



- For high speed managed data services to SME businesses up to 250 users
- Fast Ethernet and WiFi
- Sophisticated IP QoS and in-built security
- ADSL2+, VDSL2 and Ethernet (fibre) network access
- Dual network access for service backup and redundancy
- Industry leading price performance
- Simple deployment, provisioning and management
- Industry standard CLI



ABOUT OneAccess

OneAccess designs and develops a range of world-class multi-service routers for over 140 global service provider customers including four of the top five operators in Europe. This makes OneAccess the number two branch office router solution provider in the world by volume.

With an international support network operating from offices in North America, Europe and Asia, OneAccess is able to work closely and cooperatively with all its clients throughout the development and roll-out phases for new services.

Managed Data Services for Small and Medium Sized Offices

The OneAccess ONE50 Multi-Service Access Router delivers advanced data services over metro Ethernet, ADSL2+ and VDSL networks. The 100Mbps metro Ethernet card offers plug-and-go choice of fibre or copper interfaces, and the second network port can be equipped with either an ADSL2+ or an auto sensing ADSL2+/VDSL2 card.

With a high performance routing engine, sophisticated IP Quality of Service, flexible IP VPNs, in-built stateful firewall and 100Mbps Ethernet LAN switching as standard, the ONE50 enables the seamless roll out of multiple, concurrent, high speed and high quality data services.

Fixed line operators, mobile operators and ISPs can use the One50 as a cost effective and highly customisable service platform, targeting small and medium sized enterprise or the branch offices of large enterprises.

Enterprise-Class Data Services

Servers, server rooms and local area networks are connected to each other and the wide area network via the built in 4 port 10/100 Base-T Ethernet switch. Server load balancing ensures that local application performance is maintained. The ONE50 can optionally be specified with WiFi, supporting 802.11b/g/n. Several sophisticated authentication schemes are supported, and the WiFi network can even be configured as a public hotspot, without compromising the security of the private wireless or wired infrastructure.

The powerful ONE50 platform supports symmetrical, high speed Layer 3 switching with policy based routing and sophisticated Quality of Service (QoS). Powerful enough to support the real-time processing of multiple, concurrent information flows, the QoS assures the performance of high priority and delay sensitive applications.

A sophisticated and fully standardised IP VPN capability allows teleworkers to access the office IT resources, or branch offices to network back into the enterprise IT infrastructure. The in-built stateful firewall offers a suite of features to maximise information security.

Flexible High Speed Network Access

ADSL2+, VDSL2 and Optical Ethernet (100 base FX) are combined on one device, providing both asymmetrical and symmetrical network bandwidths up to 100 Mbps. An in-built autosensing capability supports easy migration from ADSL2+ to VDSL2 access. In addition the dual, high speed network access capability enables service providers to offer a cost effective high speed back-up and high availability capability to support stringent service level agreements. As a factory option, ISDN BRI (1, 2 or 4) can be provided as back up for less stringent redundancy agreements.

Low Cost, Low Touch, Accelerated Multi-Service Provisioning

As well as opening the door to new revenue opportunities, the ONE70 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 suite of provisioning tools makes roll out simpler, less prone to error and more cost effective. For instance, auto discovery options simplify initial set-ups. Tried and tested configurations can then be 'cloned' to new installations from the network operations centre (NOC). The industry standard CLI removes the need for technician training. The ONE70 supports mass customisation, enabling the provision of standardised service provider packages.

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 onsite assistance.



TECHNICAL FEATURES



ONE50 Rear View

Basic Hardware

- 1x DSL (ADSL2+/VDSL) interface card or 1x ADSL2+ interface
- 1x 100 Mbps Ethernet SFP socket
- Fast Ethernet 4 port switch
- 1x console port
- IPsec encryption accelerator for DES, 3DES, AES

VDSL2/ADSL2+ interface card

- Dual chip VDSL2 & ADSL2+
- VDSL2 according to G.993.2
- G.lite, G.DMT Annex A (ADSL over POTS)
- G.DMT Annex B (ADSL over ISDN, U-R2 compatible)
- ADSL2/2+ G.992.3 (including annex L - annex M) G.992.4, G.992.5
- RJ-11 connector
- ATM for ADSL
- EFM IEEE 802.3 2BASE-TL (aka 802.3ah) (for VDSL)
- ADSL/VDSL auto-sensing

ADSL2+ interface

- G.lite, G.DMT Annex A (ADSL over POTS)
- G.DMT Annex B (ADSL over ISDN, U-R2 compatible)
- ADSL2/2+ G.992.3 (including annex L - annex M) G.992.4, G.992.5
- ATM for ADSL
- EFM IEEE 802.3 2BASE-TL (aka 802.3ah) (for VDSL)

SFP interface

- Universal SFP socket, 100 Mbps full duplex

Ethernet interfaces

- 10/100Mbps, half/full duplex with auto-sense
- Automatic cross-over

WiFi (factory option)

- Dual mode IEEE 802.11b/g/n
- Two antennas
- WMM QoS
- 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)

IP Addressing & Routing

- NAT/NAPT: static/dynamic NAT, NAPT, selective NAT, twice NAT
- DHCP client, server, relay, DNS proxy
- Routing protocols: RIP v1/v2, OSPF v2, BGP v4
- Multicast Routing: PIM-SM and IGMP v2/v3

- Policy-Based Routing
- VRRP
- Server load balancing

IP Quality of Service

- IP Classification and priority (DiffServ) on LAN/WAN interfaces
- Class-Based Queuing (CBQ), CB-WFQ on LAN/WAN interfaces
- Low Latency Queuing, fragmentation and interleaving
- Policing and remarking
- RED, WRED, ECN

Security

- Stateful packet inspection firewall
- Standard and extended access lists
- Session monitoring and limiting
- Configurable timers per port and application
- All firewall log messages can be buffered, viewed or sent to a syslog server

IP VPNs

- Tunnels: IPsec, GRE, IPIP, L2TP
- IPsec encryption: AES, DES, 3DES*
- IPsec tunnel and transport mode: IKE and PKI, AH and ESP with SHA1 and MD-5 hashing
- UDP-based encapsulation for NAT traversal
- IKE with pre-shared secret, symmetrical or client-server mode, or X.509 certificate
- Perfect Forward Secrecy
- DNS server update protocol: DynDNS

Bridging and VLANs

- Bridging and Integrated Routing and Bridging (IRB)
- VLAN tagging and untagging
- Multiple VLAN IDs per port
- 802.1p priority tagging, TOS/COS and COS/TOS mapping

ATM (for ADSL interface)

- Up to 8 PVCs
- OAM-F5 (send/receive): loopback, continuity check
- Shaping: UBR, VBR-NRT, VBR-RT, CBR
- Encapsulations (LLC or Mux): IP, IPoE, PPP, PPPoE

EFM (for VDSL interface)

- IEEE 802.3 2BASE-TL (aka 802.3ah)
- OAM IEEE 802.3 chapter 57

PPP

- PPP over ATM, PPP over Ethernet (PPPoE) on Ethernet, EFM (VDSL2) and

- ATM (ADSL2+) interfaces
- Automatic IP address assignment
- MLPPP bonding with fragmentation and interleaving
- PAP/CHAP authentication
- IPCP subnet mask
- MAC address based authentication

Management

- Industry standard Command Line Interface (CLI)
- Web-based GUI for LAN, WLAN and IBC settings by end-users (can be turned off)
- Auto-provisioning via HTTP auto-update protocol or CWMP (TR-069)
- SNMP V1/V2C/V3
- Support of user privileges
- File upload/download via FTP/TFTP
- QoS measurement probe
- Traceroute, ping, extended ping
- User authentication via RADIUS or TACACS+
- RADIUS accounting
- Global statistics screens (console, web-based)
- Event and trace buffering
- Syslog client
- Flow capture and decoding

Optional Software Features

- Wireless access point controller

Dimensions

- Desktop, wall mountable
- W x H x D: 275 x 50 x 145 mm;
- Weight: 1,0 kg

Power supply

- External adapter 12V – 2A
- Voltage range: 110-230 VAC – 50/60 Hz
- Power consumption: <12 W

*Rear view depends on the router configuration
** Please check with OneAccess marketing for availability.