

IP Over WDM

DMAIPOM1GE8002



DESCRIPTION

Danial Moj Optical Communication Technology Company, as a science-based manufacturing Company and the only Iranian Company holding License to Approve CWDM, DWDM Systems samples issued by the Communications Regulatory Authority (both permits) offers different types of its products as described below:

IP Over VIDM

It is a single U system containing Active and Passive Parts and includes pre-defined Lambdas.

Passive Section:

In the Passive part, the wavelength of the 1550 system accumulates with wavelength 1310 and is separated in the opposite side too. In this stage, the main cores are connected to the left and right links of the apparatus and the wavelength 1310 is connected through the relevant adaptor to SDH equipment in the place. The PatchCord connection tests prevent any possible communication inside the network. Implementing this part is achievable and implementable with least disconnection time in network in case of not being exposed to high fall in the main core. Due to using passive parts in this section, it provides more than 100 years MTBF and causes higher probability of communication sustainability than other telecommunication systems.

Active Section:

This part consists of two switches:

- Second layer switch: This contains eight network ports

10/100/1000 and two SFP 1G optical ports

- Third layer switch: This contains eight network ports 10/100/1000 and two SFP 1G/ 10 G optical ports

SPECIFICATION SWITCHES

Layer 2 Features:

- Link Aggregation Control Protocol (LACP)
- Up to 4K VLANs simultaneously (out of 4K VLAN IDs)
- GVRP (GARP VLAN Registration Protocol)
- Port Isolation
- STP/RSTP/MSTP
- IGMP Snooping

Management

- Web-based GUI
- Command Line Interface
- SNMP v1/v2c/v3
- RMON (1,2,3,9 group)

Quality of Service

- 4 priority queues
- Support IEEE 802.1P
- DSCP QoS
- Rate limit feature

Security Strategies

- IP-MAC-Port-VID Binding
- Access Control List (L2~L4 ACL)
- 802.1x and RADIUS Authentication
- Support DoS defend
- Port Security
- SSL and SSH encryptions

PERFORMANCE

Certification	CE, FCC, RoHS
Package Contents	Switch; Power Cord; Quick Installation Guide; Resource CD; Rack mount Kit; Rubber Feet
System Requirements	Microsoft® Windows® 8, 7, Vista™, XP or MAC® OS, NetWare®, UNIX® or Linux.
Environment	Operating Temperature: 0°C~60°C Storage Temperature: -40°C~80°C Operating Humidity: 10%~90% non-condensing Storage Humidity: 5%~90% non-condensing

HARDWARE FEATURES

Standards and Protocols	IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3ad, IEEE 802.3x, IEEE 802.1d, IEEE 802.1s, IEEE 802.1w, IEEE 802.1q, IEEE 802.1x, IEEE 802.1p
Interface	8 10/100/1000Mbps RJ45 Ports (Auto Negotiation/Auto MDI/MDIX) 2 1000Mbps SFP Slots 1 Console Port
Network Media	10BASE-T: UTP category 3, 4, 5 cable (maximum 100m) 100BASE-TX/1000Base-T: UTP category 5, 5e, 6 or above cable (maximum 100m) 1000BASE-X: MMF, SMF
Fan Quantity	Fan less
Dimensions (W x D x H)	11.6*7.9*1.7in. (294*200*44 mm)
Power Consumption	Maximum: 10.7W (220V/50Hz)
Power Supply	-48 V DC

PERFORMANCE

Bandwidth/Backplane	20Gbps
MAC Address Table	8k
Packet Buffer Memory	4Mb
Packet Forwarding Rate	14.9Mpps
Jumbo Frame	10240 Bytes

SOFTWARE FEATURES

Quality of Service	Support 802.1p CoS/DSCP priority Support 4 priority queues Queue scheduling: SP, WRR, SP+WRR Port/Flow-based Rate Limiting Voice VLAN
L2 Features	IGMP Snooping V1/V2/V3 802.3ad LACP (Up to 8 aggregation groups, containing 8 ports per group) Spanning Tree STP/RSTP/MSTP - Port isolation BPDU filtering/guard - TC/Root protect Loop back detection - 802.3x Flow Control
VLAN	Supports up to 4K VLANs simultaneously (out of 4K VLAN IDs) Port/MAC/Protocol-based VLAN GARP/GVRP Management VLAN configuration
Access Control List	L2~L4 package filtering based on source and destination MAC address, IP address, TCP/UDP ports, 802.1p, DSCP, protocol and VLAN ID; Time Range Based
Security	IP-MAC-Port-VID Binding IEEE 802.1X Port/MAC Based authentication, Radius, Guest VLAN DoS Defense Dynamic ARP inspection (DAI) SSH v1/v2 SSL v2/v3/TLSv1 Port Security Broadcast/Multicast/Unknown-unicast Storm Control
Management	Web-based GUI and CLI management SNMP v1/v2c/v3, compatible with public MIBs and TP-LINK private MIBs RMON (1, 2, 3, 9 groups) DHCP/BOOTP Client, DHCP Snooping, DHCP Option 82 CPU Monitoring - Port Mirroring Time Setting: SNTP - Integrated NDP/NTDP feature Firmware Upgrade: TFTP & Web System Diagnose: VCT SYSLOG & Public MIBs