

ONE50

One50 VDSL2, ADSL2+ and optical Router



The ONE50 is a router targeted to business customers desiring high bandwidth as it can provide VDSL2 technology, ADSL2+ technology, or Optical connectivity in a single box. VDSL2 is the most advanced DSL technology, providing both asymmetrical and symmetrical bandwidths and transmission rates as high as 100Mbps. In addition, a 100 Mbps SFP (small form-factor pluggable) module guarantees direct optical connectivity to Metro-Ethernet networks. Thanks to its dual chip design, it is capable of providing the best performance in both VDSL2 and ADSL2+ access networks.

The router relies on the robust OneOS software, the OneAccess IP software designed for the delivery of enterprise-grade services such as Quality of Service, IP VPN and Wireless LAN. The product is available with different feature packs tailored to your needs. The extended manageability enables a reduced network Total Cost of Ownership.

HIGH SPEED DSL ACCESS

The SFP and ADSL/VDSL interfaces can be used to provide redundancy on the WAN uplink. Traffic is automatically routed to the available network. Alternatively the SFP module can be used to create an additional LAN port and can be used for a DMZ zone (De-Militarised Zone) on the customer's network.

FULL SERVICE GATEWAY

As communication over the Internet is cheaper than other alternatives, companies can use it for browsing and e-mail as well as for many other services like business processes between offices and with home workers. On their local network they need wired and wireless access. To support all these services in a secure and reliable manner in one box, they need a full service gateway. Based on the OneOS software, the ONE50 is a full service gateway for businesses with data needs.

The ONE50 provides secured Internet access through a stateful inspection firewall. Employees working at home and personnel on the road can use the business applications based on central databases through IP VPNs. It provides best-in-class IP Quality of Service features including real-time processing of high priority, delay sensitive applications and guaranteed bandwidth for selected flows.

Each of the 4 LAN ports can be reserved for a server. Specific policies can be applied per port. The optional wireless LAN gives access to different types of users.

Several user authentication schemes and policy based routing can be applied so that a public hotspot service can be offered while securing the company's LAN from intrusions.

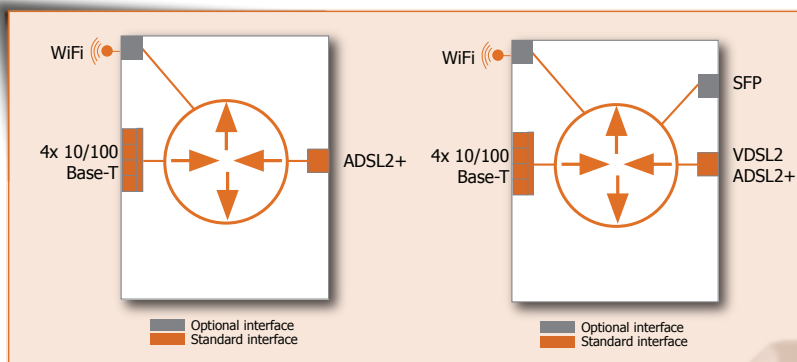
The operating system also features advanced IP routing features for high-end VPN offers such as: IP SEC PKI, BGP routing with load sharing, virtual router redundancy ...

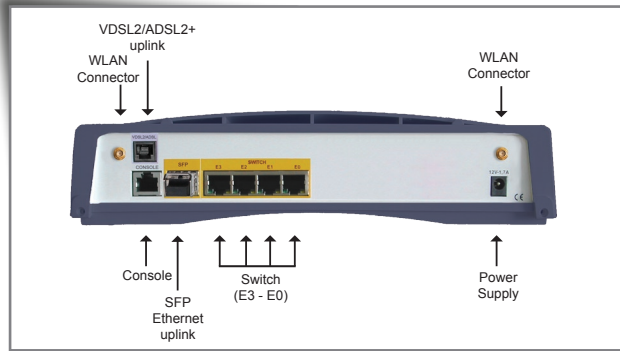
ACCELERATED DEPLOYMENT AND SERVICE PROVISIONING

As all ONE products, the ONE50 uses the Industry standard Command Line Interface (CLI). This facilitates the configuration management for the service provider's technicians and integrates rapidly with automated tools. Several auto discovery and update features make the network roll-out straightforward. Technicians or the customer install the units with a standard configuration. Once connected to the network the ONE50 automatically retrieves all customer specific information from the service provider's databases and thus becomes ready for the service.

A set of embedded tools and service level indicators enable responsive customer support. On the other hand a web based user interface provides the customer with all the service information that is relevant to him. Thanks to its capability to be managed by the DSL forum standard TR069, it becomes very easy to upsell future services on this versatile platform.

NOTE: SFP and VDSL available soon.





Rear View*

ONE50 SPECIFICATIONS

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
- 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)
- 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: 270 x 50 x 145 mm; Weight: 1,0 kg

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

NOTE: SFP and VDSL available soon.

