SYSTEMS INTEGRATED

*Innovative and Enduring Systems
Based on Published Standards*

SI-MARC 3308H

(1GE L2/L3 NID/CPE)

2x PS AC DC (24-72V)

Console, Out-of-Band

4x 10/100/1000 Copper Ports

4x 10/100/1000 SFP Ports
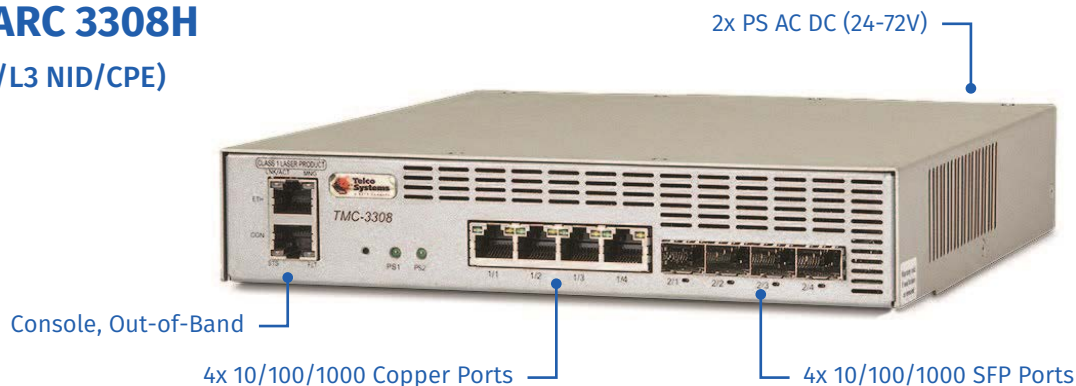
1GE MPLS CLOUD-BASED SERVICE SOLUTION

Cloud-based services pose new challenges for service providers. SI-Marc 3308H addresses these challenges using MPLS to provide low latency L2VPN, high availability, and end-to-end service assurance using advanced OAM tools and increased scalability.

SI-Marc 3308H compliments the SI-Marc 3000 Aggregation and Gateway Family by driving high capacity 1GE rings into the access layer to support low latency traffic and backhaul networks. With the addition of SI-Marc 3308H, Systems Integrated offers operators cloud-to-edge and cloud-to-cloud end-to-end services, assuring an exceptional level of experience for the end-user while optimizing carrier resources.

L3 SUPPORT

SI-Marc 3308H provides comprehensive solutions and services with native IP support, including Virtual Routing and Forwarding VRF lite, IP static routing, and dynamic routing protocols like OSPF and BGP. SI-Marc 3308H also supports Dynamic Host Configuration Protocol (DHCP) for dynamically distributing network configuration parameters, and Virtual Router Redundancy Protocol (VRRP).

The SI-Marc 3308H leverages Systems Integrated's field-proven, carrier grade BiNOX operating system – common among all its

FEATURES

- L2 (MEF CE 2.0), L3 Virtual Routing & Forwarding (VRF)
- MPLS and Carrier Ethernet Transport
- SDN Enabled (NETCONF, Yang)
- Embedded HW OAM (Y.1731, RFC2544, Y.1564, TWAMP) with Test Head
- Strong and scalable HQoS support
- Comprehensive Resiliency Suite
  - Sub 50ms G.803x, xSTP, LACP, MPLS FRR
  - Resilient Link, Dual Homing
- Dual Level Tag Manipulation
- Multicast Management
- Secure Authentication and Control
- Zero Touch Provisioning
- Optional Hardened Model

ORDERING IS EASY. CALL TODAY!

Systems Integrated: 800/966-1174

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platforms – to provide a robust and advanced multi-layer software platform to support administration, and maintenance requirements. Hardware- based QoS allows for very high QoS granularity independent of physical ports or services.

Additionally SI-Marc 3308H is MEF compliant device that supports IEEE 802.1Q bridging, IEEE 802.1ad Q-in-Q (TLS), MPLS L2VPN, Full VPLS PE, MTU HVPLS, VPWS.

For Resiliency it supports Sub-50ms RSVP-TE FRR, secondary LSP, ITU-T G.8032, xSTP, resilient link, dual homing VPLS/ HVPLS, LAG (Static/IEEE 802.3ad LACP/Multi-chassis).

Systems Integrated's Service and Support.

WARRANTY

Systems Integrated warrants that the equipment and accessories manufactured by Systems Integrated will be free from defects caused by faulty material or poor workman-ship for a period of five (5) years from the date of shipment. This warranty is subject to change at any time. The warranty that applies is determined by the warranty declaration in effect at the time the equipment ships.

Systems Integrated' liability under this warranty is limited to the obligation to repair or, at its sole option, to replace without charge within thirty (30) days of receipt, F.O.B. Systems Integrated' facility, any part found to be defective under normal use and service within the warranty period specified herein.

TAC SUPPORT POLICY

Systems Integrated' offers various levels of TAC support programs such as Silver, Gold, Platinum and Platinum Plus packages. The Silver Package offers support during business hours, 5 days a week, the Gold Package offers 24 hour, 7 day support by 365 days a year. Platinum offers Gold support with Return Material Authorization (RMA's) for out of war-ranty material and Platinum Plus offers all of this plus Advanced Replacement (RMA's). The minimum maintenance period is one year, beginning on January 1 and ending on January 31. When signing a contract in the middle of the year, Systems Integrated will pro-rate the fees from the end of the warranty period until the end of the year. The table below further explains the details all of the features offered by the various programs.

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TECHNICAL INFORMATION

Hardware Characteristics

4 x 100FX/1000BaseX SFP ports
4 x 10/100/1000BaseT RJ45 ports
1 x Console RJ45 port
Non-blocking 8Gbps FD platform
19" rack and wall-mounting options

Services

MEF Services: E-LINE, E-LAN, E-TREE, and E-ACCESS
L2 Services: IEEE 802.1Q bridging, IEEE 802.1ad Q-in-Q and TLS
MPLS Services: VPWS, VPLS and HVPLS
MPLS Signaling: RSVP-TE, BGP, LDP/T-LDP and Static MPLS
IP Services: VRF-Lite, DHCP Client/Server, VRRP
IP Routing: Static Routing, OSPFv2, IS-IS and BGPv4

Resiliency

Sub-50ms ITU-T G.8032 R-APS, STP/RSTP/MSTP, Fast Ring, FRR, HVPLS dual homing, secondary LSP, Resilient Link, LAG (static/IEEE 802.3ad LACP/Multi-Chassis), redundant AC/DC power supply

Quality of Service

Service classification per port/EVC/flow single/dual rate limiting, hierarchical rate limit per EVC. Hierarchical SP, DWRR and hybrid scheduling and shaping, with 8 queues per EVC / per port. CoS marking and mapping per EVC flow control for congestion handling

Multicast Management

IGMP snooping v1/v2/v3, IGMP proxy; multicast VLAN registration (MVR)

OAM

IEEE 802.3ah EFM, Hardware-based IEEE 802.1ag CFM, OAM over VPLS, MPLS Ping

Testing & Monitoring

Hardware-based ITU-T Y.1564 and RFC 2544 test head, loopback and service performance analyzer, MEF46
Latching Loopback controller & responder, ITU-T Y.1731 PM, SM and SLM support, per-port/ EVC/ VLAN/COS, hardwarebased MAC Swap loopbacks, TWAMP w/auto-testing

Management

Console, Telnet, SSHv2, RADIUS, TACACS+, SNMP v1/2/3, xFTP, NTP, DHCP client/server, and Zero Touch Provisioning

Security

ACLs, RADIUS, SSHv2, SNMPv3, SFTP, port security, broadcast storm prevention, secured access, ARP protection

General Specifications

Dimensions (H x W x D): 1.75" (1RU) x 8.7" x 9.25" (44 x 221 x 235 mm)

Weight: 2.42 lbs (1.1 kg)

Operating Temperature:
   T-Marc 3308: 0°C to 50°C / 32˚F to 122˚F
   T-Marc 3308H: -40°C to 70°C / -40°F to 158°F

Humidity: 5% to 95% non-condensing Input

Power: 100-240VAC or 24/48VDC

Regulatory Compliance

Safety: NRTL certified: C-UL 60950, CSA 22.2 No. 950, EN/IEC 60950, TUV/GS (EN60950),CB, EN 60825-1/2

EMC: CE Mark: EN50081-1: EN55022 Class A, EN60555-2/3

North America: FCC 47 CFR Part 15 Class A; ICES-003 Issue

4 Class A (Canada); Japan: VCCI Class A; Australia/NZ: CISPR 22 Class A

Immunity: EN50082-1, EN/IEC 61000-4-2/3/4/6/11 RoHS compliance

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