M3000

Mobile Network/Mobile Backhaul

Overview

DASAN Zhone Solutions' M3000 is a cost-effective MPLS Switch as supporting the packet-based transport technology as 5G network and designing as high-quality. M3000's operation position is as L2/L3 Ethernet LAN switches in large venues, datacenter application, and carrier aggregation switches. M3000 has diverse L3 functionality IS-IS/v6, OSPF/OSPFv6, BGP/v6 and so on.

The client interface support as 24-Port 10GbE (SFP+) or 25GE (SFP28) and 4-port 40GbE (QSFP+) or 100GbE (QSFP28) interfaces for uplink. Management port and Console ports also located at the front side.

The PSU(Power Supply Unit) modules support the 1:1 redundancy, load sharing, that is the ability to operate with non-stop service even broken as one.

Regarding FAN operations, it is controlled by an internal CPU block, can control the fan speed as system temperature.

The M3000 offers the timing services(IEEE1588v2, PTP), to allow the mobile phase locking from the core of the network. And M3000 can be used for various application scenarios as a mobile backhaul switch as Cell Site Router/Switch, business core Switch, and Enterprise markets.

Features

- High-density, Robust Design
- System switching capacity support upto 2Tbps
- 24 x 10G/25G (SFP+/SFP28) interface ports
- 4 x 40G/100G (QSFP+/QSFP28) interface ports
- 1 port RS-232 for Console (RJ45)
- 1 port 100/1000Base-T for Management (RJ45)
- 2 slot power for PSU_DC/PSU_AC
- Redundant dual power supply unit (PSU)
- Hot Swappable for all plug-in units (PSU and FAN)
- SNMP v1/v2/v3 with RMON, Alarms
- User-friendly CLI via console or telnet
- Realtime network traffic monitoring and analyzing
- IP/MPLS based network topology supplied
- SR-MPLS topology
- Front LED indicator

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Specification

Flash Memory	8MB (Boot), 64+64MB (NOS 1,2)
SDRAM	2GB (DDR3)
Service Port	24 Port 10G/25G (SFP+/SFP28)
Uplink Port	4 Port 40G/100G (QSFP+/QSFP28)
Console	1 Port (RJ45 to RS232)
MGMT	1 Port 100/1000Base-T (RJ45)
Operating Temp.	-4~140˚F (-20~60˚C)
Storage Temp.	-40~158˚F (-40~70˚C)
Humidity	10~80% (Non-condensing)
Power Voltage	AC : 100~240VAC (50/60Hz) DC : 24~-48VDC
Dimensions (W x H x D)	440 × 44 x 418 mm
Power consumption	270 W (25G ER-Lite X 24 + 100G ER- Lite x 4)

Capabilities

Layer 2	• Standard Ethernet Bridging • Port/Subnet/Protocol-based VLAN • Spanning tree (STP/ RSTP/ MSTP) • 802.3ad link aggregation • Port Mirroring • sFLOW / Netflow • DHCP Server/Relay/Option82 • Link Debounce
Layer 3	• 16K IPv4 Hosts, 380K IPv4 LPM • 64K L3 Next Hop Table • 4K IPMC group • 512 VRF • IS-IS, OSPFv2/v3, BGPv4 • VRRP
IP/MPLS	• L2VPN-VPWS/VPLS/H-VPLS • L3VPN • PW : SSPW, MSPW • 6PE/6VPE • MPLS OAM, Protection
Clock	• IEEE1588v2(TC,BC) • Synchronous Ethernet
Multicast	• IGMPv1/v2/v3, PIM-SM/SSM • IGMP snooping • Multicast VLAN Registration (MVR)
Management	• SNMP/Telnet/TFTP/SSH/SFTP • Syslog volatile, nonvolatile, remote • RMON
QoS	• 8 queues per port • DRR/WRR/SP • 802.1p/DSCP • Shaping Egress • Remarking 5 tuple

Sample Configuration