

DATASHEET

**ONE2560**

*Gigabit Multi-Services Access Router for SD-WAN and IP VPNs*



OneAccess ONE2560 with OneOS6 software combines networking, security and SD-WAN services for high performance Gigabit WAN connectivity in the access network. Designed for Service Providers as a mid-range router, it offers dual fiber WAN connectivity with optional 5G or LTE backup. 8 Gigabit Ethernet UTP ports and 2 Gigabit Ethernet SFP ports provide flexible LAN connectivity for medium businesses. Redundant power supplies reduce the risk of service interruptions. Its compact design without any fans and with rackmount option makes the ONE2560 fit on desktops and in racks.



- Quad-core architecture for high speed managed data services
- Redundant Fibre access with optional LTE/5G backup
- Designed for IP VPNs and SD-WAN services
- Industry standard CLI and NETCONF
- Low power consumption; no fans
- Ideal platform for running edge-compute applications in docker containers (FlexCPE)



**Powerful Engine**

The Quad-core ARM CPU with 4 GB of RAM supports the high-speed WAN connections under heavy service conditions, including extensive SD-WAN configurations and higher scaling. The embedded hardware accelerator provides above 1 Gbps of bidirectional IPsec Internet MIX (IMIX) traffic: IP VPN and SD-WAN services can use the full WAN bandwidth without compromises.

**5G Ready**

The ONE2560 has optionally a LTE category 12 or a 5G radio connectivity for backup purposes in case of failure on the fiber network. The 5G operates in the Sub-6GHz frequency band. It can be deployed in Non Stand Alone (NSA) or Stand Alone (SA) mode. As the 5G radio is also LTE compatible, the version with 5G radio can also be used where 5G coverage is not yet available.

**Security**

The ONE2560 is built for use in secure networks. To avoid any risks of hijacking the router with a specially crafted software, it has by default secure boot. The secure boot only accepts loading officially signed Ekinops software into the router. The ONE2560 also comes with a TPM hardware module that allows a highly secured storage of a master key allowing to build a fully secured key and certificate ladder.

With its 1Gbps IPsec throughput and sizing, the ONE2560 can be used as an IP VPN concentrator for transaction networks up to a few hundred sites. Furthermore features such as the use of secure management tools, a Zone Based Firewall and DDoS protection along with a permanent OneOS6 vulnerability monitoring secure the router against the many threats in today's fully connected world.

# Gigabit Multi-Services Access Router

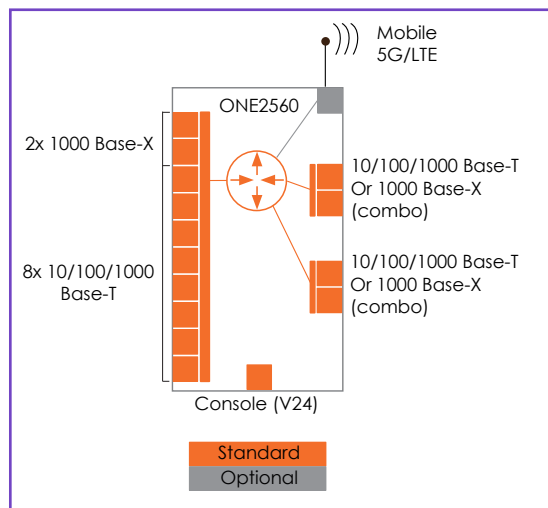
## Integration with Today's and Next Generation OSS

Industry-standard MIBs, TR-069 client and Command Line Interface (CLI) enable a swift integration with incumbent management systems and a short learning curve for operational teams. In addition the OneAccess OneOS6 software 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. OneOS6 being available both on physical routers and integrated with OVP-LIM software, is ready for a swift migration to new management platforms.

## SD-WAN Inside

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 SD-WAN Xpress license 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.).

## Technical Features



### General

- Dual combo Gigabit Ethernet WAN ports
- 8 UTP Gigabit Ethernet LAN ports
- 2 SFP Gigabit Ethernet LAN ports
- Optional 5G or LTE backup
- OneOS6 software

### Gigabit Ethernet WAN Interface

- 2 Fiber and Copper combo ports, configurable SFP/UTP
- SFP slot for fiber modules: 1000BASE-X, GPON ready
- UTP interface 100/1000 BASE-T with RJ-45 connector

### Wireless Radio Interface 5G (optional)

- Frequency bands support: n1 (FDD 2000 Mhz), n2 ( FDD 1900 MHz), n5 (FDD 900 MHz), n28 (FDD 700 MHz), n41 (TDD 2500 Mhz), n66 (FDD 2000 MHz), n77 (TDD 3500 MHz), n78 (TDD 3500 MHz), n79 (TDD 5000 MHz) \*\*\*

- LTE with MIMO 2 x 2, Peak Rate Downlink/Uplink 150/50Mbps (cat4) or 300/50Mbps (cat6)
- NSA mode support
- SA mode support \*\*
- LTE cat 16 (1200Mbps/200Mbps)
- MIMO 4x4
- SMA connectors for remote antenna
- Dual SIM card

### Wireless Radio Interface LTE cat 12 (optional)

- Frequency bands support: B1, B2, B3, B4, B5, B7, B8, B12, B20, B25, B26, B28, B32, B34, B38, B39, B40, B41, B42, B48, B66, B71 \*\*\*
- 600Mbps/100Mbps (cat 12)
- MIMO 2x2
- SMA connectors for remote antenna
- Dual SIM card

## Technical Features

### LAN Interfaces

- 8 port switch 100/1000BASE-T auto-sense with automatic cross-over and RJ-45 connectors
- 2 SFP slots for fiber modules: 1000BASE-X

### Console Port

- RS232 – RJ-45 port

### Performance and Sizing

- Full gigabit line rate at up to 500K simultaneous sessions (1M flows) with IMIX409 services and counters enabled
- 1 Gbps IPsec performance with services (IMIX410)
- 100 VRFs
- 1 Million IPv4 routes, 200.000 IPv6 routes
- 500.000 NAT, Firewall, DPI .... sessions

### IP Addressing & Routing

- IPv4 and IPv6
- NAT/NAPT: static/dynamic NAT, NAPT, selective NAT, twice NAT, Application pass-through
- DHCP client, server, relay. IP helper addresses
- DNS proxy. DNS server update protocol: DynDNS
- Routing protocols: RIP v1/v2, OSPF v2, BGP v4
- Multicast Routing: PIM-SM and 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
- 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
- Secure boot
- DDoS protection
- Trusted Platform Module (TPM) for highly secured key/certificate ladder

### 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 \*

### 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

### 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

### Optional Features

- Compose SD-WAN Xpress \*
- Session Border Controller (SBC) \*
- FlexCPE \*

### Dimensional and Environmental

- Desktop, wall mountable, rack mountable
- W x H x D: 300 x 44 x 180 mm (11.81 x 1.73 x 7.08 in)
- Weight: 1.5 kg (3.31 lb)
- Operating temperature: 0 - 45°C
- Humidity: 5 - 90% non condensing
- Optional brackets for 19" and ETSI racks
- Fanless, silent

### Power Supply

- Redundant power supply inputs with dying gasp
- External adapter 12V – 3A, region dependent
- Voltage range: 110 - 230 Vac – 50/60 Hz
- Power consumption: <36 W
- Optional second power supply for redundancy
- Optional 24/48Vdc powering

\* Subject to a license

\*\* Contact product management for availability

\*\*\* Contact product management for other frequencies support

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, Ekinops (EKI) - a public company traded on the Euronext Paris exchange operates on four continents.

**EKINOPS360**  
Dynamic Optical Transport

 **COMPOSE**

**ONEACCESS**