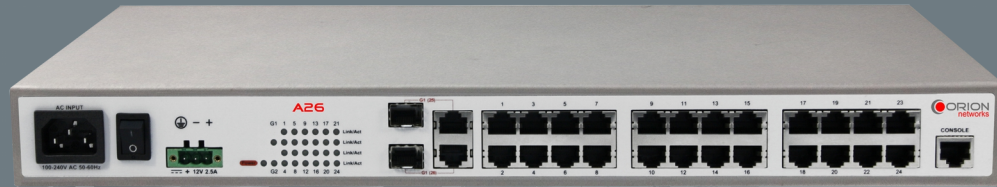


A26 Ethernet Switch

Enhanced L2 Metro-Ethernet Access Switch



Product Overview

A26 is designed for Metro Ethernet access portfolio, which provides cost-effective solutions for campus, enterprise, and residential access scenarios.

The product has 24x10/100Base-T auto-sensing client interfaces and 2xSFP combo GE network interfaces, which enables flexible network deployments such as dual ring or ring + chain. The A26 also offers rich functionality that guarantees MEF-compliant E-Line, E-Tree and E-LAN services together with full suite of management and protection mechanisms for FTTX triple-play applications. Port Backup (Flex Links) feature serves as an alternative to STP - a pair of layer 2 interfaces has one interface configured as backup to other, and if the primary link fails, the backup link takes over traffic forwarding. A26 is equipped with advanced microchips that ensure carrier-class stability and reliability.

Product Description

The Orion Networks© A26 Metro-Ethernet Access Switch supports a number of key features:

- **Network Security** - Upgraded security with port-isolation, advanced ACL, broadcast/multicast/DLF storm control, unique port loopback detection, and DHCP Client/Snooping/Option 82 functionality, IGMP RADIUS Authentication
- **Resiliency & Protection** - Supports ITU-T G.8031 linear and ITU-T G.8032 ring protection; Supports STP/RSTP/MSTP, IEEE 802.3ad Link Aggregation, and Port Backup (Flex Links) as an alternative to STP functionality with ability to backup links and balance traffic between primary and backup links
- **Carrier Ethernet Service & Management** - Supports IEEE 802.3ah Link OAM, IEEE 802.1ag end-to-end connectivity OAM and ITU-T Y.1731 end-to-end service and performance; Advanced QoS technology allows stream-marking based on CoS, DSCP and port priority; Scheduling modes including SP, WRR, SP+WRR; Support flow-based mirroring/rate-limit/redirection/VLAN swapping and rewriting
- **Multicast Functionality** - Supports IGMP snooping/proxy, multicast filtering, multicast VLAN registration (MVR) to save bandwidth and optimize corresponding services such as IPTV

Features

Switching mode	Store and forward mode Non-blocking switching
Packet Forwarding	MTU: 2,048 bytes (default) DLF Control
Bandwidth Profile	Rate limiting: up to 1,048,576Kbps Ingress rate limit per port Increments: 64Kbps (64K-1M)
VLAN	IEEE 802.1Q VLAN: 4K active VLANs Port-based VLAN GVRP, 256 max dynamic VLAN
Storm Control	Broadcast/multicast/unicast/DLF storm control Control mode: global, bps, burst Default burst: 8KB
Multicast	1K multicast addresses Static multicast group IGMP Snooping V1/V2/V3 Multicast filtering & unknown multicast discarding Multicast VLAN Registration (MVR)
Mirror	Mirroring per port Separate mirroring configurations for ingress & egress ports
Port Loopback Detection	Auto shutdown individual ports upon fault signals Auto-detection interval can be set
MAC Address Table	8K MAC address Add/remove MAC address View MAC address statistics Search MAC address Aging time: 10-1,000,000s MAC table threshold per port MAC table limit: 1-255
Link Aggregation	Up to 6 groups and 8 ports per group Group member max-port-number 26 Load balance based on MAC/MAC+IP Standard LACP (static only)

Features

Flow Control	IEEE 802.3x in full duplex mode Back pressure in half duplex mode
STP	STP, RSTP & MSTP (64 instances) 256 STG (Spanning Tree Group)
Digital Diagnostic (DDMI)	SFP digital diagnostic function
System Management	CLI/Telnet/SNMP/Web management RMON1, 2, 3 & 9, Bridge MIB (RFC1493), System log, Hierarchical alarms, Link alarm per port, Fault pass through
Maintenance	Debug information output, PING, Telnet client, Port statistics Port dynamic statistics
QoS	Global CoS/DSCP to queue mapping Port priority override Port TRUST mode: CoS/DSCP/port priority Global queue scheduling with 8 queues per port Scheduling mode: SP/WRR/SP+WRR WRR weight range: 1-255
Ethernet Ring	MRRP Up to 8 rings 124 devices on one ring switching time \leq 50ms
ACL	MAC/IP/MAC+IP-based ACL User-defined ACL
Safety Features	Client classification and password protection RADIUS, TACACS+ Binding of MAC address & port, Port protection, IP source guard, Dynamic APR Inspection PPPoE agent, DOT1X
Filter	ACL hardware filter
LLDP	Discovery remote base on link layer Get remote basic information
Error Tolerance & Redundancy	System error report Fast recovery during serious error
Time Management	Time zone, Time modification, Support SNTP & NTP
Software Upgrade	Xmodem/FTP upgrade in BootROM/FTP/TFTP

Specifications

Performance	Switching fabric: 8.8Gbps
Capacity	64MB DDR2 16MB flash 1.5MB switch buffer 1K IGMP groups
Indicators	Power Supply (flashing) FE port: LINK/ACT GE port: LINK/ACT
Physical interface	Management port: 1 console (RJ45) Client interfaces: 24 x 10/100 Base-TX RJ45 port Network interfaces: 2 x COMBO (2 x 100/1000Base-X SFP; 2 x 10/100/1000Base-T RJ45)
Power Specs	AC: 110~240V, 50/60Hz Full load: ≤ 20.0W RPS
Usage Conditions	Operating temp: 0~50 °C (32~122 °F) Storage temp: -25~70 °C (-13~158 °F) Humidity: 10~90% non condensing
Dimensions	440(L) x 180(W) x 44(H) mm
Weight	≤ 2.5Kg

Compliances

Standards & Protocols	IEEE 802.1Q VLAN, IEEE 802.3ad Link Aggregation, IEEE 802.1ad QinQ, IEEE 802.1D Spanning Tree, IEEE 802.1w RSTP, IEEE 802.1s MSTP, IEEE 802.1x Security, IEEE 802.1p CoS Prioritization, IEEE 802.3x Flow Control, IEEE 802.3ah OAM, IEEE 802.1ag Connectivity Fault Management, ITU Y.1731 Services OAM, Statc Routing, IGMP v1/v2/v3, RMON I and II standards, SNMPv1/v2/v3, MEF9, MEF14
-----------------------	--

Corporate and Sales Headquarters
Orion Networks
4262 Entry Ct STE K
Chantilly, VA 20151 USA
Phone: 512.646.4025
www.orionnetworks.com

To purchase Orion Networks solutions, please contact your Orion Networks representative or authorized reseller.

Copyright 2013 Orion Networks. All rights reserved. Orion Networks, the Orion Networks logo are registered trademarks of Orion Networks, in the United States and other countries. All other trademarks, service marks, or registered service marks are the property of their respective owners. Orion Networks assumes no responsibility for any inaccuracies in this document. Orion Networks reserves the right to change, modify, transfer, or otherwise revise this publication without notice.

June 2013