ONEACCESS

ekinops
Empowering Networks

ONE621

Access Router for the Ultra-Connected Branch-Office

OneOS6

The Ultra Connected Branch-Office

The ONE621 router answers the needs of evolving broadband access with an increased throughput. Its packet forwarding engine delivers Gigabit bidirectional throughput (line rate)* even with small packets, with advanced services and all counters enabled, at up to 100.000 concurrent sessions (200.000 flows).

On the LAN side, 4 Gigabit Ethernet ports are available, as well as an optional embedded dual concurrent WiFi 6 MIMO 4x4 access point.

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 branded 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.

- Quad-core architecture for multi gigabit managed services
- Carrier-grade hardware reliability
- Dual fiber for access and service continuity
- Industry-standard CLI and NETCONF
- Flexible licensing options designed for VPN Business and SD-WAN services
- Compact and fanless design
- Ready for FlexCPE containerized applications
- Very low power consumption (6W standby)

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 (Office 365, SalesForce, etc.).

Technical Features

General

- Quadcore ARM A72 CPU, 2.2 GHz
- 2 GB RAM
- Dual combo UTP/SFP Gigabit Ethernet LAN/WAN ports
- 4 Gigabit Ethernet LAN switch
- Optional WiFi
- OneOS6 software
- Support FlexCPE deployment of containerized applications *

Gigabit Ethernet Interfaces

- 2 Gigabit Ethernet WAN Interfaces
- 2 SFP slots for fiber modules: 1000BASE-X, GPON ready**
- UTP interface 10/100/1000 BASE-T with RJ-45 connector
- 4 Gigabit Ethernet Switch
- 10/100/1000BASE-T auto sense ports
- Automatic cross-over
- RJ-45 connectors

Wireless LAN (factory option)

- Dual concurrent 2.4/5GHz 802.11ax (WiFi6) MIMO 4x4
- 4 antennas with SMA connectors
- WMM QoS
- Encryption options WEP, WPA 1.2 (TKIP) and WPA 2.0 (802.11i, AES-CCMP), WPA 3.0
- Authentication options WPA-PSK (pre-shared key) and 802.1x with a RADIUS server (PEAP, EAP-SIM, EAP-TLS and EAP-TTLS)

Wireless Radio Interface (factory option)

- Optional 4G LTE MIMO 2x2 (300/50Mbps CAT6) mobile backup
- UMTS/HSPA+/EDGE/GPRS and GSM
- Two SMA connectors for mobile antenna
- Dual SIM cards

Console Port

- RS232 - RJ45 port

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

IP Addressing & Routing

- 600Mbps / 1Gbps (line rate)* IPv4 and IPv6 routing performance at up to 100.000 concurrent sessions (200.000 flows) with all counters enabled.
- 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), Class-Based Weighted Fair Queing (CB-WFQ)
- Low latency queuing, fragmentation and interleaving
- Policing 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+ authorization and accounting

IP VPNs

- IPsec, GRE, IPIP, L2TPv2nL2TPv3 *
- IPsec encryption: AES, DES, 3DES

Technical Features

- 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) *
- 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

Dimensions 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: 1.3 kg (2.86 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

- Dying gasp
- External adapter 12V – 3A, region dependent
- Voltage range: 110 - 230 V AC – 50/60 Hz
- Very low power consumption: Standby 6W, average 13W, max 20W (version without Wi-Fi)
- Optional 24/48 V DC powering

Optional Functions *

- eSBC
- Compose SD-WAN Xpress
- FlexCPE

Note: *The same platform exists in a version with 5G radio commercialized under the product name 'ONE-5G'.*

*   *Subject to license*
**   *Contact product management for availability*

About Ekinops

Ekinops is a leading provider of open, trusted and innovative network connectivity 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 as well as 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.

EKINOPS360
Dynamic Optical Transport

ONEACCESS
Fast Network Virtualization

COMPOSE

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