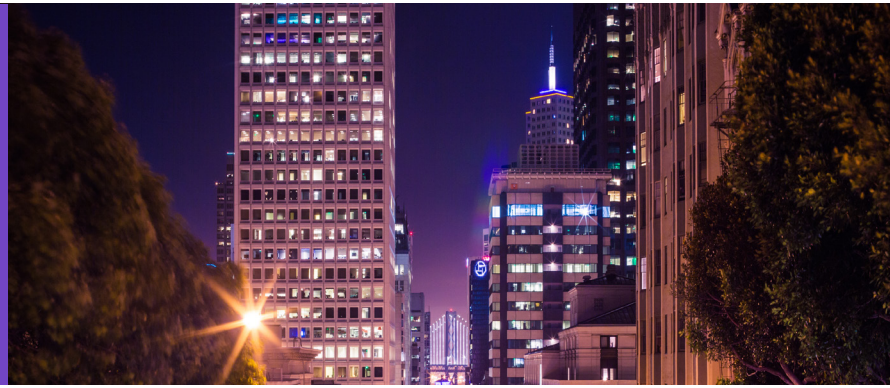


DATASHEET

ONE2540

High-Performance Enterprise Router for Regional Offices



High Performance Architecture for Sophisticated Services

This state-of-the-art software architecture enables a linear performance increase with the addition of CPU cores, delivering ASIC-like performance and processing latencies.

A hardware accelerator identifies traffic flows and distributes associated packets to multiple CPU cores. Packets are processed in parallel in the new OneOS6 distributed packet engine.

Because packet processing is fully managed as software, the ONE2540 brings the inherent advantages of software (versus hardware) solutions, namely: rich, extensible services. Compute-intensive services such as application visibility and control can be run concurrently at Gbps speed thus greatly improving user experience.



- Distributed control and forwarding planes for rich, concurrent services
- Full-duplex Gbps performance with complex services
- Carrier-grade hardware reliability
- Flexible licensing options designed for VPN Business and SD-WAN services

Scalability in Number of Users and Services

The ONE2540 is intended for use in regional offices. As a result, it needs to support a large number of users and the termination of flows from many branches. For this reason, the ONE2540 is equipped with a large memory (8 GB of RAM). Many users imply many user flows and associated firewall / NAT / ... sessions. Up to 500k sessions are supported to serve potentially tens of thousands of users. This large RAM enables to accommodate a large number of remote branches where many VPN, logical links or BGP prefixes must be handled.

Reliable Services

The ONE2540 hardware architecture and software eliminates points of failures and thus increases service availability to the standards expected in critical locations such as data centers. Redundant power supplies warranty continuous operations during outage of a power supply. Fans and power supplies are hot-swappable for service continuity during hardware maintenance.

The Error Code Correction (ECC) RAM verifies and corrects data integrity. Such RAM is typically found in carrier-grade servers and now available in the ONE2540 platform. Service availability is enhanced because software is protected against data corruption.

The ONE2540 integrates in various network topologies to provide redundant network access. While multiple paths are available, the ONE2540 can share the load between WAN links so as to maximize the available network capacity. A combination of layer-2 and layer-3 Operation, Administration and Maintenance (OAM) protocols enables the ONE2540 to quickly detect network failures and trigger fail-over to available links.

Unified Management from Branch to Headquarters

The ONE2540 is an instrumental piece to build a complete corporate network with the OneAccess portfolio. The range of OneAccess Multi-Services Access Routers (MSAR) provides smart enterprise solutions from small branch offices to headquarters. All MSARs are managed through common, standardized protocols for a unified, one-stop-shop management solution.

The OneAccess software OneOS6 provides one of the most complete NETCONF implementations on the market. NETCONF enables a gain in service agility for service providers, as the programming of the provisioning flows is greatly accelerated by the transactional nature of NETCONF. It has therefore driven OSS vendors to support this protocol to deal with Network Function Virtualization (NFV). And OneOS6 is ready today for a swift migration to new management platforms.

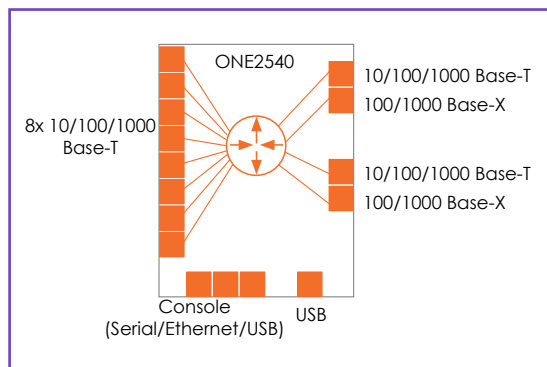
High-Performance Enterprise Router

SD-WAN Ready

Ekinops SD-WAN extends from the OneOS6 features and enhances them to deliver a feature-rich and full fledged SD-WAN solution. Additional functionalities embedded in the 2 variants of SD-WAN license (Xpress and Prime) enable Service Providers to transform their existing business VPN, delivering highest value from the same infrastructure. SD-WAN Xpress is a perfect fit for SMBs and companies in various verticals such as Retail, which, above all, look for a cost effective solution enabling them to quickly adopt digital transformation and leverage SaaS services (O365, SalesForce, etc.). SD-WAN Prime is tailor made for larger organizations where business applications are mission-critical and require real time optimization to grant the expected Quality of Experience.



Technical Features



General

- Dual Gigabit Ethernet WAN uplinks
- 8 Gigabit Ethernet LAN ports
- Console and USB ports for management
- OneOS6 software

WAN Interfaces

- Fiber, Copper, configurable SFP/UTP
- SFP slot for fiber modules: 1000BASE-X, 100BASE-X
- UTP interface 10/100/1000 BASE-T with RJ-45 connector

LAN Interfaces

- UTP interface 10/100/1000BASE-T with RJ-45 connector
- Integrated 8 port Ethernet switch

Console Port

- RS232 – RJ-45 port
- Ethernet 10/100BASE-T – RJ45 connector
- Slave USB - Mini-B connector

Performance and Sizing

- 2 Gbps bidirectional routing performance with services (IMIX409)
- 2 Gbps bidirectional best effort routing performance
- 1 Gbps bidirectional IPsec performance with services (IMIX410)
- 100 VRFs, 400.000 / 100.000 routes (IPv4 / IPv6)
- 500.000 NAT, Firewall... sessions
- 1000 logical interfaces
- 1000 NAT rules
- 1000 Stateful Firewall rules
- 2000 traffic policers, filters and classifiers
- 4000 traffic filtering rules and classification rules

IP Addressing & Routing

- IPv4 and IPv6
- NAT/NAPT: static/dynamic NAT, NAPT, selective NAT, ALGs
- DHCP client, server, relay
- DNS client, proxy
- Routing protocols: RIP v1/v2/ng, OSPF v2, BGP v4 , BFD
- Multicast Routing: PIM-SMv1/v2, IGMP v2/v3
- Policy-Based Routing
- VRRP, VRF
- Load balancing

Technical Features



Quality of Service

- IP Classification and priority (DiffServ)
- Class-Based Queuing (CBQ), CB-WFQ
- Low Latency Queuing, fragmentation and interleaving
- Policing, shaping and remarking
- RED, WRED, ECN
- QoS measurement probe
- Deep Packet Inspection
- Advanced Deep Packet Inspection (SaaS applications) *
- Netflow

Security

- Standard and extended access lists
- Zone Based Firewall *
- Session monitoring and limiting
- User authentication locally, via RADIUS and TACACS+
- TACACS+ Authorisation and Accounting

IP VPNs

- IPsec, GRE, IPIP, L2TPv2
- L2TPv3 *
- IPsec encryption: AES, DES, 3DES
- IPsec ESP hashing: SHA-1, SHA-2 and MD5
- IKEv1 & IKEv2 with pre-shared keys & certificates
- IPsec tunnel and transport modes
- NAT traversal
- Easy VPN client / server *
- Dynamic Virtual Tunnel Interfaces *
- IPsec Group Mode *

Bridging and VLANs

- Bridging & Integrated Routing and Bridging (IRB)
- STP, RSTP, MSTP
- VLAN tagging and un-tagging
- Multiple VLAN IDs per port
- 802.1p priority tagging, ToS/CoS and CoS/ToS mapping
- Ethernet OAM
- 802.1x authentication

ONeSBC (Session Border Controller)*

- SIP trunking with demarcation – SIP Connect 1.1
- Hosted PBX solution
- SIP normalization
- SIP v2.0 over UDP/TCP/TLS and RTP/SRTP
- Codec negotiation with transparency: G.711a/u, G.729a, G.729ab, G.722, G.722.2, CES, H.263, H.264
- VQM (Voice Quality Monitoring)
- Up to 600 simultaneous centrex calls
- Up to 500 simultaneous trunking calls (no transcoding)

Management

- Industry standard Command Line Interface (CLI)
- Telnet, SSH, HTTP(S) server
- NETCONF server compatible v1.0/v1.1 *
- Customizable web interface
- TR-069 provisioning
- SNMP V1/V2C/V3
- Support of user privileges
- FTP/TFTP, SFTP, SCP upload/download configuration and binaries
- Traceroute, ping
- Global statistics screens (console, web-based)
- Event and trace buffering
- Embedded Event Manager
- Telnet, SSHv2 client
- Syslog client
- Flow capture and decoding

Dimensional and Environmental

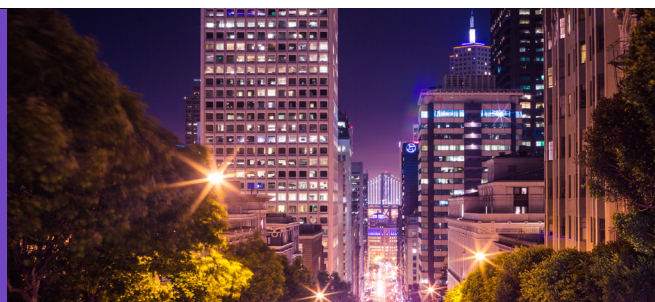
- W x H x D: 440 x 44 x 240 mm (17.32 x 1.73 x 2.45 in)
- Weight: 4,5 kg (9.92 lb)
- Operating temperature: 0 - 45°C
- Humidity: 5 - 90% non condensing
- Rack mountable for 19" and ETSI racks
- Hot swappable Fan tray
- Acoustic level: maximum 27dB(A)

Power Supply

- 2 redundant hot swappable Power Supplies
- AC & DC 60W Power Supplies
- AC PSU: Voltage range: 90 - 264 VAC – 50/60 Hz
- DC PSU: Voltage range: 39 – 60 VDC

* Subject to a license

About



Ekinops is a leading provider of open and fully interoperable Layer 1, 2 and 3 solutions to service providers around the world. Our programmable and highly scalable solutions enable the fast, flexible and cost-effective deployment of new services for both high-speed, high-capacity optical transport networks and virtualization-enabled managed enterprise services

Our product portfolio consists of three highly complementary product and service sets: Ekinops360, OneAccess and Compose.

- Ekinops360 provides optical transport solutions for metro, regional and long-distance networks with WDM for high-capacity point-to-point, ring and optical mesh architectures, and OTN for improved bandwidth utilization and efficient multi-service aggregation.
- OneAccess offers a wide choice of physical and virtualized deployment options for Layer 2 and Layer 3 access network functions.
- Compose supports service providers in making their networks software-defined with a variety of software management tools and services, including the scalable SD-WAN Xpress.

As service providers embrace SDN and NFV deployment models, Ekinops enables future-proofed deployment today, enabling operators to seamlessly migrate to an open, virtualized delivery model at a time of their choosing.

A global organization, with operations in 4 continents; Ekinops (EKI) - a public company traded on the Euronext Paris exchange - is headquartered in Lannion, France, and Ekinops Corp., a wholly-owned subsidiary, is incorporated in the USA.

EKINOPS360
Dynamic Optical Transport

 **COMPOSE**

ONEACCESS