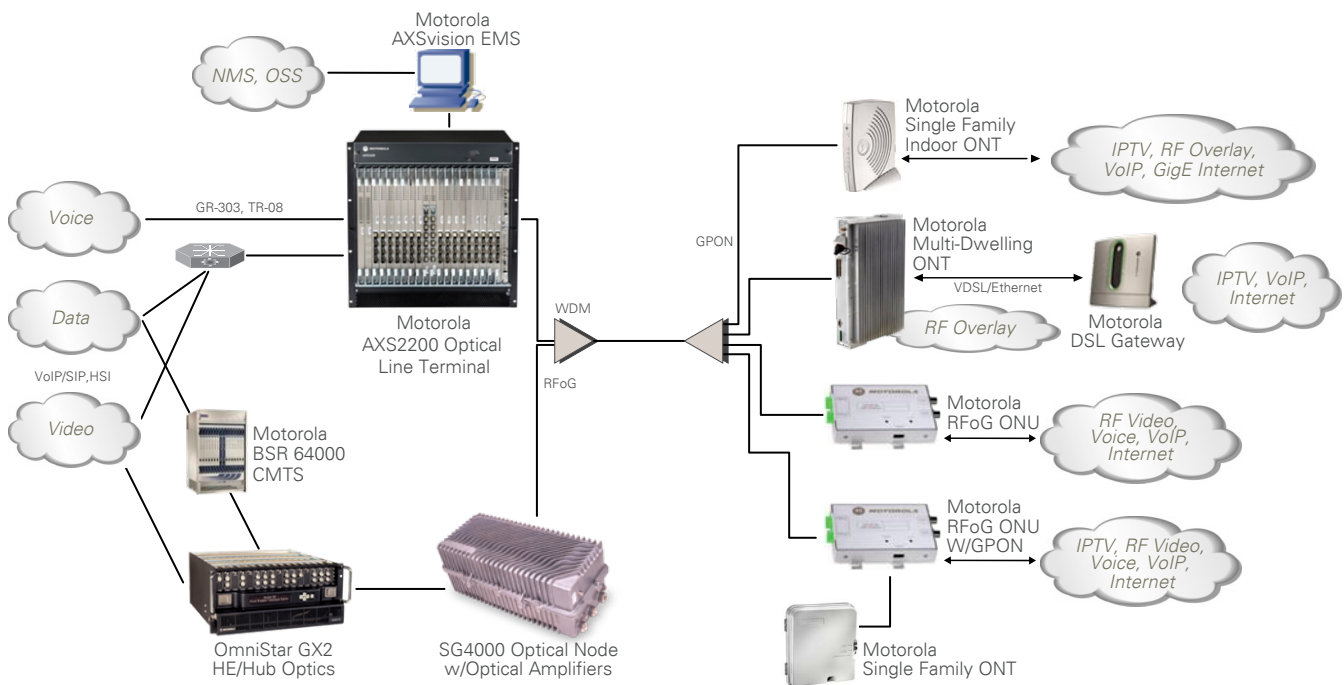


BROADBAND EVERYWHERE

Motorola Fiber-to-the-Home Solutions for North America



Experience the Motorola difference. From the headend to the home or business, Motorola offers established and innovative access solutions that enable service providers to deliver Ultra-Broadband voice, video, and data services.

Motorola Optical Line Terminal (OLT)

Next Generation Optical Access Platform

AXS2200 and AXS1800 GPON OLTs

Motorola's OLT offering extends fiber to the edge of service provider networks to enable the delivery of end-to-end Ultra-Broadband services to single family, small office, and multi-dwelling units. Each OLT provides superior capacity for growth in services such as HDTV, HD video on demand (VOD), and time-shifted television.

The AXS2200 features flexible and high capacity GPON access and WAN uplinks, unparalleled scalability and line rate performance with a 200 Gbps fully non-blocked switch fabric in a high density chassis that supports up to 4608 residential and business subscribers.

The AXS1800 supports up to 3,584 subscribers with 18 slots, and is designed to meet the specifications and regulations of international markets.

Proven to be reliable in tier one service provider networks across the globe, Motorola's AXS2200 and AXS1800 OLTs help operators stay ahead of consumer demand for high quality personalized communication and entertainment experiences.



AXS2200 GPON OLT

System Features:

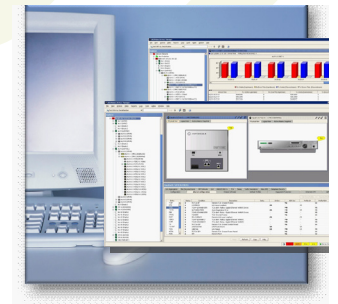
- Symmetrical Throughput – Hundreds of megabits in downstream and upstream simultaneously
- Video Optimized Design – Sustained full bandwidth to subscribers with superior capacity for growth in HD unicast services such as VOD and time-shifted television
- Quality Voice – High quality and reliable delivery of legacy voice services with an integrated voice gateway
- Service Delivery Flexibility – Rapid IPTV video deployment
- Proven Solutions – Deployed, operational and scaled in tier one service provider networks
- Scalability – Enables FTTH deployment from hundreds to thousands of subscribers
- Advanced Configuration Management Tools – Reduces operational costs to connect and maintain subscribers

AXSvision Element Management System

The AXSvision Element Management System unleashes the power of Motorola's next generation FTTH solutions by simplifying and speeding the creation and delivery of new personalized entertainment and communications services.

AXSvision Offers:

- Advanced Configuration Management Tools – Modifies service profiles without affecting service and providing self-service to subscribers
- Fully Automated Provisioning – Drives automated installation and reduces the costs to pass and connect
- Preemptive Maintenance – Identifies soft failures before they impact system performance
- Focused Diagnostics – Obtains information that assists in dispatching the right skill sets and equipment to quickly resolve problems
- Intelligence at the End Points – Remotely performs common to complex maintenance procedures
- Sophisticated Embedded Software Administration – Automatically keeps thousands of network elements up to date
- Scalability – Designed to support large scale deployments of over a million subscribers and hundreds of simultaneous users and sessions, as well as a scaled down version for smaller operators



AXSvision

Motorola Optical Network Terminals (ONTs)

Flexible Service Delivery Options

Motorola GPON Optical Network Terminals (ONTs) extend fiber to the edge of service provider networks to enable the delivery of end-to-end Ultra-Broadband services to subscribers, anywhere. Motorola's ONT solutions feature Ultra-Broadband delivery of rich entertainment services to every end user.

Single Family Units



SF21000

SF21000 Single Family Unit

Motorola's SF21000 is a small form factor, indoor single family GPON ONT based on open standards and delivers Ultra-Broadband services. The SF21000 delivers IPTV and high speed Internet access and utilizes a single fiber optic connection to the home. This ONT can be wall mounted or placed on the desktop.



SF24200 / SF24210

SF24200 and SF24210 Single Family Units

Motorola's SF24200 and SF24210 are indoor single family GPON ONTs. They are based on open standards and deliver Ultra-Broadband services. The SF24200 delivers high quality voice-over-IP IPTV and high speed Internet access; the SF24210 delivers high quality voice-over-IP, IPTV, RF Overlay, and high speed Internet access. Both ONTs utilize a single fiber optic connection to the home. The SF24200 supports one GbE, three FEs, two telephone interfaces; the SF24210 supports one GbE, three FEs, two telephone interfaces, and one RF interface. Both ONTs have integrated fiber management and support up to two optional internal lithium ion batteries for power backup. The SF24200 and SF24210 can be wall mounted or placed on the desktop.



ONT1400GT2 /ONT-1400GT2JI

ONT1400GT2 and ONT1400GT2JI (Just Inside) Single Family Units

Based on open standards and leveraging a highly flexible design, the Motorola ONT1400GT2 and ONT1400GT2JI addresses the demand for Ultra-Broadband services. It can be configured to deliver high quality voice, voice-over-IP, and high speed Internet access via a single fiber optic connection to the home. The ONT1400GT2 and ONT1400GT2JI also supports interactive services by integrating ALOHA upstream signals (SCTE 55-1) from Motorola's widely deployed family of digital RF set top boxes. The ONT1400GT2 is designed for outdoor applications and the ONT1400GT2JI is designed for indoor applications and features an integrated battery backup unit.

Small Office/Home Office and Business



ONT1120GE

ONT1120GE Desktop Intelligent Fiber-to-the-Premises Services Platform

The ONT1120GE provides a desktop FTTP solution for business or Ethernet only residential applications. This product allows for Ultra-Broadband service directly to the desktop allowing for the delivery of IPTV – voice, video, and data services over a single fiber.



ONT1500GT

ONT1500GT Small Office/Home Office

The ONT1500GT brings the benefits of corporate telecommunications to a small home office setting. The ONT1500GT delivers eight lines of Class 5 and VoIP quality voice service, RF and IPTV video, and two GbE Ethernet interfaces, making it ideally suited for small office or home office applications.



ONT6000GVT

Multi Dwelling Units

ONT6000GVT and ONT6000GET Multi-Dwelling Units

The ONT6000 GPON multi-dwelling unit (MDU) series deliver RF video and POTS to 12 subscribers and includes two service delivery options (GbE and VDSL2). Both MDUs feature a hardened two rack unit housing that has several convenient indoor and outdoor mounting options which include in-cabinet, rack, or wall mount.

ONT6000GVT: Features 12 VDSL2 interfaces for the delivery of IP service over CAT 3 cabling and 24 POTS ports

ONT6000GET: Features 12 GbE interfaces that deliver IP service over CAT 5 cabling and 24 POTS ports

Motorola FTTH Solution Portfolio

GPON OLTs

OLT - AXS2200	23" 13RU GPON 22 slot 1500W/-48Vdc chassis, includes variable speed fan tray, redundant power filter, and universal slots.
OLT - AXS1800	19" / 500mm 14RU GPON 18 slot 1500W/-48Vdc chassis, includes variable speed fan tray, redundant power filter, and universal slots.
Switch Fabric	Non blocking 200 Gb/s Switch Processor card, includes 6x 1 GbE SFP and 1x 10 GbE XFP WAN ports, BITS timing. Use 2x cards for redundancy.
GPON Card	Four port 2448/1224 Mbps SMF GPON interface card. Supports up to 256 subs using 1:64 optical split. Up to 14x cards per OLT-AXS1800.
Additional WAN	WAN card 10GbE or 10 x 1 GbE interface. Used to extend the WAN capacity provided by the Switch Fabric. WAN card can be installed in any GPON slots.
Controller Card	System controller card, alarm, and redundant management interfaces. Use 2x cards for redundancy.

GPON ONTs

Data ONT	ONT1120GE: Wall mount / desktop data only GPON ONT with 4x GbE. External A/C adapter included, optional battery backup unit available. SF21000: Wall mount / desktop data only GPON ONT with 1xGbE.
Triple Play ONT	ONT1400GT2: Outdoor GPON SFU ONT with 2GbE, 2 POTS (VoIP & TDM), 1Ghz RF overlay, and MOT-RPD. External battery backup unit available. ONT1400GT2 JI: Just inside GPON SFU ONT with 2GbE, 2 POTS (VoIP & TDM), 1Ghz RF overlay, MOT-RPD, internal backup unit, optional 12V – 7.2Ahr replaceable battery available. ONT1500GT: Outdoor GPON SOHO ONT with 2GbE, 8 POTS (VoIP & TDM), RF overlay, and SyncE. External battery backup unit available. SF24210: Wall mount/desktop GPON ONT with 1GE+3FE, 2 POTS (VoIP & TDM) and 1Ghz RF overlay, integrated battery backup, 1 or 2 optional replaceable Li-ION batteries). External A/C adapter required. SF24200: Wall mount/desktop GPON ONT with 1GE+3FE, 2 POTS (VoIP & TDM), integrated battery backup, 1 or 2 optional replaceable Li-ION batteries. External A/C adapter required.
MDU ONTs	ONT6000GET: Outdoor Triple Play GPON ENET MDU ONT with 24x POTS (VoIP & TDM), 12x GbE, Sync E, +33dBmV RF video, and MOT-RPD. ONT6000GVT: Outdoor Triple Play GPON VDSL2 MDU ONT with 24x POTS (VoIP & TDM), 12x VDSL2-30A, Internal POTS splitters, +33dBmV RF video a, MOT-RPD. - External 48Vdc FMPS BBU available - Both require 48Vdc BBU. Indoor and outdoor cabinets, wall brackets, and rack mount brackets available

Element Management System

AXSvision	Performance optimized management system to support up to 500LTs and 100,000 ONTs.
AXSvision Light	Performance optimized management system to support up to 5 OLTs, 10,000 ONTs.

Related Equipment Available from Motorola

Optical	Optical TX and RX, EDFA, Return Path Receiver, RFoG ONU, WDM
Video	DAC, DSR, SEM, APEX, OOM, CableVista



MOTOROLA

motorola.com/ftth

MOTOROLA and the Stylized M Logo are registered in the U.S. Patent and Trademark Office. All other product or service names are the property of their respective owners. The information presented herein is to the best of our knowledge true and accurate. No warranty or guarantee expressed or implied is made regarding the capacity, performance or suitability of any product. ©Motorola, Inc. 2009
NA, August 2009