

Edge 3L

For High Performance

2U Form Factor



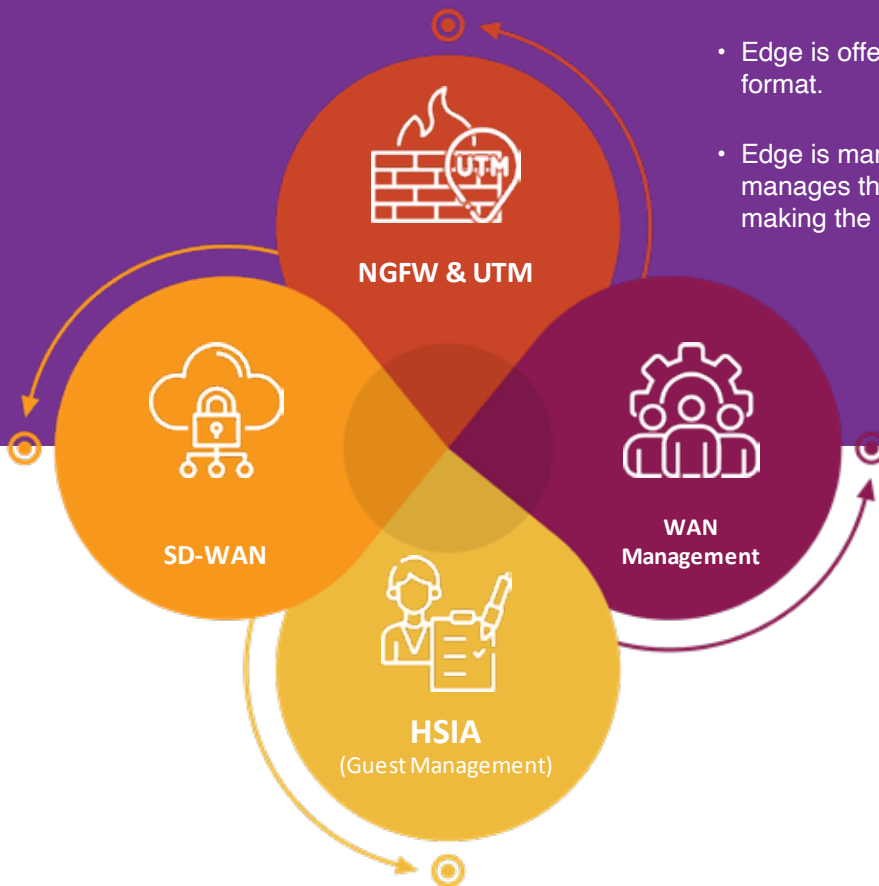
Edge 3L



> Large Enterprise Use Cases

Ray One is a Next Generation Solution for the challenges of today.

- Ray combines the features of multiple specialty product lines into One single EDGE Product line.
- Edge is offered in both Physical Appliance and Virtual format.
- Edge is managed from the same Ray Platform that manages the Ray Switch, Ray Wi-Fi and Ray Endpoint making the management fabric very simple.



Overview

Ray's cutting-edge convergence solution effortlessly scales to any location, whether it's a remote office, branch, campus, data center, or cloud environment. Our innovative hybrid mesh firewall system is expertly managed through Ray Unified Management, ensuring seamless security across intricate hybrid infrastructures. Powered by the Ray One, our solution offers unparalleled visibility and security in multiple form factors.

Ray's Secure SD-WAN solution delivers exceptional speed, scalability, and adaptability both on-premises and in the cloud. Designed with cloud-first, security-conscious, and global enterprises in mind, Ray Secure SD-WAN also caters to the evolving needs of hybrid workforces. Our Integrated Networking approach employs a single operating system, streamlining SD-WAN, next-generation firewall (NGFW), advanced routing, and Zero Trust Network Access (ZTNA) application gateway capabilities.

Seamlessly Merging Security and Networking

With the rise of cloud computing and hybrid work, organizations require anywhere, anytime access from any device. Traditional network architectures struggle to support this shift, causing poor user experiences and administrative complexities.

Ray's innovative Unified SASE Platform addresses these challenges by combining a wide range of networking and security capabilities into one streamlined platform. Ray One features a unified console, cohesive policy management, and a shared data lake. Our application-aware, traffic-engineered fabric simplifies design, deployment, and life cycle management for the modern digital landscape.

For more refer our White paper on SD-WAN

Features

-  **Acceleration**
Architecture for improved performance, greater ROI, and reduced power consumption.

 **Content Control**
User-based monitoring and control of keyword content and downloadable content.
-  **Secure SD-WAN**
Optimize performance for SaaS, SD-WAN, and cloud traffic With Ray One.

 **Business Applications**
Protect critical applications with next-gen firewall and an enterprise-class web application firewall.
-  **One Console to Manage It All**
Ray One provides a single cloud management console for all your Ray Product line.

 **Phishing & Spam**
Protect email from spam, phishing, and data loss with policy-based email encryption, DLP, and anti-spam.
-  **Reporting in the Cloud**
Flexible reporting tools for analyzing and visualizing network data over time.

 **Central Management**
Powerful centralized management, reporting, and zero-touch deployment for all your Ray Product line.
-  **Isolate Infected Systems**
Automatic threat response to identify and isolate compromised systems on your network.

 **Central SD-WAN Orchestration**
Easily set up complex site-to-site SD-WAN overlay networks.
-  **Zero-Day and ML Protection**
Instantly identify the latest ransomware and unknown threats with machine learning technology.

 **Central Firewall Reporting**
Create custom views of network activity and threats across your entire network.
-  **Advanced Threat Protection**
Instantly identify bots and other advanced threats while defending your network.

 **Dashboard and Alerts**
Respond quickly to changes in your network with a control center that analyzes extensive back-end data sources.
-  **User Identity**
User identity-based policies and unique user risk analysis for better network control.

 **Reporting**
Extensive, free on-box reporting and limited cloud-based reporting at no extra charge.
-  **Application Control**
Complete visibility and control over all applications on your network with deep-packet scanning technology.

 **High Availability Support**
-  **Web Control**
Full visibility and control over web traffic with flexible enforcement tools.

Secure SD-WAN Use Cases

Achieve Operational Efficiencies

Automate network design, deployment, and operation with a single pane of glass for comprehensive visibility, analytics, reporting, and orchestration.

Connecting Remote Workers

Offer remote or hybrid users client-based or clientless options for always-on connections to workloads in private or public clouds, with gateways based on proximity, load, and real-time variables.

Connecting Branch Offices

Empower branch or corporate offices with Ray Secure SD-WAN devices or third-party SD-WAN, routers, or firewalls for seamless access to workloads in private or public clouds and interoffice connections. Utilize Ray SD-WAN as an on-ramp for end-to-end observability and control over user/device-to-app performance and security.

Ray AI Powered Security Services



Antispam

Significantly reduce spam at the perimeter with a multi-layered approach to filtering email.



Central SD-WAN Orchestration

Enjoy easy setup of complex site-to-site SD-WAN overlay networks with Ray's cloud-managed SD-WAN orchestration.



ZTNA

Ray One integrates with Zero Trust Network Access (ZTNA) to provide a secure and straightforward way for users to access crucial applications and data.



Ray Edge Gateway

Experience the Ray Edge Gateway for an affordable, secure edge access device suitable for SD-Branch, SOHO, and industrial control solutions.



Core Networking

Utilize the most advanced enterprise-grade networking technology available for NAT, routing, and bridging with Firewall.

Ray HSIA

Complete control of User Wi-Fi

You can easily create customized free and paid tiers that suit your hotel's unique requirements and seamlessly integrate with your own custom systems through its API. Providing guests with instant and customized connectivity has never been easier with the one-touch account slip printer that interfaces with Property Management Systems for hassle-free billing without staff intervention. Extremely helpful in hospitality use cases.

Ray Customised Log-In options

Ray HSIA is a one-stop gateway solution for schools and universities, providing optimized bandwidth and content filtering for multimedia classrooms and on-campus roaming, offices, dormitories, and hostels. With multiple authentication methods such as LDAP, SMS OTP, and many more, student logins are seamless and secure. The dual WAN link load-balancing and multi-tier QoS, including a guaranteed bandwidth option, ensures top performance during critical periods. User form authentication and lawful intercept provide added security and compliance with contact tracing requirements.

NGFW Use Cases



Enterprise

Equip your demanding network with enterprise-grade protection, performance, visibility, and SD-WAN features tailored for the modern business landscape.



Cloud

Safeguard public cloud infrastructure or hybrid networks with a robust cloud firewall solution designed for diverse network environments.



All-in-One

Simplify and consolidate protection for small offices with an affordable, comprehensive security solution that delivers the best value and protection.



Retail and Branch

Address the unique challenges of retail and distributed organizations with branch offices for seamless, secure connectivity.



Schools

Cater to the specific requirements of educational institutions with RAY One's compliance and protection features designed for a safe learning environment.

Ray Multi Wan

Load Balancing

Experience seamless connectivity with Ray Multi-WAN's Load Balancing feature. It intelligently distributes network traffic across multiple paths, ensuring optimal internet performance and resilience against any single point of failure. With load balancing, you can make the most of your bandwidth, optimizing resource utilization and enhancing your online experiences.

Complete control of user Wi-Fi

With Ray Multi Wan Traffic Steering, an advanced network feature that offers unparalleled control over the flow of various types of traffic within your network. Whether it's video streams, ERP sessions, HTTP sessions, or other types of traffic, you can easily prioritize or limit the bandwidth of each one to ensure optimal network performance. With Ray Multi-Wan Traffic Steering, you can tailor your network to suit your specific needs and deliver an exceptional user experience. Say goodbye to network congestion and hello to a more efficient and streamlined network.

Bandwidth Policy Management

Introducing Bandwidth Management, an innovative feature that offers instant access to improvised WAN connections anytime and anywhere. With this feature you can stay connected on the go without any limitations or restrictions. Whether you're traveling to a new city or working remotely, Ray Multi-WAN has got you covered with a tailored solution that meets your unique needs. Experience the freedom of seamless connectivity.

RAY O1ME

Edge 3L

2 x 1GE RJ45 Ports on Board
 16 x 1GE RJ45 Ports,
 4 x 10G SFP+ (Loaded NIC Slot)

8 x NIC Slot (Expansion NIC Slot)
 1 x Console Port
 2 x USB 3.0

CORE COMPONENTS



 RAY Essential
  RAY Premium

Services

 Edge Gateway
  Switch
  Wi-Fi
  Sase

Products

 Orchestration
  Integration
  Automation


Centralized Management

 SD-Wan
  Firewall
  HSIA
  Multiwan

Security driven Networking

 Linux Networking
  Multiple Interfaces
  Hardware

Ray OS

 Appliance

 Virtual

Specifications

Specs	Edge-3L
Interfaces	2 x 1GE RJ45 Ports on Board 16 X 1GE RJ45 Ports, 4 X 10G SFP+ (Loaded NIC Slot)
Firewall Throughput	47 Gbps
IPsec VPN Throughput	26 Gbps
IPS Throughput	10.6 Gbps
NGFW Throughput	9.2 Gbps
Threat Protection Throughput	8 Gbps
Concurrent Sessions	12.26 Million
New Sessions/Sec	1,87,000
IPSEC VPN Concurrent Tunnels	6,500
SSL VPN Throughput	3 Gbps
Concurrent SSL VPN Tunnel	5,000
SSL/TLS Inspection	2.5 Gbps
Application Control Throughput (HTTP 64K)	6.7 Gbps
I/O Interface	1 x Console Port
	2 x USB
	1 x VGA (Optional)
	1 x Power On/Off Switch
Optional Interfaces	N/A

MGMT PORT	-
Edge L Series NIC Support	8 x NIC Expansion Slot
Local Storage	256 GB
Form Factor	2U Rack Mount
Operational Temperature	0°C~50 °C
Storage Temperature	-40°C~70°C
Humidity	5%~90% (non-condensing)
Dimension	440 x 592 x 88 mm (WxDxH)
Device Weight	30 kg
Power Input	AC 90~264V @ 47~63Hz
Type/Watts	2 x 550W Power Supply
Redundant Power Supplies	Yes - Built-in CRPS 550W, Redundant power supply (Hot-swappable)

Edge L Series NIC Expansion module	Ports
NIC-005-4C	4 x GbE RJ45
NIC-005-8C	8 x GbE RJ45
NIC-005-4F	4 x GbE SFP Fiber
NIC-005-8FS	8 x GbE SFP Fiber
NIC-005-2WF	2 x 10 GbE SFP+ Fiber
NIC-005-4WF	4 x 10 GbE SFP+ Fiber
NIC-006-2QSFP+	2 x 40GbE QSFP+
NIC-100-2QSFP28	2 x 100GbE QSFP28

Box Contents

Edge-3L

- 1 x 3L Hardware Appliance
- 2 x Power Cord
- 2U Rack mounting accessories



SUBSCRIPTIONS

ESSENTIAL	CONNECT	TOTAL
Cloud Subscription	Cloud Subscription	Cloud Subscription
L3 Networking	L3 Networking	L3 Networking
VPN	VPN	VPN
Advance Wireless	Advance Wireless	Advance Wireless
RRM	RRM	RRM
	Multi WAN	Multi WAN
	SD-WAN	SD-WAN
		Network & Web Protection
		Captive Portal/Guest Authentication
		IDS/IPS
		Analytics (7 Days)
Essential Software Support (8*5)	Essential Software Support (8*5)	Essential Software Support (8*5)
12 Months (Renewal Required)	12 Months (Renewal Required)	12 Months (Renewal Required)
36 Months (Renewal Required)	36 Months (Renewal Required)	36 Months (Renewal Required)
60 Months (Lifetime Essential)	60 Months (Lifetime Essential)	60 Months (Lifetime Essential)

Ordering Information

Product Name	Specifications
Edge-3L	Form factor - 2U Rack mount 2 x 1GE RJ45 on board 16 x 1GE RJ45 port and 4 x 10G SFP+ (Loaded NIC slot) 8 x NIC expansion slot 1 x Console port, 2 x USB 3.0, 1 x Power on/off switch

For more details on warranty visit: www.ray.life

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