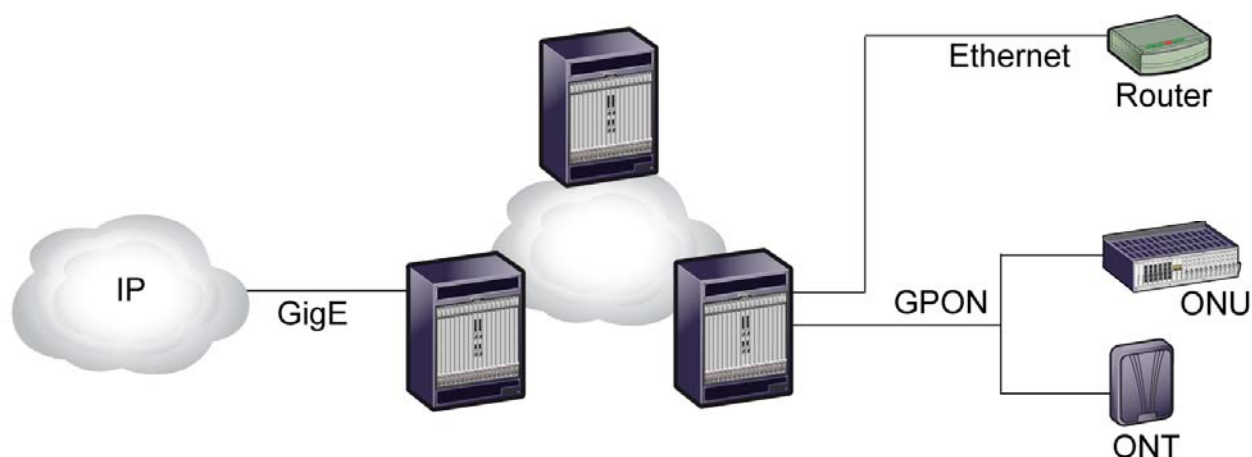


GIGABIT PASSIVE OPTICAL NETWORK

GPON Solution

EDA 1500



Introduction

Ericsson's complete end-to-end EDA 1500 GPON solution is based on the following products:

- BLM 1500 Optical Line Termination (OLT)
- Complete series GPON Optical Network Terminals/Units (ONT/ONUs) portfolio
- EntriView EMS element management system (EMS)

EDA 1500 is part of the EDA family, which also includes the EDA 1000, EDA 1200 and EDA 2500, making up a complete range of broadband access solutions.

Gigabit Passive Optical Networks

Demand for HDTV IPTV and other advanced services is driving the need for the high-capacity all-IP optical access network. GPON is the key technology for achieving this goal. The Ericsson solution takes you there.

The all IP optical access network

Consumer demand for IPTV and other advanced services is creating the need for a converged high-capacity all-IP based fiber network. The promise of the all optical IP network includes dramatic efficiencies and cost savings, and significantly more bandwidth. With this new all-IP network comes exciting new capabilities such as IP Multimedia Subsystem (IMS), an IP-based service infrastructure that enables highly personalized multimedia services, such as follow-me video that follows you wherever you go, switching from TV on your cell phone to HDTV IPTV when you walk into your house.

GPON has emerged as the key enabling technology to achieve the all-IP network. It is fiber-based and it provides high bandwidth. Using GPON to accelerate optical and IP convergence in the access network, carriers packetize all voice, data, and video services. This means more revenue, more flexibility, and lower cost.

EDA 1500 for comprehensive, deployable GPON

BLM 1500, the EDA 1500 GPON OLT provides a crucial element in the all IP optical access Network. Its 320 Gbps backplane provides the high bandwidth necessary to support the evolving network.

Designed to provide superior user experience, the EDA 1500 GPON solution provides G.984 ITU-T compliant speeds of 2.488 Gbps downstream and 1.244 Gbps upstream, more than enough bandwidth to support triple-play services. Its high density design supports 1,792 ONT/ONUs per chassis with a maximum 1:32 split ratio. The powerful lasers with a 28 dB optical power budget support a practical reach of 20 km.

For more specific information on the BLM 1500, see the BLM 1500 Technical Product Description.

Ericsson provides a complete GPON solution

- The EDA 1500 is a proven, deployed access system
- GPON OLT and a full line of GPON ONT/ONUs - from residential to business - including modular chassis-based ONUs offers a service-aware architecture
- IP-awareness with QoS embedded in GPON OLT and ONTs
- Compatible with emerging IMS solutions for differentiated services
- Tuned to new IP services
- Support for VoIP

Easy multi-service management

- CORBA and XML northbound interfaces
- Line-by-line transition from legacy to next-generation OSS
- A packet-based end-to-end solution for virtually every deployment scenario

The Ericsson solution includes a complete portfolio of GPON OLTs, ONTs, and ONUs. It also provides IP service-awareness with QoS features as well as new, integrated gateways that offer voice services and high-density GigE uplinks. This comprehensive, end-to-end solution can be deployed in Single Family Units, Small Business Units, Multiple Dwelling Units and Multiple Tenant Units, and in Fiber to the Curb and Fiber to the Business applications. The GPON solution builds on the existing base of EDA 1500, T-Series and EntriView products, all of which have been deployed at major carriers for copper and PON networks.

The Optical Network Termination Units

Ericsson offers a complete range of optical network termination units. The T-025G SFU ONT is an example of an ONT for fast delivery of efficient triple-play service to residential customers.



- 2.5/1.2G GPON
- 2-4 POTS (SIP/H.248)
- 1 Ethernet (IPTV, HSIA)
- PON multicasting for IPTV
- 1 RF Video option

Flexible delivery of multiple services: From residential to business

The Ericsson GPON solution is a complete access solution. GPON ONTs and ONUs serve every kind of subscriber, from single family homes to MDUs/MTUs. The solution also includes software that enables IMS integration and expands existing IP service-aware features such as IGMP multicasting, VLAN tagging and stacking, and security features.

EntriView Element Management System

The EntriView Element Management System (EMS) manages the GPON network elements. The GPON ONTs and OLT include new SIP-based VoIP service, coupled with integrated voice gateways to legacy Class5 switches and H.248 soft-switches in the EDA 1500. As an alternative to using an integrated gateway, the system also interoperates with external SIP and H.248 voice gateways. The enhanced integrated gateways provide full support for future services over GPON networks.

Accelerating optical and IP convergence in the access network

The Ericsson GPON solution offers carriers a powerful access platform to converge a full suite of services to IP, including voice, video, and data. Its flexibility allows carriers to offer this broad range of services cost effectively, and to deploy them quickly and without disruptions, ensuring that carriers will be able to attract and satisfy new customers as well as protecting their valuable existing customer base. Ericsson's complete portfolio of GPON equipment allows carriers to increase revenue through triple-play services, while at the same time reducing costs.