

DATASHEET

ONE2561

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



OneAccess ONE2561 with OneOS6 software combines networking, security and SD-WAN services for high performance multi Gigabit WAN connectivity in the access network. Designed for Service Providers as a mid-range router, it offers dual 10 Gigabit combo WAN interfaces with optional 5G 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 in a metal casing without any fans and with rackmount option makes the ONE2561 fit on desktops and in racks.

- Quad-core architecture for high speed managed data services
- 10 Gigabit fibre access with optional 5G backup
- Designed for IP VPN 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 8 GB of RAM supports high-speed WAN connections under heavy service conditions, including SD-WAN configurations. The embedded hardware accelerator provides above 1 Gbps of bidirectional IPsec Internet MIX (IMIX) traffic.

5G Backup

The ONE2561 has optionally 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, it can also be used in regions where 5G coverage is not yet available.

Security

The ONE2561 is built for use in secure networks. To avoid any risks of hijacking the router with a specially crafted software, it only accepts loading signed Ekinops software into the router. The embedded Trusted Platform Module (TPM) further increases security against firmware and ransomware attacks by enabling a secure hierarchy for storing certificates and credentials.

With its 1Gbps IPsec throughput and sizing, the ONE2561 can be used as an IP VPN concentrator for transaction networks up to a few hundred sites. Features* such as the use of secure management tools, a Zone Based Firewall (ZBF) and DDoS protection along with a permanent OneOS6 vulnerability monitoring further secure the router against the many threats in today's fully connected world.

10 Gigabit Multi-Services Access Router

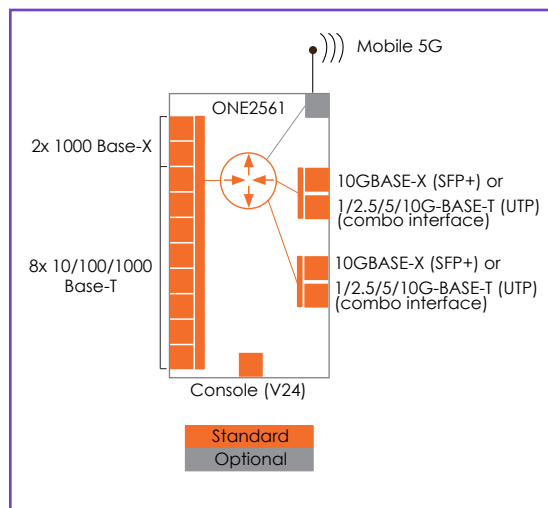
Integration with Today's and Tomorrow's OSS

Industry-standard MIBs, a TR-069 client and a 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, 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 more 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 (Office365, SalesForce, etc.).

Technical Features



General

- 2x 10 Gigabit Ethernet SFP+/UTP combo
- 8x UTP Gigabit Ethernet LAN ports
- 2x SFP Gigabit Ethernet LAN ports
- Optional 5G backup
- OneOS6 software

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

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

Technical Features

Performance and Sizing

- 10 Gbps bidirectional (20Gbps aggregated) routing performance
- 2/5* Gbps bidirectional (4/10* aggregated) routing performance with services (IMIX600) and all counters enabled
- 1 Gbps bidirectional IPsec performance with services
- 100 VRFs
- 1 Million IPv4 routes, 200.000 IPv6 routes
- 500.000 NAT, Firewall, DPI sessions
- 8GB RAM

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), Class-Based Weighted Fair Queuing (CB-WFQ)
- Low latency queuing, fragmentation and interleaving
- Policing, shaping and remarking
- RED, WRED, ECN
- QoS measurement probe
- Deep Packet Inspection (DPI)
- Netflow

Security

- Standard and extended access lists
- Zone Based Firewall (ZBF) *
- Session monitoring and limiting
- User authentication locally, via RADIUS and TACACS+
- TACACS+ authorisation and accounting
- Secure boot, TPM
- DDoS protection

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 (DVTI) *

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 *
- FlexCPE ready *
- Session Border Controller *

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: Maintenance free, silent, reduced power consumption

Power Supply

- Redundant power supply inputs with dying gasp
- External adapter 12V – 3A, region dependent
- Voltage range: 110 - 230 V AC – 50/60 Hz
- Power consumption: <36 W
(typical power consumption without 5G backup and under full routing load below 19W, standby below 16W)
- Optional second power supply for redundancy
- Optional 24/48 V DC 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 and SixSq Edge-to-Cloud solutions.

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.

