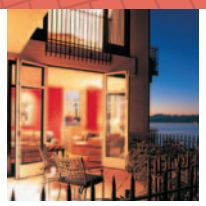
Alloptic Xgen6000™ ONT


Meeting the communication needs of high-density residential and business applications, the **Xgen6000 ONT** offers voice, video, and data services to multi-dwelling units, dormitories, multi-story businesses, and campus environments. With 24 configurable ultra high-speed data ports, 2 T1/ E1 ports, protected fiber, and RF or IP video capabilities, the rugged, temperature-hardened Xgen6000 allows a complete menu of services from a single robust, flexible and cost-effective service platform. QoS and prioritization functionality support business-grade data services and SLAs. The Xgen6000's compact, temperature hardened design and extended-reach Gigabit Ethernet capabilities allow it to deliver high value business services wherever needed.

Benefits

- Services supported: Voice, TDM, Data, and RF & IP Video
- Hardware efficiency: Multiple services from any Ethernet port
- Advanced data services via symmetrical high speed through-put, bandwidth guarantees, and VLAN service segregation
- Wire speed, full bidirectional data rate on each port
- Support and monitor RF devices such as MicroNode™ RFoG ONUs
- High reliability: temperature hardened and optional PON redundancy
- Subscriber and service provisioning via DPC™ DOCSIS PON controller
- Comprehensive remote management facilitates activation and diagnostics
- Rapid activation via pre-provisioning of the ONT
- Flexible installation: indoor or outdoor mounting, long reach operating range, temperature hardened design
- Standards compliant

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Imagine the Possibilities™

Alloptic Xgen6000™ ONT

Specifications

Physical

- (2U) Rack mount: 3.5" H x 17" W x 11" D 8.9cm H x 43.2cm W x 27.9cm D
- Weight: 9 lbs/4.1kg

Indicators/External Alarms

- PON & unit status via multi-color LED
- Power input LED
- 24 data port status LEDs
- 2 x T1/E1 interface status LEDs
- 2 external alarm inputs

Optical Characteristics

PON Interface

- SC/APC optical PHY (single-mode fiber)
- 1.25 Gigabit Ethernet PON
- Operating range: 0 to 75km (loss limited)

Optional Dual PON capability

- Dual optical transceivers
- Automatic switchover on LOS
- Automatic re-ranging
- Working/protect link status indicators
- Manual lockout and force controls

Downstream PON (receiver)

- Dynamic range: 0 to -24 dBm
- Receive wavelength: 1490nm ±10nm
- Configurable RSSI (Receive Signal Strength Indicator) range: -15 to -25dBm

Return Path PON (transmitter)

- Class 1 laser
- Output power level: 1 dBm ±1dB
- Wavelength: 1310nm ±50nm

RF optics

- RF wavelength 1550nm ±20nm
- RF receiver dynamic range: 0 to -6dBm
- Loss of RF input power threshold: -25dBm

Ethernet Data Ports

- 24 10/100BaseT RJ45 data ports
- Automatic speed detect
- Full or half duplex (automatic or manual)
- Guaranteed and best effort bandwidth controls
- Bandwidth selectivity per port: Up to 100Mbps symmetrical in 64Kbps increments
- Reach up to 100m with CAT5 cable

Data switching features

- Port bridging & trunking
- VLAN trunking
- Private LAN service
- IGMP V2 support
- IGMP proxy and snooping with "fast leave"
- Diffserv & QoS prioritization
- Transparent LAN services using Q-in-Q

Port statistics

- Transmit packets/octets
- Receive packets/octets
- Receive errors
- Collisions
- Packet discard reason

Ordering information

Part #	Description
ONUX6110	24 fast Ethernet ports
ONUX6140	24 fast Ethernet, 2 T1/E1 TDM ports
ONUX6240	24 fast Ethernet, 2 T1/E1 TDM ports, Dual PON xcvr
ONUX6142	24 fast Ethernet, 2 T1/E1 TDM ports, 1 WB RF video port

Compatible Power Systems

Part #	Description
PSB1001	-48 Volt (UPS charger & battery)
PSAC001	Brick -48 Volt

Mounting

The Xgen6000 mounts directly into a 19" equipment rack without adapters. For other mounting options, the following adapters are available.

Part #	Description
ADPTR05	23" rack adapter
ADPTR04	Wall mount adapter

T1/E1 Ports (optional)

Interfaces

- 2 RJ48 connectors

Framing options

- SF (super frame)
- ESF (extended super frame)
- Unframed E1 mode
- CRC E1 mode
- MF E1 mode
- CRC-MF E1 mode
- Basic E1 mode

Line coding

- B8Zs
- AMI
- HDB3 E1 line coding

Synchronization

- System clocked (synchronous mode)

Other

- Loopback diagnostics
- Configurable LBO (line build-out)
- GR824 performance monitoring
- Red/yellow alarm support

RF port (Optional)

Interface

- 1 "F" connector, 75 ohm

RF Characteristics

- Output level @ -4dBm optical in: +14dBmV/ch
- Frequency response: 50–870MHz
- RF flatness 50–870MHz range: ±4dB
- Typical load w/o amplification: 4 splits
- CNR @ -4dBm optical in: 47.5
- CSO @ 0dBm optical in: 55
- CTB @ 0dBm optical in: 55

Operations

- Remote control capable
- Alarms with configurable severity
- Optical power threshold alarms
- Software download
- TDM line testing & loop-back
- Real-time data port statistics
- Auto ONT discovery
- Remote configuration
- RF video control & alarms
- DPC™ DOCSIS controller support

Power and Environmental

- Operating temperature: -40°C to +65°C
- Humidity: 5% to 95% non-condensing
- Dual feed, redundant input power support
- Power input voltage: -42 to -56VDC
- Power consumption: 25 watts maximum

Standards, Certifications, and Patents

- TUV listed, CE mark and FDA certified for safety
- Meets or exceeds FCC Part 15a for emissions
- RoHS
- ANSI T1.403, T1.231, T1.408
- ITU-T G.703, G.704, G.706, G.823, G.824
- Telcordia TA5, TR194, TR54016, TR62411
- IEEE 802.3p, 802.3Q, 802.1ad: QinQ, RFC2495, 802.3ah, 802.3U, 802.3ab
- IGMP V2 for IP video support
- MEF 9, 14
- Patents
  - United States (US Pat 7 031 343)
  - Taiwan (#90128223)
  - China (ZL01821736.2)

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