

MPLS Platform

Adamas3224G

Preliminary



1RU Compact Multi-Service Platform

- Industrial level fanless designed
- Support seamless connections with MPLS-TP and IP-MPLS networks
- Support end-to-end MPLS-TP PW\LSP\section layer OAM based on ITU-T G.8113.1
- Support Ethernet EPL \ EVPL \ EP-LAN \ EVP-LEN \ EP-Tree \ EVP-Tree services defined by MEF
- Support end-to-end PWLSP layer liner protection switching based on ITU-T G.8131 with switching over time in sub 50ms
- Support MPLS-TP ring protections switching based on ITU-T G.8132 with switching over time in sub 50ms
- Support L2 VPN and L3 VPN
- Support IEEE1588v2 (PTP) and Sync-E
- Support hierarchical QoS (HQoS)
- Provide end-to-end service provisioning, real-time system operation and performance monitoring by using the graphic user interface (GUI) via new NMS platform

- OAM : Support IEEE802.3ah EFM ; Support IEEE802.1ag CFM(CC \ LB \ LT) ; Support ITU-T.Y.1731 (CC \ LB \ LT \ RDI \ LCK \ AIS \ CSF \ PM) ; Support ITU-T G.8113.1 MPLS-TP PW\LSP\section layer OAM (CC \ CV \ LB \ RDI \ LCK \ AIS \ CSF \ PM)
- CAR : Support 2K ingress bandwidth profiles ; Support 512 egress bandwidth profiles ; Support hierarchical bandwidth profile with dual leaky bucket meters ; Support modified TrTCM
- ACL : Support MAC/IP based ACL and L2-L4 based ACL ; Support user defined ACL ; Support ACL combination based on VLAN / CoS / MAC / EtherType / IP /L4 protocol
- QoS : Supports port / CoS / DSCP mapping ; Supports SP,WRR,DRR, SP+WRR, and SP+DRR scheduling ; Supports hierarchical QoS with four-level scheduler ; Support Weighted Random Early Detection (WRED)
- Synchronization : Support IEEE1588v2 PTP ; Support ITU-T G.8261\8262 Synchronous Ethernet
- MPLS : Support RSVP-TE ; Support LDP ; Support MPLS TE FRR ; Support L2VPN to provide VPWS and VPLS services (CCC and SVC mode) ; Support both static and dynamic L3VPN
- IP Routing : Support static routing ; Support OSPF-TE ; Support MP-BGP
- IP Multicast : Up to 1K groups in L2 Multicast groups ; Up to 4K groups in L3 IP Multicast groups ; Support PIM-SM and PIM-DM

Overview

Adamas3224G is a 1RU compact Multi-Service Platform. It enables profitable network establishment for industrial backbone networks, smooth evolution from traditional to next-generation services. Adamas3224G supports up to 2 x 10G uplink capabilities, and provides efficient cross-connection and transportation over IP services. Maximum system uptime and high network availability are guaranteed by full hardware redundancy and G.8132/G.8131 MPLS-TP protections. A new management platform provides all aspects of functionalities from service provisioning to real-time system operation and performance monitoring. Adamas3224G offers cost-effective solutions to seamless connections with MPLS-TP and IP-MPLS networks and time synchronization by adopting Sync-E and PTP. With this integrated system, considerable amounts on CAPEX and OPEX will be saved for implementing scalable networks in the future.

Features & Benefits

- Switching Mode : Store and forwarding mode ; 16Mbit packet buffer ; Support Jumbo frame
- Packet forwarding : MTU : 13K Bytes ; Support DLF control ; Support storm control
- MAC address table : Up to 32K entries
- VLAN : 4K
- Link Aggregation : Up to 32 link aggregation groups ;Up to 8 ports in each group ; Support Distributed Link Aggregation ; Support load balancing based on source/destination IP and MAC address
- Protection Switching : Support ITU-T G.8131 based MPLS-TP liner protection switching ; Support ITU-T G.8132 based MPLS-TP ring protection switching ; Support MPLS TE FRR ; Support IEC62439-6 (DRP); Support STP\RSTP\ MSTP

Specification

Switch Properties

Capability : 88 Gbps
MAC : Up to 32K entries
VLAN : Up to 4K VLANs
L3 Routing : Up to 12K LPM / 8K host entries
L2 Multicast groups : Up to 2K
L3 Multicast groups : Up to 4K
LACP : Up to 32 groups (8 members per group)
PWs : Up to 2K
LSP Protection Groups : Up to 1K
Bandwidth profile (CAR) : Ingress : 2K ; Egress : 512

Interfaces

10GE: Up to 2 SFP+ ports
GE: Up to 24 GE Ports
Console: 1 x RJ45 port (RS232)
Management port: 1 x RJ45 port (10\100\1000Base-T(X))
Alarm: 1 x 3-pole terminal block (Form-C contact relay)

Chassis

Housing: Metal
Type of mounting: 19' Rack
Heat dissipation: Convection cooling (Fanless design)
Protection class: IP40
Dimension: 480mm x 44mm x 360mm (W x H x D)

Weight

<8Kg

Ambient condition

Operating Temperature: -40°C ~+85°C
Storage Temperature: -40°C ~+85°C
Relative Humidity: 5-95% non-condensing

MTBF

233400h

Warranty

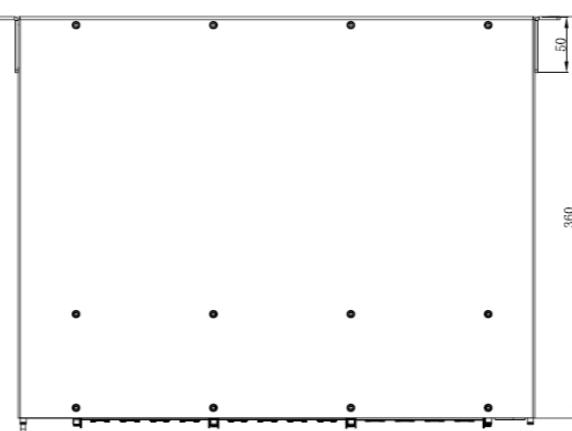
5 years

Power Supply

Full load: <60W
Overload protection: Yes
Reverse polarity protection: Yes
Power redundancy: Yes

Dimensions

Adamas3242G panel mounting dimensions



Compliance

Standard

IEEE802.3; IEEE802.3i, IEEE802.3x; IEEE802.3u;
IEEE802.3z; IEEE802.3ab; IEEE802.3ae;
IEEE802.3ah(EMF); IEEE802.3ad(LACP);
IEEE802.1d; IEEE802.1q; IEEE802.1p; IEEE802.1w(RSTP); IEEE802.1s(MSTP);
IEEE802.1x ; IEEE802.1ag(CFM);
IEEE1588v2(PTP);
ITU-T G.8113.1(MPLS-TP OAM); ITU-T G.8131; ITU-T G.8132;
ITU-T G.1731; ITU-T G.8261\8262(Sync-E)
RFC4090 (FRR); RFC4115(mTrTCM); RFC3473(RSVP-TE);
RFC4447(LDP); RFC4664; RFC2328(OSPFv2); RFC3630(OSPF-TE);
RFC4664(L2VPN); RFC4110(L3VPN); RFC2858(MP-BGP);
IEC62439-6(DRP)

Approvals

CE(Pending) ; FCC(Pending)

EMI

FCC CFR47 Part 15,EN55022/CISPR22,Class A

EMS

IEC61000-4-2(ESD) ±6kV(contact), ±8kV(air)
IEC61000-4-3(RS) 10V/m(80MHz-2GHz)
IEC61000-4-4(EFT) Power Supply Input : ±2kV; Signal Input/Output : ±1kV
IEC61000-4-5(Surge) Power Supply Input:±2kV/DM,±2kV/CM; Signal Input/Output : ±2kV
IEC61000-4-6(CS) 3V(10kHz-150kHz);10V(150kHz-80MHz)

Machinery

IEC60068-2-6(Vibration) IEC60068-2-27(Shock) IEC60068-2-32(Free Fall)

Industry

IEC61000-6-2

Power Utility

IEC61850-3, IEEE1613

Railway

EN50155, EN50121-4

Ordering Information

Chassis: Adamas3224G-Ports-PS1-PS2

Ports: 2X4GX4G16T =
2 x SFP+(1000Base-X or 1000Base-X);
4 x SFP (1000Base-X or 100Base-FX);
4 x Combo ports(1000Base-X SFP or 10\100\1000Base-T(x));
16 x RJ45 ports (10\100\1000Base-T(X));
PS1: HV = 220AC/DCW (85-264VAC/77-300VDC);
L1 = 48DC(36-72VDC)
PS2: HV = 220AC/DCW (85-264VAC/77-300VDC);
L1 = 48DC(36-72VDC)
NA: -

