

AIMR-412C

IP-MPLS Aggregation Router

Feature Summary

- ◆ Compact 1RU standard rack mountable
- ◆ Hot-swappable AC/DC power supplies with 1+1 redundancy
- ◆ Supports variety of physical interfaces such as 1GE/ 10 GE/ 100 GE interfaces.
- ◆ Hot swappable fan module with redundant fans
- ◆ Interface redundancy protection by Link Aggregation (LAG) technology
- ◆ Support a maximum 300 Gbps switching capacity
- ◆ Supports Nonstop forwarding (NSF), Nonstop routing (NSR) and Graceful restart (GR) at protocol as well as device level
- ◆ Supports SyncE, IEEE 1588v2, PTP (G.8275.1 profile)
- ◆ Supports IPv4 and IPv6 TCP/IP dual stack that includes ICMP, IP, TCP, UDP and ARP, etc.
- ◆ Supports Hardware-based IPv6 wire-speed forwarding and processing
- ◆ Supports powerful routing capabilities, IP Multicasting capabilities and MPLS Processing Capabilities using standard IP MPLS Technology
- ◆ Excellent Full service Carrying Capability
- ◆ Compliant with TEC-GR 48050-2024.

Layer 2 and Layer 3 features

- ◆ MPLS L2 VPN/L3 VPN, EVPN L2 VPN/L3 VPN, H-QoS mechanism, MPLS/BGP VPN, Inter-AS VPN Option A/B/C
- ◆ Static routing (IPv4 and IPv6), OSPFV2/V3, IS-IS, IS-ISv6, BGP, BGP4+, Routing Policy (Route Mapping), IPv6 over MPLS 6PE/VPE, IPv6 Policy based routing and IPv6 Net Stream
- ◆ Segmented routing (SR), Ti-LFA, IPv6 solution based on SRv6 (with steering policies), EVPN
- ◆ Provides network reliability by IP FRR, TE FRR, PW Redundancy, VPN FRR, VRRP
- ◆ Network reliability by supporting single-hop/multi-hop BFD for VRRP/BGP /OSPF/ISIS/Tunnel, BFD for LDP/LSP/TE/ TE LSP/ PIM/SRv6 Policy, IP/LDP/BGP/TE FRR
- ◆ IP multicast services based on IGMP v1/2/3, Static multicast group, PIM SM/DM/SSM, NG-MVPN, MSDP, MBGP, BIER
- ◆ IGP/BGP/Multicast fast routing convergence
- ◆ SDN for NETCONF, BGP-LS, PCEP, Flex-Algo
- ◆ Supports MPLS OAM, IEEE 802.1ag, IEEE 802.3ah, ITU-T Y.1731, RFC2544, TWAMP, iOAM

Security

- ◆ AAA, Keychain, URPF, CPU Defend etc.
- ◆ Rogue access detection, DDos and control plane overload

The Alphion AIMR-412C is a high-performance and high-stability end to end solution for multiple purposes, 5 G, IoT and cloud era. It adopts the unified platform and the combination of Segment Routing, EVPN, 1588 v2, SyncE, Network slicing and SDN to provide ultra large bandwidth, ultra low latency, high precision synchronization, intelligent network management and control to meet the challenges of 5G network.

Applications

Alphion AIMR-412C can be deployed as an aggregation node in Metropolitan Area Network (MAN). With flexible networking capability and perfect reliability design, it is an ideal choice for 5G backhaul, IP Metro and other IP network applications.

Management

Remote management and control of Alphion AIMR-412C devices is supported via NetConf.

SPECIFICATIONS

Ethernet I/O Interfaces

100GE: 2 x QSFP28 ports
1GE/10GE: 16 x SFP/SFP+ports

Transceivers Supported

QSFP28: 100GBASE-SR4, 100GBASE-LR4, 100GBASE-ER4,
100GBASE-ZR4
SFP+: 10GBASE-SR, 10GBASE-LR, 10GBASE-ER and
10GBASE-ZR
SFP: 1000BASE-SX, 1000BASE-LX, 1000BASE-EX and
1000BASE-ZX

Timing Interfaces

CLK1/2

Management Interfaces

Out-of-band, Console

Performance

Switching: 300 Gbps Ethernet switching
Capacity

Scalability

No. of Routes IPv4 – 16K, IPv6 – 4k
Virtual Routing 128
Functions (VRF)
Routes-Per-VRF 8K
No. of. Route 8K
Entries (OSPF)
Forwarding DB 32K
(MAC)

Power

AC Option: Hot swappable Dual-AC, 1+1 redundant PSU
AC Input: 100 ~ 240V, 50-60Hz
DC Option: Hot swappable Dual-DC, 1+1 redundant PSU
DC Input: -48V +/-20%
Consumption: 130W (Maximum)

Physical

Operating Temp: -5°C to 55°C
Operating (RH): 5% to 95% (RH), Non-condensing
Dimensions: 443mm (W) x 235mm (D) x 44.4mm (H)
Weight: 4.5 Kg (approx.)

Regulatory Compliance

EMC: ETSI EN 300 386, EN 55022, EN55024, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, CISPR 22, CISPR 24,
Safety: IEC/EN 60825-1, IEC/EN 60950-1, IEC/EN 62368-1

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