

DATASHEET

ONE641

10Gbps Access router for ultra-connected branch offices up to 100 employees



Powerful flexible routing engine, 100% software based

The ONE641 is based on the powerful Ekinops OneOS6 software with routing performances service providers can rely on to define precise customer SLAs. Performances are optimized for use with services like QoS, NAT, network visibility (TIC), IPSec, VPN, firewall, and a large sizing capable of routing 100.000 concurrent sessions (200.000 flows). As the engine is software based, it is also very evolutive and adaptive, which enables a long ownership of the device, lowering the TCO.

Security from the ground up

At Ekinops, Security starts at the lowest level: The hardware. The Ekinops One641 is manufactured in Ekinops European factory in Belgium, the secure boot certificate hierarchy is fully controlled by Ekinops. The Software stack is completely under Ekinops control and systematic monitoring of CVE combined with regular updates and customer supports are the keys to getting the best level of security.

Designed for Service Providers

Service providers have different needs than Enterprises: Remote manageability and supervision of the router and smooth integration into OSS are key. Ekinops OneOS6 is designed from the ground to keep the integration efforts low: One software with industry standard CLI, natively build on Netconf/Yang (ready for SASE/SDWAN from day one), and of course supporting secure management via SNMPv3 and TR-69.



- Ideal solution for **XGS-PON** access
- Two UTP 10G ports allow connection to external ONT and 10G LAN devices
- Based on the **flexible** Ekinops OneOS6 fully **software based** routing engine
- **Manageable** thanks to industry standard CLI and NETCONF interfaces
- **Secure** (Hardware made in Europe, fully sovereign software stack, trusted secure hierarchy, trusted Ekinops CA or own certificates installed in Ekinops factory)
- **Reliable** (optional 5G backup)
- **Evolutive** (Support containers, smooth integration into SDWAN/SASE, based on open standards)
- Scalable enterprise Wi-Fi 6 access point (optional)
- **Ecodesign** (Long hardware lifetime & software maintenance windows, low power consumption, integrated energy meter, wireless electric power off, conscious selection of materials, eco packaging)

About Ekinops

Ekinops is a European leader in optical networking and secured connectivity solutions for service providers, enterprises and public organizations around the world.

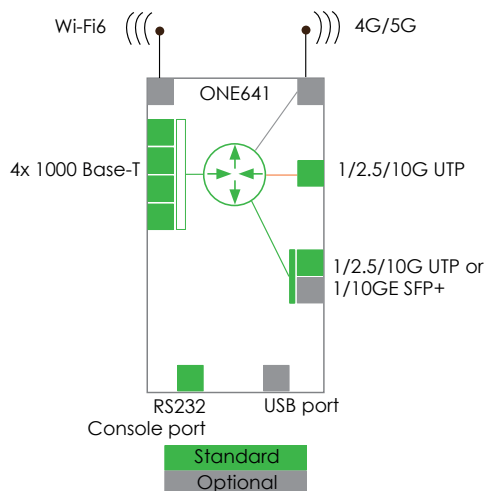
Ekinops designs, develops and manufactures high-performance solutions with cutting-edge software used to deliver high-bandwidth connectivity and managed services in over 70 countries worldwide.

Ekinops leads in the areas of:

- Advanced coherent optical networking for all metropolitan, regional, long-distance and datacenter interconnection applications
- Secured connectivity solutions for enterprises, from voice and data routing devices to Secure Access Service Edge (SASE) capabilities, including ZTNA (Zero-Trust Network Access), SD-WAN, and SSE.

Ekinops operates globally and is listed on Euronext Paris (FR0011466069 - EKI).

Technical Features



General

- 1× 10 Gigabit Ethernet SFP+/UTP combo port
- 1× 10 Gigabit Ethernet UTP port
- 4x UTP Gigabit Ethernet LAN ports
- Optional: 5G backup, TPM module, USB port

Wi-Fi 6 (optional)

- Option 1: Dual concurrent 2.4GHz/5GHz 2×2
- Option 2: Dual concurrent 2.4GHz 2×2/5GHz 4×4

Wireless Radio Interface 5G (optional) **

- 3GPP Rel16
- 5G (SA/NSA) up to 2.4 Gbps DL/900 Mbps UL ***
- LTE cat 16 (1200Mbps/200Mbps)
- MIMO 4×4
- SMA connectors for remote antenna
- Single SIM card (optional embedded eSIM)

Console Port

- RS232 – RJ-45 port

Performance and Sizing

- 7.4 Gbps aggregated (2×3.7 Gbps bidirectional) routing performance with services (NAT, QoS; IMIX 600) at up to 100.000 sessions.
- 15 Gbps aggregated (2×7.5Gbps bidirectional) aggregated raw routing performance (IMIX 600)
- 20 Gbps aggregated (2×10 Gbps bidirectional) best effort performance
- 1.2Gbps bidirectional IPSec throughput
- 100.000 NAT sessions
- 62.500 IPv4 + IPv6 routes
- 2GB RAM (optional up to 8GB for FlexCPE applications)

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

Security

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

IP VPNs

- IPsec, GRE, IPIP, L2TPv2, L2TPv3* with AES, DES, 3DES encryption and SHA-1, SHA-2 and MD5 hashing
- IKEv1 & IKEv2 with pre-shared keys & certificates
- 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)
- NETCONF server compatible v1.0/v1.1
- TR-069 provisioning
- SNMP V1/V2C/V3
- FTP/TFTP, SFTP, SCP upload/download configuration and binaries
- Traceroute, ping
- Powerful event manager, logging, syslog
- Syslog client

Dimensional and Environmental

- Desktop, wall mountable
- W x H x D: 315 × 162 × 60.5 mm (12.4 × 6.38 × 2.36 in)
- Weight: 1.9 kg (4.2 lb)
- Operating temperature: 0 - 40°C
- Humidity: 5 - 90% non condensing
- Fanless: Maintenance free, silent, reduced power consumption

Power Supply

- Power Supply: External 12V/3A power adapter, 110-230V
- Power consumption: standby <11W, average 17W, max 30W
- Dying Gasp

* Subject to a license

** Contact product management for availability

*** Contact product management for frequencies support