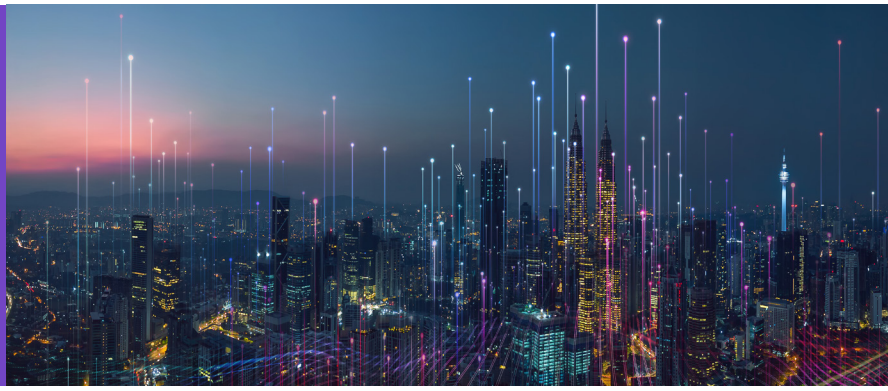
DATASHEET

ONE-5G

5G Fixed Wireless Access Router for the Ultra-Connected Branch-Office



The Ultra Connected Branch-Office over 5G

The OneAccess 5G router, ONE-5G, answers the needs of evolving broadband access with an increased throughput delivered over the new 5G radio access network. Its packet forwarding engine delivers multi Gigabit bidirectional throughput with advanced services.

The ONE-5G is designed for Fixed Wireless access (5G primary link) but can be also used for back up and Hybrid WAN service.

On the LAN side, up to 4 Gigabit Ethernet ports are available as well as an embeded dual concurrent Wi-Fi 11ac/a/b/g/n access point.

OneOS6

- Quad-core architecture for multi gigabit managed services
- Carrier-grade hardware reliability
- Combines dual fiber and 5G for hybrid access and service continuity
- Industry-standard CLI and NETCONF
- Flexible licensing options designed for VPN Business and SD-WAN services
- Compact and fanless design

Suitable for all 5G network deployment

The ONE-5G router operates in the Sub-6Ghz frequency band. It can be deployed either in Non Stand Alone (NSA) or Stand Alone (SA) mode.

As the ONE-5G is also 4G compatible same products can be used also where 5G coverage is not yet there.

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.

SD-WAN Ready

Ekinops SD-WAN extends from the OneOS6 features and enhances them to deliver a feature-rich and full fledge 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.).

Reducing Total Cost of Ownership

As well as opening the door to new revenue opportunities, the ONE-5G 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 roll

Technical Features

General

- 5G NR interface
- High category LTE interface
- Dual combo Gigabit Ethernet LAN/WAN ports
- Optional 4 Gigabit Ethernet LAN switch
- Optional Wi-Fi 11ac wave2
- OneOS6 software

Wireless Radio Interface 5G

- 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)**
- NSA mode support
- SA mode support
- NSA: 2.5 Gbps (DL)/ 650 Mbps (UL)
- MSA: 2.1 Gbps (DL)/ 450 Mbps (UL)
- MIMO 4x4
- SMA connectors for remote antenna
- Dual SIM card

Wireless Radio Interface High cat LTE

- 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 **
- DL peak rate 2Gbps (CAT20) / UL peak rate 211Mbps (CAT18)
- MIMO 2x2, MIMO 4x4
- SMA connectors for remote antenna
- Dual SIM card

Gigabit Ethernet Interfaces

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

Wireless LAN (factory option)

- IEEE 802.11 b/g/n MIMO 2x2 (2.4 GHz)
- IEEE 802.11 a/n/ac MIMO 4x4 wave 2 (5 GHz)
- Dual concurrent radio
- 4 antennas with SMA connectors
- WMM QoSn Encryption options WEP, WPA 1.2 (TKIP) and WPA 2.0 (802.11i, AES-CCMP)
- Authentication options WPA-PSK (pre-shared key) and 802.1x with a RADIUS server (PEAP, EAP-SIM, EAP-TLS and EAP-TTLS)

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

- 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), CB-WFQ on LAN/WAN interfaces
- Low Latency Queuing, fragmentation and interleaving
- Policing and remarking
- RED, WRED, ECN
- QoS measurement probe
- Deep Packet Inspection
- Advanced Deep Packet Inspection (SaaS applications) ***
- Netflow

Technical Features

Security
- Standard and extended access lists
- Zone Based Firewall ***
- 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
- 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

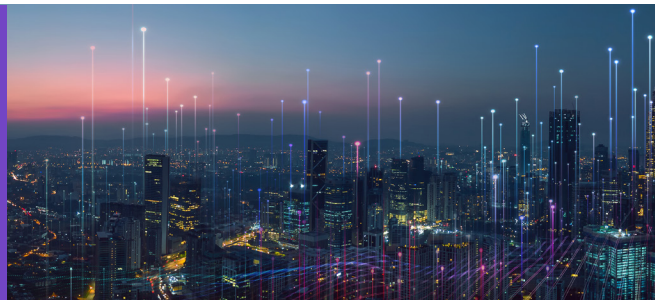
Dimensions and Environmental
- Desktop, wall mountable, rack mountable
- W x H x D: 300 x 44 x 180 mm (11.81 x 1.73 x 7.08 in)
- Weight: 1.3 kg (2.86 lb)
- Operating temperature: 0-45°C
- Humidity: 5-90% non condensing
- Optional brackets for 19" and ETSI racks
- Fanless, no noise

Power Supply
- External adapter 12V – 3A, region dependent
- Voltage range: 110 - 230 Vac – 50/60 Hz
- Power consumption: <36 W
- Optional 24/48 Vdc powering

Optional Functions ***
- eSBC
- Compose SD-WAN Xpress

* *Contact product management for availability*
** *Contact product management for other frequency support*
*** *Subject to license*

About Ekinops



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, with operations in 4 continents; Ekinops (EKI) - a public company traded on the Euronext Paris exchange - is headquartered in Lannion, France, and Ekinops Corp., a wholly-owned subsidiary, is incorporated in the USA.

EKINOPS360 Dynamic Optical Transport

ONEACCESS Fast Network Virtualization

COMPOSE

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