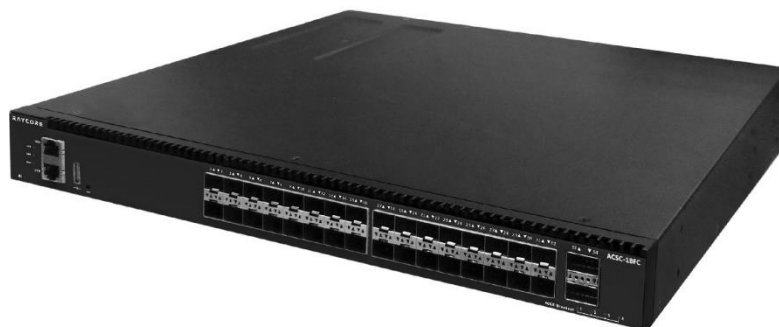# RAYCORE

Q3-S326 V1.2E

Specification of L3 Manageable 40G Fiber Switch, 32 Ports 10G SFP+ and 2 Ports 40G QSFP+

Part Number: ACSC-1BFC-RC0xx-00

The Routing Switch from Melbye contains 32 Ports 10G SFP+ and 2 Ports 40G QSFP+. It is high performance Ethernet switch to meet next generation Metro, Data Center and Enterprise network requirements. The Routing Switch support L2/L3/Data Center/Metro features. The Routing Switch comes with complete system software with comprehensive protocols and applications to facilitate rapid service deployment and management for both traditional L2/L3 networks and Data Center networks.

The Routing Switch is cost-effective Ethernet access and aggregation platform to Enterprise, Data Center and Metro application.

Specifications

Interface

- TP
  - ➢ RJ-45 Port: 1 Port 1G Management Port
  - ➢ 1 Port Console Type
- Fiber
  - ➢ Fiber Port: 32 Ports 10G SFP+
  - ➢ 2 Ports 40G QSFP+
- USB
  - ➢ USB Port: 1 Port USB 2.0

Standard compliance

- Support IEEE 802.3ab 1000Base-T
- Support IEEE 802.1p QoS
- Support IEEE 802.1q VLAN Tagging
- Support IEEE 802.1x Access Control
- Support IEEE 802.1d STP
- Support IEEE 802.1w RSTP
- Support IEEE 802.1s MSTP
- Support IEEE 802.1ab LLDP
- Support IEEE 802.1ad Q-in-Q
- Support IEEE 802.3x Flow Control
- Support IEEE 802.3ad Link Aggregation/LACP

Traffic

- Support Switching capacity up to 800 Gbps
- Support Throughput up to 595.2 Mpps
- Support full duplex, half duplex, and auto-negotiation duplex
- Support auto-negotiation port speed
- Support Storm Control
- Support Port-isolate
- Support L2 Protocol Tunneling
- Support VLAN
  - 4094 VLANs
  - VLAN access mode: Access /Trunk/Hybrid
  - Default VLAN
  - VLAN Classification
  - Basic QinQ, selective QinQ and VLAN Mapping
  - Private VLAN
  - Guest VLAN

- Support Link aggregation
  - Static Link aggregation
  - Link Aggregation Control Protocol (LACP)
  - Static load balancing (SLB)
  - dynamic load balancing (DLB)
  - Round-Robin (RR)
- Support DHCP Relay
- Support DHCP Snooping
- Support DHCP Client
- Support DHCP Option82
- Support RMON
- Support sFlow
- Support Internet Protocol Service-Level Agreement (IP SLA)
- Support Network Time Protocol (NTP)
- Support port Errdisable state detection and recovery
- Support configure static DNS client
- Support Link Layer Discovery Protocol (LLDP)
- Support hardware loopback (internal/external)
- Support to configure system time
- Support to configure time zone
- Support Debugging
  - Debug based on modules
  - CPU/memory usage display and alarm
  - Device temperature/PSU/FAN/status display and alarm
  - User operation logs
  - Management of logs, alarms, and debugging information
  - Detailed diagnostic-information collection
  - Reboot information logging
  - Network diagnostics (ping/traceroute)
  - Mirror: support use port/vlan/cpu as mirror source
  - use port/port group/vlan/cpu as mirror destination
  - To CPU/From CPU packets statistics

Security & Authentication

- Support STP/RSTP/MSTP protocol
- Support STP Protocol Protection (BPDU Filter/Guard, Root Guard, Loop Guard, Anti TC-BPDU attack)
- Support Single ERPS ring / tangent ERPS rings / intersecting ERPS rings
- Support ERPS compatible with RRPP
- Support Virtual Router Redundancy Protocol (VRRP)
- Support Behavioral Health Measure (BHM)
- Support Address Resolution Protocol (ARP)
  - Static ARP
  - Dynamic ARP leaning and aging
  - Gratuitous ARP
  - Basic ARP-Proxy and local ARP-Proxy
- Support IPv4 forwarding
  - IPv4 static routes
  - IPv4 static routes co-work with IP SLA
  - uRPF check
  - ICMP redirect
  - ICMP error message
  - ECMP
- Support IPv6 static routes
- Support IGMP snooping
- Support QOS
  - Traffic classification based on COS/DSCP (simple classification)
  - Traffic classification based on ACL (complex classification)
  - Queue scheduling based on traffic classification
  - Remark the priority fields (COS/DSCP) of the packet
  - Flow redirection
  - Flow mirror
  - Traffic policing
  - Traffic shaping
  - Traffic statistics
  - Strict Priority (SP) scheduling
  - Weighted Deficit Round Robin (WDRR) scheduling
  - SP + WDRR mixed scheduling

> ➢ Tail Drop (TD)
> ➢ Weighted Random Early Detection (WRED)

- Support SSH
- Support Radius
- Support TACAS+
- Support AAA
- Support port based dot1x and MAC based dot1x
- Support configure dot1x Guest via command or Radius server
- Support access control list (ACL)
- Support traffic classification based on source and destination IP/source and destination MAC/ source and destination layer for protocol number / VLAN ID
- Support ACL active based on Time-Range
- Support ARP inspection
- Support IP source guard
- Support port security to limit the MAC address learning on interface
- Support control plane policing (CoPP)
- Support Prevent DDOS attack
- Support Link-Flapping detection
- Support file system to manage the files and directories
- Support file upload and download via FTP/TFTP/USB
- Support transmit files via Xmodem

Management

- Support in-band and out-band management ports
- Support privileged user priority and privileged commands
- Support Network management based on SNMPv1/v2c/v3
- Support Public and private MIB
- Support Public and private Trap
- Support Configuration and management based on WEB UI
- Support Configuration and management based on RPC-API
- Support change the system specifications by choose different STM Profiles
- Support feature configuration based on License
- Support restore factory default configuration
- Support manual/schedule reboot
- Support upgrade with the local image file/remote TFTP server
- Support online upgrade Uboot
-

Hardware

- Support store and forward mode
- Support Flow Control
- Support Jumbo Frame
- Support MAC Address Table
  - ➢ Support static MAC address
  - ➢ Support dynamic MAC address learning and aging
  - ➢ Support black hole MAC address
  - ➢ Support MAC Flapping detect

Environmental & Physical

- Dimension: 400mm x440mm x 43.6mm (WxDxH)
- Weight: 7.5kg
- Operating temperature: 0 to 45 °C
- Storage temperature: -40 to 70 °C
- Relative humidity: 0 to 95% (non-condensing)
- Altitude: ≤ 5000 meters
- Latency: 612ns
- Memory: 1 GB
- Flash: 2 GB

- Packet buffer memory: 9 MB
- Hot plugging fans: 4 (3+1 backup)
- Power characteristics:
  - AC

    Operating voltage: 100 ~ 240V; 50/60H

    Maximum voltage: 90 ~ 264V; 47~63Hz
  - DC

    Operating voltage: -36 ~ -72V
- Hot plugging power supplies: 2 (1+1 redundant)
- Power consumption: 120W/150W
- Certifications:
  - UL to UL 60950, third edition
  - CE marking
  - NEBS level 3
  - CE/FCC Part 15 Class A

Ordering Information

Part Number	Description
ACSC-1BFC-RC0xC-00	L3 Manageable 40G Fiber Switch, 32 Ports 10G SFP+ and 2 Ports 40G QSFP+, power supply AC Power + AC Power
ACSC-1BFC-RC0xD-00	L3 Manageable 40G Fiber Switch, 32 Ports 10G SFP+ and 2 Ports 40G QSFP+, power supply AC Power + DC Power
ACSC-1BFC-RC0xE-00	L3 Manageable 40G Fiber Switch, 32 Ports 10G SFP+ and 2 Ports 40G QSFP+, power supply DC Power + DC Power

(x) Power Cord Type: 1= EU, 2= UK, 3=US, 4= No Need