm, LC connector, single-strand SMF fiber. This optic should only be connected to an E1MG-BXD at the far end.
E1MG-LHA-OM-T	1000BASE-LHA SFP optic, SMF, LC connector, optical monitoring-capable (70 km), industrial temperature
E1MG-LX-OM	1000BASE-LX SFP optic, SMF, LC connector, optical monitoring-capable
E1MG-SX-OM	1000BASE-SX SFP optic, MMF, LC connector, optical monitoring-capable
E1MG-TX	1000BASE-TX SFP copper, RJ-45 connector
Optics	For Brocade ICX 7250-24/24P/48/48P
10G-SFPP-ER	10GBASE-ER SFP+ optic (LC), for up to 40 km over SMF
10G-SFPP-LR	10GBASE-LR, SFP+ optic (LC), for up to 10 km over SMF
10G-SFPP-SR	10GBASE-SR, SFP+ optic (LC), target range 300 m over MMF
10G-SFPP-USR	10GE USR SFP+ optic (LC), target range 100 m over MMF, 1-pack
10G-SFPP-ZR	10GBASE-ZR SFP+ optic (LC), for up to 80 km over SMF
E1MG-BXD	1000BASE-BXD SFP optic SMF, transmits at 1,490 nm and receives at 1,310 nm, LC connector, single-strand SMF fiber. This optic should only be connected to an E1MG-BXU at the far end.
E1MG-BXU	1000BASE-BXU SFP optic SMF, transmits at 1,310 nm and receives at 1,490 nm, LC connector, single-strand SMF fiber. This optic should only be connected to an E1MG-BXD at the far end.
E1MG-LHA-OM-T	1000BASE-LHA SFP optic, SMF, LC connector, optical monitoring-capable (70 km), industrial temperature
E1MG-LX-OM	1000BASE-LX SFP optic, SMF, LC connector, optical monitoring-capable
E1MG-SX-OM	1000BASE-SX SFP optic, MMF, LC connector, optical monitoring-capable
E1MG-TX	1000BASE-TX SFP Copper, RJ-45 connector
Direct-Attached Cables	For Brocade ICX 7250-24/24P/48/48P
10G-SFPP-TWX-0101	Direct-attached SFP+ copper cable, 1 m, 1-pack, active
10G-SFPP-TWX-0301	Direct-attached SFP+ copper cable, 3 m, 1-pack, active
10G-SFPP-TWX-0501	Direct-attached SFP+ copper cable, 5 m, 1-pack, active
10GE-SFPP-AOC-0701	10 GbE SFP+ direct-attached active optical cable, 7m, 1-pack
10GE-SFPP-AOC-1001	10 GbE SFP+ direct-attached active optical cable, 10 m, 1-pack
1G-SFP-TWX-0101	Direct-attached 1 GbE SFP copper cable, 1 m
1G-SFP-TWX-0501	Direct-attached 1 GbE SFP copper cable, 5 m

For a list of cables and fiber optics approved for stacking, visit www.ruckuswireless.com/optics.

ORDERING NOTES

Customers have two options when ordering a Brocade ICX 7250 switch. They can order one of the five Brocade ICX 7250 switch models with 1 GbE uplink/stacking ports, or order a switch preloaded with a PoD license for two 10 GbE uplink/stacking ports.

The Brocade ICX 7250 (-24/-24P/-48/-48P) can be upgraded to 2×10 GbE uplink/stacking ports by purchasing a PoD license (ICX7250-2X10G-LIC-POD).

A Brocade ICX 7250 switch with 2×10 GbE uplink/stacking ports can be upgraded to 8×10 GbE by purchasing an additional PoD license (ICX7250-8X10G-LIC-POD). Only switches that already have 2×10 GbE can be upgraded to 8×10 GbE.

Note that the Brocade ICX 7250-24G switch is not upgradable and will support 4×1 GbE uplink ports only.

All Brocade ICX 7250 switches come with a power cord, two-post rack mounting brackets, and a USB serial console cable. Stacking cables and optics must be ordered separately.

WARRANTY

Brocade ICX 7250 Switches are covered by the Ruckus Assurance Limited Lifetime Warranty. For details, visit www.ruckuswireless.com/warranty.

BEST-IN-CLASS SUPPORT

Brocade ICX 7250 switches come with 3 years of free technical support from the Ruckus Technical Assistance Center (TAC). For continued access to the TAC past the initial 3 years, customers must purchase a Ruckus Technical Support contract.

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, non-infringement of third-party rights or availability with respect to any products and services.

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