DATA CENTER SWITCH **S7810-54QS**

S7810-54QS

S7810-54QS is a data center class switch product with 48 × 10GE and 6 × 40GE ports. S7810-54QS is played the role as TOR switch to link with server and storage. And also provides numerous data center software feature. It not only complies with environment policies but also lower user's operating costs.

MAIN ADVANTAGES

- Optimization for Data Center
- 48 × 10GE SFP+ and 6 × 40GE QSFP Ports
- Line rate switching capacity
- L2 and L3 software feature support
- IPv4 , IPv6 and Dual stack Ready
- OpenFlow Technology
- Redundant Power & Fan
- Airflow: Front to back or Back to front

DESCRIPTION:

System Specification

- CPU: Intel Rangeley C2558 2.4G 4-Core
- RAM: DDR3 8GB with ECC
- SSD: M.2 64GB
- Switching Capacity: 1440Gbps
- Packet throughput: 1.07Gpps
- MAC Address Table: 288K [1]
- MTBF: 205000 hours
- Airflow: Front-to-Back or Back-to-Front
- Fan: 3+1 redundant FAN FRU
- Power Supply: 1+1 redundant 550W PSU FRU

Package Specification

- Dimension(W×D×H): 440 × 406 × 44 mm
  Weight: 9.0 Kg

Operation Environment

- Input Voltage: 100V-240V, 50Hz-60Hz
- Operation Temperature: 0°C ~ 45°C
- Operation Humidity: 5% ~ 95% non-condensing

L2 Switching Feature

- VLAN
  - 802.1Q VLAN
  - Port Based VLAN
  - Q in Q
- Spanning Tree Protocol
  - IEEE 802.1D
  - IEEE 802.1w
  - IEEE 802.1s
  - Spanning Tree Fast Forwarding
- Storm Control
  - Broadcast Storm Control
  - Unknown Multicast
  - DLF (unknown unicast)
- IGMP Snooping
  - IGMP Snooping v1/v2/v3
  - IGMP Immediate Leave
  - MLD Snooping
- QoS Features
  - 8 priority queues
  - WRR, Strict priority, Hybrid
  - 802.1p based COS
  - IP TOS/DSCP Classification

L3 Routing Features

- Number of IP interface: 128
- Multi-netting / CIDR
- Static route
- 48-way ECMP
- OSPF v2/v3
- BGP v4/v6
- VRRP
- Policy-based Routing (PBR)

IP Multicast

- MLD v1/v2
- DVMRP
- PIM-DM v4/v6
- PIM-SM v4/v6
- IGMP proxy

IPv6

- IPv4/v6 dual stack
- ICMPv6
- ICMPv6 redirect
- IPv6 Path MTU Discovery
- IPv6 Neighbor Discovery
- Stateless Auto-configuration
- Manual Configuration

Datacenter Features

- FIP Snooping
- Congestion Notification (CN)
- ETS
- PFC
- DCBX for PFC (CIN/CEE v1.06/IEEE)
- DCBX for ETS (CIN/CEE v1.06/IEEE)
- Puppet/Chef Support
- VXLAN/NVGRE support
  - Neutron plug-ins for OpenStack
- MLAG Support
- Open API
- OpenFlow v1.0/v1.3 [2]

Certification

[1] MAC Table size can be adjusted
[2] It is supported in the feature firmware upgrade

DATA CENTER SWITCH DESIGN

S7810-54QS provides 48 × 10GE SFP+ for downlink port to Server and 6 × 40GE QSFP for uplink port to cloud. Deployed as the Top of Rack switch or as part of distributed spine network.S7810-54QS offers the high performance and reliability for data center environment.

FULLY SUPPORT IPV6 PROTOCOL

S7810-54QS is the IPv6 ready data center switch. It supports for extensive transition technologies from IPv4, IPv6, dual stack, and IPv6 management function. S7810-54QS also supports the IPv6 routing protocols like IPv6 static routes, OSPFv3, BGP4+, PIM. Smoothly migration to future generations of Internet.

OPENFLOW TECHNOLOGY

S7810-54QS supports OpenFlow protocol. It's fully open architecture for SDN while providing customers with more flexible network business model and innovative platform. Also it elevates network service capability, allowing network to provide better application services.

AUTOMATION

Accompanied by the application of cloud computing, big data and parallel calculation, datacenter network devices continue to grow fast and make network automation a critical factor. Supporting auto installation and integration with orchestration tools like Chef and Puppet, S7810-54QS switches help for easy deployment of mass datacenter IaaS build-up.

VIRTUALIZATION

Network virtualization is becoming an important topic for datacenters. S7810-54QS provides hardware-based VXLAN/NVGRE feature to support virtual machine mobility. Not limited by 4K VLANs, VXLAN/NVGRE helps for the network scaling out across L3 subnets and can support up to 16.7M possible virtual networks. To reduce the network OPEX, a neutron plug-in highly integrated with OpenStack is provided for customer to deploy their virtual machine in few minutes.

RELIABILITY

S7810-54QS has multiple layers of reliable protection at both equipment and link levels. S7810-54QS equips with dual power supply and fan assembly with overcurrent, overvoltage, and overheating protection technologies. Provides the hot swappable modularized power supply and fan to strengthen equipment reliability and not impact the daily operation.

Additionally, S7810-54QS also supports for monitoring alarm function in the failure event of power supply or fan. It also supports auto-adjusting fan speed according to temperature changes, system hot backup without system reboot or reconfiguration, switch over to backup system in event of primary system failure to ensure uninterrupted data processing and operation.

NETWORK MANAGEMENT

S7810-54QSsupports extensive types of management ports, such as Console, out-of-band management port, USB port. Support CLI commands, SNMPV2c/V3 and management tools Puppet, Chef to manage even easier.

CONTEG, spol. s r.o.

Headquarters:
Na Vitezne plani 1719/4
140 00 Prague 4
Czech Republic
Tel.: +420 261 219 182
conteg@conteg.com
www.conteg.com

Production plant:
K Silu 2179
393 01 Pelhrimov
Czech Republic
Tel.: +420 565 300 300

Local Branches/Offices:

Austria/Germany/Switzerland:	+420 261 219 182
Benelux:	+31 76 5420 709
Southeastern Europe:	+49 172 8484 346
Finland:	+358 50 414 1257
France/Italy/Maghreb:	+33 1 60 04 55 90
Middle East:	+971 55 508 3241
Russia/CIS:	+7 495 967 3840
Saudi Arabia:	+966 54 000 2341