ONEACCESS

ekinops
Empowering Networks

ONE3540

High-Performance Enterprise Router for Headquarters & Regional Offices

High Performance Architecture for Advanced Routing Services

The combination of a powerful Intel CPU with the OneOS6 state-of-the-art software multi-core architecture delivers a router with 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 OneOS6 distributed packet engine.

Because packet processing is fully managed as software, the ONE3540 brings the inherent advantages of software (versus hardware) solutions, namely: rich, extensible services. Compute-intensive services such as IP VPNs and application visibility and control can be run concurrently at multi Gbps speed thus greatly improving user experience.

OneOS6

- For 2 to 10 Gbps WAN connectivity routing services
- Distributed control and forwarding planes for rich, concurrent services
- Carrier-grade hardware reliability
- Industry standard CLI & NETCONF
- Built-in SD-WAN

Scalability in Number of Users and Services

The ONE3540 is intended for use in headquarters and 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 ONE3540 is equipped with a large memory (16 GB of RAM). This large RAM enables to accommodate a large number of remote branches where many VPN, logical links or BGP prefixes must be handled.

SD-WAN Ready

Ekinops SD-WAN extends from the OneOS6 features and enhances them to deliver a feature-rich and full fledge 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.

Reliable Services

The ONE3540 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. The 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 ONE3540 platform. Service availability is enhanced because software is protected against data corruption.

The ONE3540 integrates in various network topologies to provide redundant network access. While multiple paths are available, the ONE3540 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 ONE3540 to quickly detect network failures and trigger fail-over to available links.

Technical Features

ONE3540

15x 1000 Base-T

2x 10GbE SFP+

2x 10GbE SFP+

PSU1
PSU2

Console USB

Standard
Optional
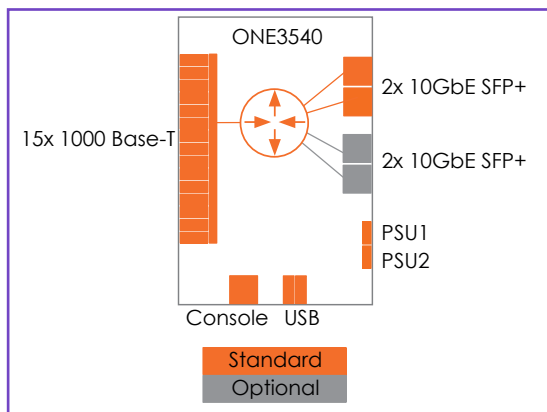
General

- Dual SFP+ slots for 10 Gigabit Ethernet uplinks
- Optionally 2 additional SFP+ slots
- 15 Gigabit Ethernet UTP LAN ports
- Console port for management
- OneOS6 software

10 Gigabit Interfaces

- 10 Gigabit Interfaces
- SFP+ slot for 10G fiber modules
- SR, LR, ER SFP+ modules available

Gigabit Interfaces

- UTP interface 10/100/1000BASE-T with RJ-45 connector

Console Port

- RS232 – RJ-45 port

Performance and Sizing

- Bidirectional routing performance with services (IMIX409): 5 Gbps, 10 Gbps with throughput license
- Best effort bidirectional routing performance: 20 Gbps
- Bidirectional IPsec performance with services (IMIX410): 3 Gbps, 5 Gbps with throughput license
- 100 VRFs,1.000.000 / 200.000 routes (IPv4 / IPv6)
- 1.500.000 NAT sessions
- 500.000 Firewall, DPI, ACL sessions

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

IP Quality of Service

- IP Classification and priority (DiffServ)
- Class-Based Queuing (CBQ), CB-WFQ on LAN/WAN interfaces
- Low Latency Queuing, fragmentation and interleaving
- Policing 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+ Authorization and Accounting

IP VPNs

- IPsec, GRE, IPIP, L2TPv2, mGRE
- 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
- Easy VPN 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

Technical Features

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

- Metal housing
- W x H x D: 438 x 44 x 431 mm (17.2 x 1.73 x 17.0 in)
- Weight (inclusive 2 PSUs): 8,3 kg (18,3 lb)
- 19" / ETSI Rack mount kit included
- Operating temperature: 0-40°C
- Humidity: 5-90% non-condensing
- 2 cooling fans

Power Supply

- 2 modular AC power supplies included
- Voltage range: 90 - 264 Vac – 50/60 Hz
- 300W PSUs
- Power consumption: 100W (idle), 150W (full load)

*   *Subject to a license*

About ⠿ EKINOPS

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