

## DATASHEET

# ONE2520

*Gigabit Cloud Services  
Gateway & Multi-Service  
Access Router*



## Deploy and Accelerate Cloud Services to the Mid-Market

The ONE2520 Multi-service Access Router is designed for service providers capitalizing on new and emerging cloud services. The ONE2520 is OneAccess' Gigabit Data router, with a quad-core network processor to boost performance, and high-speed Gigabit Ethernet uplinks.

The ONE2520 is scaled to provide 100 to 500 desks with sophisticated, symmetrical broadband, value added data services. It is a perfect fit for operators targeting medium sized enterprises, or branch offices of large enterprises, with a portfolio of managed and value-added Cloud based services. All this is available in a compact form factor and with low power consumption.



- Quad-core architecture for high speed managed data services
- For 100 to 500 data-only desktops
- Redundant Ethernet Fibre access with optional LTE backup
- Certified Microsoft Teams Direct Routing
- Flexible licensing options designed for VPN Business and SD-WAN services
- Industry standard CLI and NETCONF
- Lowest power consumption; no fan

## 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. 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.

## Enterprise-Class Data Services

IP PBXs, server rooms and local area networks are connected to each other and the wide area network via the built in 4 port Gigabit Ethernet (GigE) switch.

The powerful ONE2520 platform supports symmetrical, high speed Layer 3 switching at next generation broadband throughputs, with sophisticated QoS. In-built IP VPN capabilities enable the seamless networking of enterprise branch offices.

## Access Network Speed and Symmetry

The ONE2520 has a dual Combo (SFP and Copper Ethernet) interface as standard network interface, offering plug-in options for 1000Base-X modules, with a range of fibre flavours and lengths catered for.

## Reducing Total Cost of Ownership

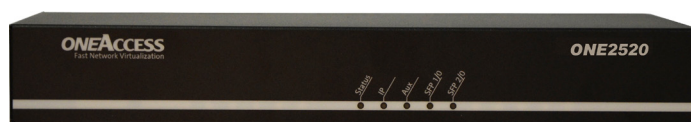
As well as opening the door to new revenue opportunities, the ONE2520 helps achieve long term cost savings. As a service provider, the opportunity to replace multiple CPE with a single, flexible unit, means reduced capital costs and simpler logistics and operations.

A set of embedded tools and service level indicators make it simple to manage and assure the customer experience remotely, virtually removing the need for maintenance truck rolls.

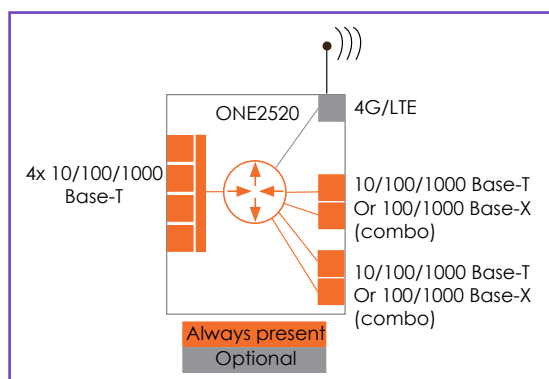
# Gigabit Cloud Services Gateway

## 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 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
- 4 UTP Gigabit Ethernet LAN ports
- Optional LTE backup
- OneOS6 software

### Gigabit Ethernet WAN Interface

- 2 Fibre, Copper, configurable SFP/UTP
- SFP slot for fibre modules: 1000BASE-X, GPON ready
- UTP interface 10/100/1000 BASE-T with RJ-45 connector

### Wireless Radio Interface (factory option)

- Different variants available depending the region
- LTE with MIMO 2 x 2, Peak Rate Downlink/Uplink 150/50Mbps (cat4) or 300/50Mbps (cat6)
- UMTS/HSPA+
- Edge/GPRS & GSM
- 2 SMA connectors for mobile antenna
- Dual SIM card

### LAN Interfaces

- 4 port switch 10/100/1000BASE-T auto-sense
- Automatic cross-over
- RJ-45 connectors

### Console Port

- RS232 – RJ-45 port

### Performance and Sizing

- 1 Gbps bidirectional routing performance with services (IMIX409)
- 2 Gbps bidirectional best effort routing performance
- 600 Mbps bidirectional IPsec performance with services (IMIX410)
- 17 VRFs
- 200.000 IPv4 routes, 50.000 IPv6 routes
- 250.000 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

## Technical Features



### 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

### PPP

- PPP over Ethernet (PPPoE)
- Automatic IP address assignment
- PAP/CHAP authentication

### 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
- Certified Microsoft Teams Direct Routing
- 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 200 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

### Dimensions and Environmental

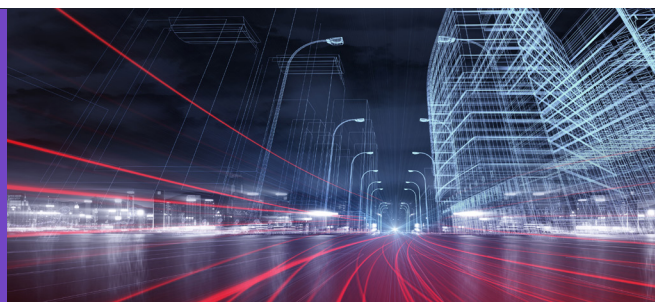
- Desktop, wall mountable, rack mountable
- W x H x D: 295 x 44.5 x 166 mm (11.6 x 1.75 x 6.5 in)
- Weight: 1.3 kg (2.86 lb)
- Operating temperature: 0 - 45°C
- Humidity: 5 - 90% non condensing
- Optional brackets for 19" and ETSI racks

### Power Supply

- External adapter 12V – 3A, region dependent
- Voltage range: 110 - 230 Vac – 50/60 Hz
- Power consumption: <30 W
- Optional second power supply for redundancy
- Optional 24/48Vdc powering

\* 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, Ekinops (EKI) - a public company traded on the Euronext Paris exchange - operates in 4 continents.

