Oxygen *wi*Access Wireless series

Wired or Wireless WAN
WiFi 802.11n / 802.11 ac
Dual-band / Dual-radio
High transmit-power*
Multiple SSIDs
Remote power-feed
Captice portal service
L2TP / IPSec / SSL VPN
IoT concentrator
Local Ethernet port
WAN backup

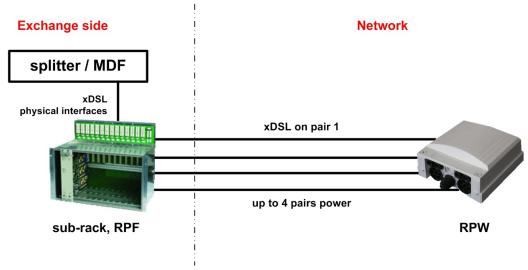
OXYGEN Broadband

Oxygen *wi*Access

The Oxygen *wi*Access terminals are advanced indoor or outdoor wireless access points, which offer high speed Internet access over multiple options of wired or wireless backhauling broadband access.

Ideal for mobile data offloading, Oxygen *wi*Access terminals offer in a compact and robust design the needed functionality and performance for broadband communication of mobile users via smarphone, tablet or other WiFi-enabled portable devices. The extended list of hardware and software features and options of the Oxygen *wi*Access terminals includes:

- **Choice between xDSL, Fiber, WiFi, Mobile (3G/4G) or Ethernet broadband access**
- **Remote power feed through broadband access copper pair for easy installation and use without local mains availability**
- **Assured communication through optional backup access connectivity for backhauling**
- **Optional integrated eCall and/or GPS functionality for in-vehicle operation and integration with emergency and/or fleet management services**



Based on the Linux OS, Oxygen *wi*Access terminals are future-proof designs with increased CPU and memory capacities. These characteristics allow broadband operators to enhance their portfolio of offered services with new applications and ensure that their investment is future proof, as more and more portable IP-enabled devices require constant Internet connectivity. At the same time, advanced policy-based Quality of Service (QoS), together with complete service separation and a powerful and flexible firewall ensure full client protection over carrier-grade real-time applications and services.

Technical Specifications

Network Interface Options

WAN
- 1 x VDSL1, VDSL2, VDSL2-Vplus
  (auto ADSL2+, ADSL2, ADSL fallback)
  8a, 8b, 8c, 8d, 12a, 12b, 17a, 30a, 35b, G.fast*
and/or
  1 x 10/100/1000 BaseT, Auto-MDIX
and/or
  1 x SFP slot for FTTH (Ethernet, GPON, G.fast)
and/or
  1 x internal LTE/HSPA+ module, Cat-4 or Cat-6
  GPRS/EDGE/HSPA+/DC-HSPA+/LTE

WiFi
- 802.11n 2.4GHz MIMO (2x2 or 3x3)
- 802.11ac 5 GHz, MIMO (2x2, 3x3 or 4x4)
- 2.4GHz / 5GHz dual-band *(optional)*
- 2.4GHz + 5GHz dual-concurrent *(optional)*
- external antennas
- Enhanced WiFi Tx-power up to 500 mW *(optional)*

LAN
- 1 x Ethernet ports (10/100/1000 BaseT, Auto-MDIX) *(optional)*
- 1 x USB Host (master) interface *(optional)*
- 802.3af Power-over-Ethernet *(optional)*

IoT
- 1 x internal LTE Cat.M1 & Cat.NB1 & EGPRS module with ultra-low power consumption
and/or
  1 x internal Cat.1 10/5 Mbps
and/or
  1 x Zigbee HA1.2 coordinator
and/or
  1 x Bluetooth 4.0 / LE

Wireless
- WEP 64/128-bit, WPA, WPA2, PSK, 802.1x
- TKIP, AES-CCMP, EAP-SIM
- 802.11e WMM
- Muliple WLAN SSIDs (up to 8)
- WiFi Protected Setup (WPS)
- Wireless Distribution System (WDS)
- Client Isolation
- Embedded Captive Portal
- RADIUS server authentication

Routing/Bridging
- Multiple VLANs and/or ATM PVCs with QoS
- Traffic Shaping
- VLAN-to-Service mapping support
- 802.1d bridging
- 802.1q VLAN support
- RIP v1/v2, OSPF*, BGP*, Static Routing
- DHCP Client/Server/Relay
- SNTP Client/Server
- IPv6 support (dual-stack, DS-lite, MAP-T, MAP-E)
- NAT, PAT and DNS relay agent
- IGMP v1/2/3, proxy, snooping
- IP QoS (ToS/DSCP)
- Ethernet QoS (802.1p/q CoS)
- Queuing, rate limitation, fragmentation
- Low latency handling of VoIP/Video services
- Multihoming, Load-balancing, WAN backup
- Dynamic DNS
- PPP Server / Proxy
- VRRP

Security
- Enhanced policy-based and SPI firewall
- Standard and Extended Access Lists
- URL Filter
- Virtual Server, DMZ
- MAC filtering
- VPN IPSec*, TLS/SSL OpenVPN, L2TP, L2TPv3*, PPTP*, GRE, VPN pass-through
- UPnP IGD, NAT-PMP

Remote Power Feeding Option
Remote power of *wi*Access terminal through broadband copper pair coexisting with xDSL service.

In combination with a centralized power feeding solution for remote terminals, a highly scalable network can be depoyed with:
- elimination of the cost for additional electrical cabling, that would otherwise be necessary
- isolation of the critical broadband service devices on a single power system, which can be supported by a UPS backup

Features & Benefits:
- Scalable power transmission to multiple end-terminals
- High efficiency at both ends (> 90%)
- Compliance to safety standards
- Overall network management

Alternative Power Input Options
- External power adaptor: 12V DC, 1A/90-240V AC, 50-60Hz
- 802.3af Power-over-Ethernet (POE) *(optional)*
- Battery Backup for main power failure *(optional)*
- Power consumption 4W (typical), 9W (max)

Management
- DSL Forum TR-069, TR-098, TR-181
- Multilevel Web-based graphical user interface
- SSH/Telnet remote access to CLI
- Console port *(optional)*
- SNMP v1/2c/3
- Diagnostic and performance monitoring
- Connection test (end-user), ping, traceroute
- Remote management through SMS*
- E-mail / SMS alerts
- Time-of-day Schedule, Patental control
- Syslog with network support
- Packet capturing (sniffer)
- Configuration backup and restore
- Zero-touch deployment mechanism
- Automatic remote firmware upgrades
- Dual firmware image support
- Over The Air (OTA) device management*

Automotive Services
- eCall with built-in accelerometer
- Embedded GPS tracker *(optional)*
- External GPS antenna *(optional)*

USB Services
- File Server support (FTP, SMB/CIFS, NFS)
- UPnP Media Server support
- WAN-backup through external LTE modem

Additional specifications
- Flash/RAM: 128-512MB / 128-256MB
- Functional LED indicators
- Power on/off switch
- Factory reset pin
- IP64 housing for outdoor installation *(optional)*
- Operating temperature: -40 to 60ºC
- Storage temperature: -40 to 85ºC
- Operating humidity: 10% to 90% *(non-cond.)*
- Storage humidity: 5% to 95% *(non-cond.)*
- Dimensions: 179x129x32mm
- CE Mark, IEC 60950, EN 60950, K.21, RoHS

(*) Optional

Photos, features and specifications subject to change without notice.

OXYGEN Broadband
2, Messogeion Ave., 115 27 Athens, Greece
Tel.: +30 216 6000300, Fax: +30 216 6000301
info@oxygenbroadband.com