

ISCOM S7600-32C data center switch

The ISCOM S7600-32C data center switch is a new-generation high-performance and high-density switches independently developed by Raisecom for data centers and high-end park networks. It supports pluggable power supply and fan modules, adopts advanced hardware architecture design, and has strong hardware forwarding performance and rich data center characteristics. The ISCOM S7600 can be used in conjunction with the core switch ISCOM S10600 to build an elastic and high-quality 100GE data center network, meeting the network requirements of data centers in the cloud era. The ISCOM S7600-32C is positioned for core and aggregation in data centers, helping enterprises and carriers build data center network platforms in the cloud computing era. They can also be used as the core or aggregation of TOR access switches and park networks on Overlay networks or converged networks.



ISCOM S7600-32C

ISCOM S7600-32C data center switch >>

ISCOM S7600-32C



- Thirty-two 100GE QSFP28 interfaces (supporting 40GE QSFP and 100GE QSFP28 optical modules)
- 1 USB interface, 1 Console interface, and 1 management Ethernet interface
- 2 fan module slots. Each fan module contains 2 fans.
- 2 power supply slots, supporting AC/DC power supplies

Characteristics >>

High-density interface for access

- Provide thirty-two 100GE interfaces, meeting the high-density and high-bandwidth access needs of data centers.
- L2/L3 wire-speed forwarding, meeting the networking needs of high-density servers in next-generation data centers without convergence access
- Support eight 100G high-performance QSFP28 interfaces. Each can be split into four 10GE/25GE interfaces, providing flexible networking capabilities.

Network visualization

- Support intelligent ISF virtualization technology, which virtualizes two switches into one logical device, unifies operation and management, increases network reliability, achieves millisecond-level link fault switching, and ensures uninterrupted key services.

International Headquarters

Raisecom Building, East-11, No.10 Xibeiwang East Road,
Haidian District, Beijing, P.R.China, 100193
Tel: +86 10 8288 3305
Fax: +86 10 8288 3056
www.raisecom.com

North American Headquarters, Raisecom Inc.

6380 N Eldridge Parkway Houston Texas 77041 USA
Tel: 1-888-816-4808
Email: sales@raisecominc.com

Raisecom Technology Co., Ltd.

Copyright@1999-2024
All rights reserved
Technical information is subjected to
change without notice



- Implement redundant backup of the control plane and data plane, avoiding the risk of single point of failure, greatly enhancing the reliability of the system.
- Support stacking service interfaces, which enables intra-rack stacking and inter-rack stacking.

Inter-device link aggregation

- Support inter-device link aggregation M-LAG, which can achieve link aggregation among multiple devices, thereby increasing link reliability from the card level to device level, achieving dual active link uplink, and doubling the effective network connection bandwidth.
- Each node device of the M-LAG can be independently upgraded. During the upgrade process, other nodes take over service forwarding, avoiding service interruption.
- Suitable for Overlay and traditional Underlay scenarios, with flexible networking.

Rich data center characteristics

- Support the VxLAN technology to meet the needs of building new-generation data centers that are flexible, efficient, highly reliable, and scalable.
- Support BGP-EVPN as the control plane of the VxLAN, thus simplifying VxLAN deployment and improving the efficiency of constructing great Layer 2 networks.

Reliable carrier-grade design

- Feature high reliability, and adopt redundancy design for key components, such as power supplies and fans. All modules support hot swapping, maximizing the reliability and availability of the entire device.
- Support hardware health status visualization, thus monitoring key components, system temperature, power modules, fan modules in real time.
- Support hardware BFD, support BFD for VRRP/OSPF/BGP4/ISIS/ISISv6/static routing, and achieve fast fault detection mechanisms for various protocols, and implement the millisecond-level fault detection time.

Complete security protection

- Support binding multiple elements, such as the user account, IP address, MAC address, VLAN, and interface, to meet the needs of the park network to strengthen control over visitors and restrict unauthorized user communication.
- Support user authentication based on 802.1x or AAA/RADIUS. Hierarchical user permission management ensures the security of device management.
- Support CPU hardware protection queues, enabling separation and processing of the data plane and control plane, preventing security threats, such as DOS attacks, illegal access, and control plane overload.

Comprehensive IPv6 solutions

- Support wire speed forwarding with IPv4/IPv6 dual protocol stacks. Support IPv6 static route, RIPv6, OSPFv3, BGP+, and IS-ISv6.
- Support rich IPv4 to IPv6 transition technologies and multiple tunneling technologies (manually configured tunnel, automatic tunnel, and ISATAP tunnel), ensuring smooth transition from IPv4 to IPv6 and meeting the needs of IPv6 independent networking and IPv4/IPv6 mixed networking.

Easy OAM

- Support diverse management and maintenance methods, such as CLI, Web, and Telnet, making device management more convenient.
- Support SNMP, RMON, Syslog and other features for daily network diagnosis and maintenance.
- Support Telemetry, which collects device data in real time, accurately presents realtime network status, and timely and effectively locates faults and their causes.

International Headquarters

Raisecom Building, East-11, No.10 Xibeiwang East Road,
Haidian District, Beijing, P.R.China, 100193
Tel: +86 10 8288 3305
Fax: +86 10 8288 3056
www.raisecom.com

North American Headquarters, Raisecom Inc.

6380 N Eldridge Parkway Houston Texas 77041 USA
Tel: 1-888-816-4808
Email: sales@raisecominc.com

Raisecom Technology Co., Ltd.

Copyright@1999-2024
All rights reserved
Technical information is subjected to
change without notice

- Feature complete interface status indication. The innovative 100GE interface split LED clearly shows the status of all sub-interfaces.

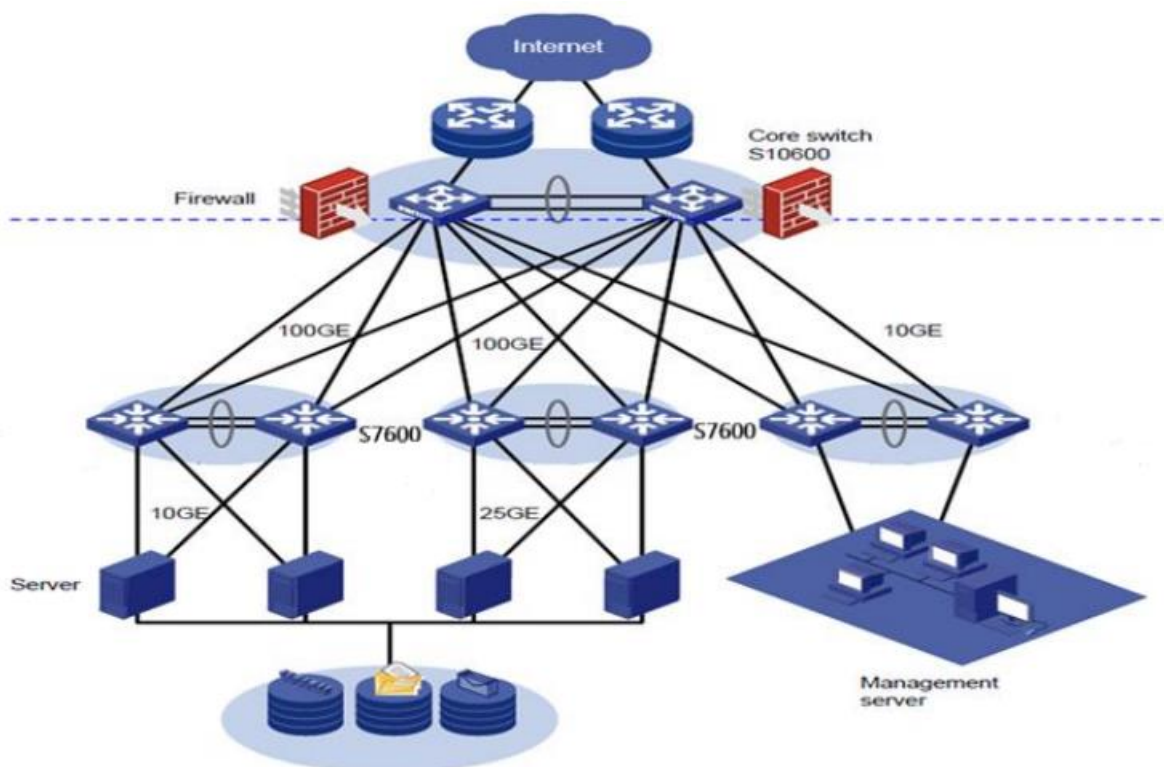
Green and energy-saving design

- Adopt strict front-to-rear straight air ducts, which completely isolate hot and cold air ducts, improve heat dissipation efficiency, and meet the design needs of data center equipment rooms.
- Support intelligently adjusting rates, effectively reducing device power consumption and noise.
- Support monitoring power consumption in real time, which reduces operation and maintenance costs for customers and establish green data centers.

Typical applications >>

Data center solution

In typical data center networking, the ISCOM S10600 is used as the core switch (Spine node) of the network, and the ISCOM S7600-32C is used as the TOR switch (Leaf node), 100GE/40GE interfaces are used to interconnect them, thus providing high-density 100G/40G/25G/10G server access solutions. The protocols, such as VxLAN, are used to build a non-blocking great Layer 2 network, ensuring large-scale migration of virtual machines and flexible deployment of user services.



International Headquarters

Raisecom Building, East-11, No.10 Xibeiwang East Road,
Haidian District, Beijing, P.R.China, 100193
Tel: +86 10 8288 3305
Fax: +86 10 8288 3056
www.raisecom.com

North American Headquarters, Raisecom Inc.

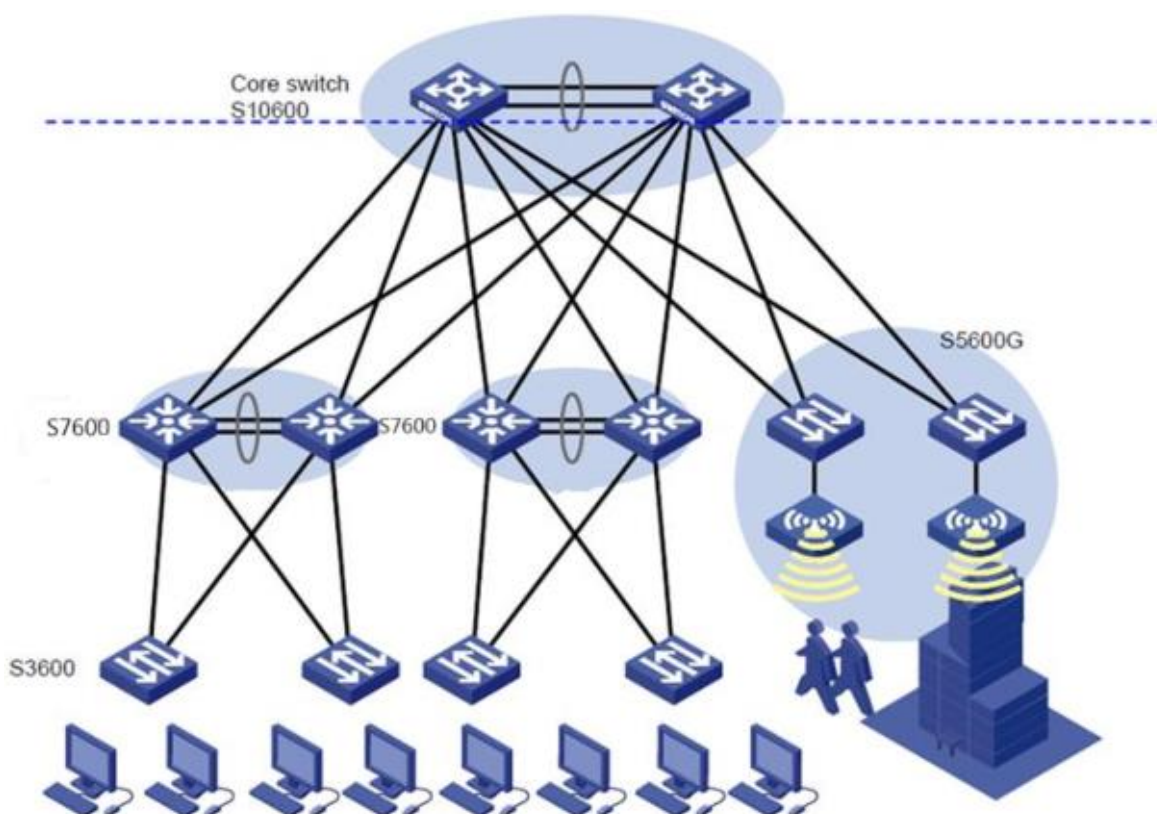
6380 N Eldridge Parkway Houston Texas 77041 USA
Tel: 1-888-816-4808
Email: sales@raisecominc.com

Raisecom Technology Co., Ltd.

Copyright@1999-2024
All rights reserved
Technical information is subjected to
change without notice

Park network solution

The ISCOM S7600-32C can be used in park network scenarios, it has industry-leading high-density wire-speed 100GE interfaces, and its high-performance stacking can meet ever-increasing requirements for network bandwidth. On a typical park network, multiple ISCOM S10600 devices are virtualized into one core switch through stacking technologies, At the aggregation layer, multiple ISCOM S7600 devices at the aggregation layer are stacked as a logical switch through virtualization. This increases network reliability and simplifies management.



International Headquarters

Raisecom Building, East-11, No.10 Xibeiwang East Road,
Haidian District, Beijing, P.R.China, 100193
Tel: +86 10 8288 3305
Fax: +86 10 8288 3056
www.raisecom.com

North American Headquarters, Raisecom Inc.

6380 N Eldridge Parkway Houston Texas 77041 USA
Tel: 1-888-816-4808
Email: sales@raisecominc.com

Raisecom Technology Co., Ltd.

Copyright@1999-2024
All rights reserved
Technical information is subjected to
change without notice



Item	ISCOM S7600-32C
Dimensions (mm) (Width × Depth × Height)	442 x 420 x 44
Switching capacity	6.4Tbps
Packet forwarding rate	2000Mpps
10GE SFP+ interfaces	2
100GE QSFP28 interfaces	32
Fan modules	2
Power supplies	2
Typical power consumption	236W
Fan redundancy	The fan modules support hot backup. When one fan module fails, the device can work properly for a short time; however, we recommend immediately replacing the faulty fan module.
Rated input voltage	● DC input: -48 VDC ● AC input: 110/220 VAC, 50/60 Hz ● HVDC input: 240/336 VDC
Maximum input voltage	● DC input: -36 to -72 VDC ● AC input: 90–264 VAC, 47–63 Hz ● HVDC input: 190–400 VDC
Operating temperature	0–40°C (0–1800 m altitude). When the altitude increases by 220 m between 1800 m and 5000 m, the highest operating temperature decreases by 1°C.
Operating humidity (RH)	RH: 10%–90% (non-condensing)
Heat dissipation mode	Front-to-rear air duct and intelligent speed adjustment

Software features>>

Device visualization	Support stacking.
	Support inter-device link aggregation M-LAG.
Network visualization	Support VxLAN Layer 2 and Layer 3 gateways.
	Support BGP-EVPN.
	Support IPv6 VxLAN over IPv4.
MAC	Support automatically learning and aging MAC addresses.
	Support the static, dynamic, and blackhole MAC addresses.
	Support filtering the source MAC address.
	Support MAC address limit based on interface or VLAN.
VLAN	Support 4K VLANs.

International Headquarters

Raisecom Building, East-11, No.10 Xibeiwang East Road,
Haidian District, Beijing, P.R.China, 100193
Tel: +86 10 8288 3305
Fax: +86 10 8288 3056
www.raisecom.com

North American Headquarters, Raisecom Inc.

6380 N Eldridge Parkway Houston Texas 77041 USA
Tel: 1-888-816-4808
Email: sales@raisecominc.com

Raisecom Technology Co., Ltd.

Copyright@1999-2024
All rights reserved
Technical information is subjected to
change without notice



	Support VLAN based on MAC/protocol/IP subnet/interface.
	Support the Access, Trunk, and Hybrid modes.
	Support basic QinQ and selective QinQ.
	Support VLAN mapping (1:1/N:1).
Multicast	Support IGMP v1/v2/v3, IGMP v1/v2/v3 Snooping, and MLD Snooping.
	Support PIM-DM, PIM-SM, and PIM-SSM.
	Support immediate leave of users.
	Support multicast VLAN.
QoS/ACL	Support Ingress/Egress ACL.
	Support flow-based priority scheduling and mapping. Each interface supports 8 queues. Support the timerange-based ACL.
	Support combined traffic classification based on Layer 2 protocol header, Layer 3 protocol, Layer 4 protocol, and 802.1p priority.
	Support interface-based bandwidth rate limiting; support flow/VLAN-based bandwidth rate limiting (single-rate dual-color); support flow-based bandwidth rate limiting (single-rate three-color and dual-rate three-color).
	Support SP, WRR, DRR, SP+WRR, and SP+DRR queue scheduling modes.
	Support traffic shaping.
Loop guard	Support STP (IEEE 802.1d), RSTP (IEEE 802.1w), and MSTP (IEEE 802.1s).
	Support BPDU Guard, root Guard, and loop protection.
	Support ERPS (ITU-T G.8032).
Reliability	Support aggregating LACP interfaces.
	Support hardware BFD, support BFD for VRRP/BGP/ISIS/OSPF/static routing, and achieve fast fault detection mechanisms for various protocols.*
	Support VRRP and BFD for VRRP.
	Support hot patches for online upgrade.
IP routing	Support IPv4 dynamic routing protocols, such as RIP, OSPF, ISIS, and BGP.
	Support IPv6 dynamic routing protocols, such as RIPng, OSPFv3, ISISv6, and BGP4+.
Security	Support AAA/RADIUS.
	Support TACACS+ and local authentication.
	Support 802.1x.
	Support SSHv2.0.
	Support plaintext authentication and MD5 ciphertext authentication of OSPF, RIPv2, and BGPv4 packets.
	Support hierarchical command protection, which avoid illegal access by unauthorized users and assigns different configuration rights for users at different levels.
	Support interface-based and VLAN-based storm control.
	Support the whitelist, port security MAC, and MAC address limit.
	Support IP Source Guard, DoS attack prevention, ARP attack prevent, TCP SYN Flood attack prevent, UDP Flood attack prevent, broadcast storm attack prevent, and huge traffic attack prevent.
	Support hierarchical scheduling and protection of control plane packets in CPU hardware queues.

International Headquarters

Raisecom Building, East-11, No.10 Xibeiwang East Road,
Haidian District, Beijing, P.R.China, 100193
Tel: +86 10 8288 3305
Fax: +86 10 8288 3056
www.raisecom.com

North American Headquarters, Raisecom Inc.

6380 N Eldridge Parkway Houston Texas 77041 USA
Tel: 1-888-816-4808
Email: sales@raisecominc.com

Raisecom Technology Co., Ltd.

Copyright@1999-2024
All rights reserved
Technical information is subjected to
change without notice



Management and maintenance	Support login through the Console interface.
	Support SNMPv1/v2c/v3.
	Support gRPC and Telemetry Stream traffic visualization.
	Support unified user management and group-based/domain-based/time-based authorization.
	Support system logs and hierarchical alarms.
	Support RMON
	Support hardware health status visualization, thus monitoring key components, system temperature, power modules, fan modules in real time.

Ordering information >>

Chassis

ISCOM S7600-32C	Y	ISCOM S7600-32C chassis (including fans and power supplies)
-----------------	---	---