सी-डॉट
C-DOT

GPON SOLUTION

VOICE VIDEO DATA

C-DOT GPON

C-DOT's GPON (Gigabit Passive Optical Network) technology offers an excellent mix of triple play services (voice, data & video) to end users. This is an indigenous development of C-DOT and offers advantages in terms of appropriateness for Indian environment, Innovation & local manufacturing.

GPON has only passive components in the neighborhood infrastructure while active electronics are deployed only in the main communication room/Central Office and at the customers's desk/workstations. At the central office, the termination point is Optical Line Terminal (OLT) equipment. At the customer premises, the termination point is in optical network terminals or ONTs. Between the OLT and the ONT is the passive optical network comprising of fiber links and passive splitters. In GPON, optical fibre can be split to support multiple CPEs and reaches to each user/room. Because multiple users share the optical fibre and Central Office equipment (OLT), GPON substantially reduces the investment required to serve a given number of users.

C-DOT's EMS/LCT complements GPON solution with the ease of provisioning, monitoring and management of complete network and its elements.

Current technology delivers a downstream data rate of 2.5 Gbps and an upstream data rate of 1.25 Gbps on a single fibre over a distance of up to 60 Kms. One optical fiber from OLT can be shared with up to 128 users. Signals from the OLT to the ONT are encrypted (secure) and then broadcasted to workstation devices. Signals from the workstation devices are then multiplexed back to the OLT.
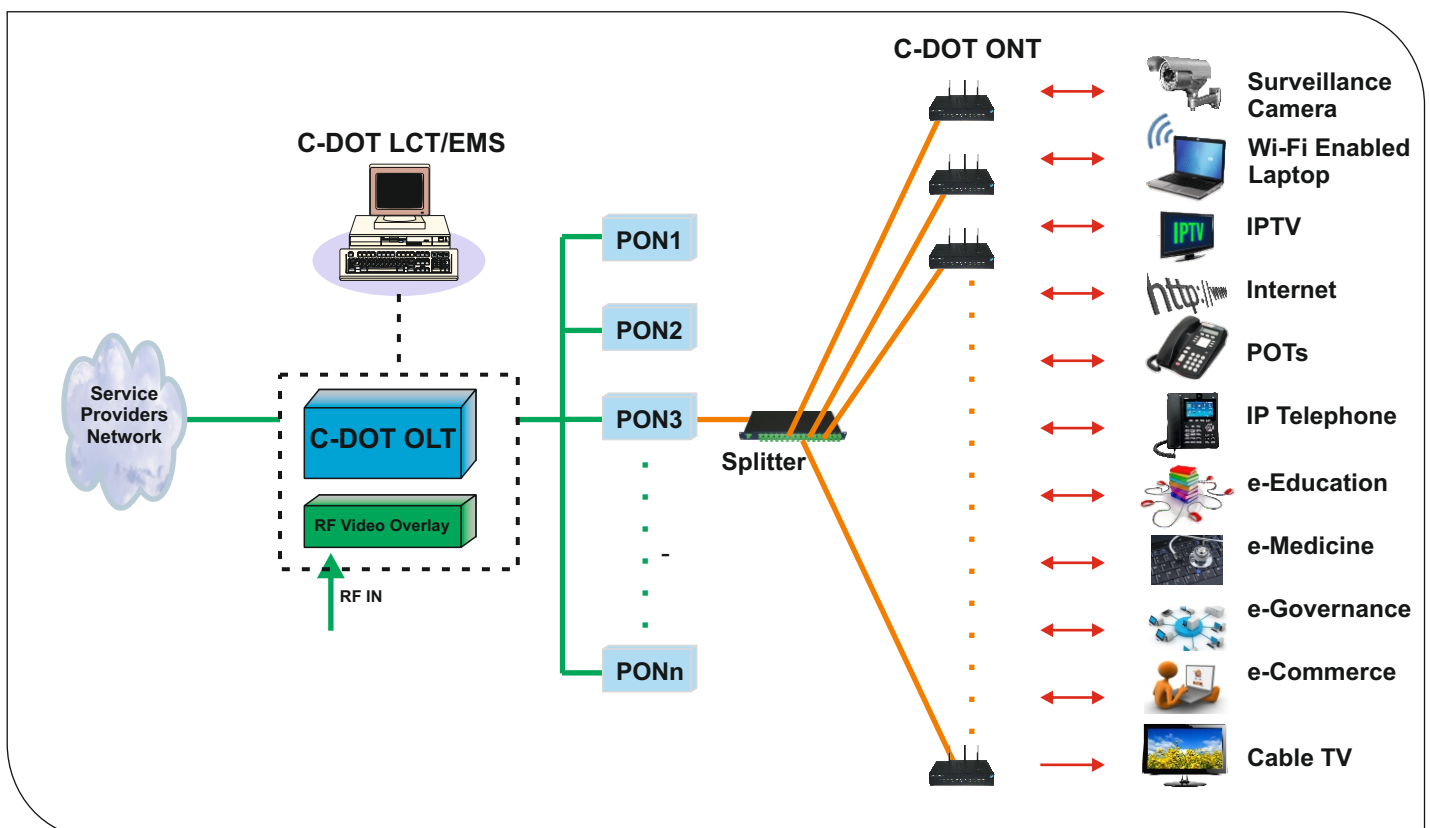
C-DOT OLT

Features:

- Compliant with ITU-T G.984 & TEC GR/PON-01/02. APR.2008
- 2.5 Gbps downstream at 1490 nm
- 1.25 Gbps upstream at 1310 nm
- Support of 1:1 protection towards ODN
- Protection as per GR & ITU-T recommendations
- Support of upto 128 ONTs per PON Port
- Maximum supported physical distance is 20 KM and logical distance is 60 KM

- Class B+ (28dB) and Class C+ (32 dB) optics
- AES encryption at ONT
- Synchronization of the GPON system through Network Clock
- Management of the entire GPON system through LCT/EMS/NMS
- User friendly operations through self explanatory GUI
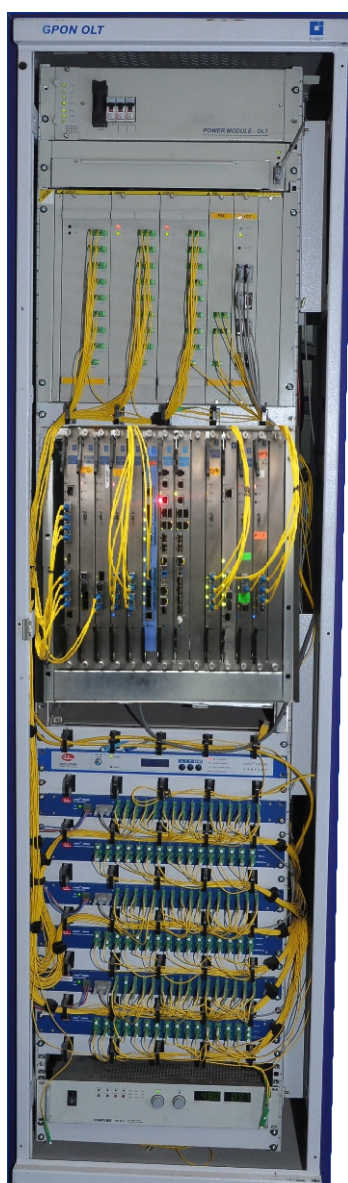
Chassis Based OLT

- Upto 96 PON ports
- Supports upto 12288 ONTs
- Six 10GbE Optical Interfaces & Six 1 GbE Optical/ Electrical Interface towards SNI
- 19" rack of 2200mm height
- -48V DC Supply
- Forced Cooling
- Suitable for City wide deployment
- Optional RF Transmission at 1550 nm

Chatur Damini

- 4 PON ports
- Supports upto 512 ONTs
- Two 1GbE/10GbE Optical Interfaces & One 1 GbE Optical/Electrical Interface towards SNI
- Small size 9.3" x 11.6" x 1U
- -48 V DC or 220V AC with external AC-DC Adaptor
- Low power consumption, Works in non-AC environment
- Suitable for office complexes
- Ultra Compact portable design

Mini OLT

- 8 PON ports
- Supports upto 1024 ONTs
- Two 10 GbE Optical Interfaces & four 1 GbE Optical/electrical Interfaces towards SNI
- 19" x 1U size
- -48 V DC or 220V AC with external AC-DC Adaptor
- 120W, Works in non-AC environment
- Suitable for Campus, hotels, commercial complexes
- Compact portable design

C-DOT ONTs

Features:

- Compliant with ITU-T G.984.x GPON Standards & TEC-GR.
- Low Power Consumption
- Works in Non-AC Environment
- Wall & Table Mount
- Plug-n-Play Implementation
- Remote Configuration & Management

Fibre Damak

- One 10/100/1000 Base-T Port
- Four Optical 1G Ports
- Two RJ-11 Voice Ports
- Two USB Ports
- Dying Gasp Power Fail Indication

Mudrika Damak

- Five 10/100/1000 Base-T Port
- Two RJ-11 Voice Ports
- Two PON Ports for Ring Topology
- Two USB Ports
- Dying Gasp Power Fail Indication

Lok Damak

- Four 10/100 Base-T Ports
- Two RJ-11 Voice ports
- Low Power Consumption

Titli Damak

- Two 10/100/1000 Base-T Ports
- Two RJ-11 Voice Ports
- One USB Port
- Compact & Cost Effective Solution
- Sleek Design

Samay Damak

- Five 10/100/1000 Base-T Ports
- Two RJ-11 Voice Ports
- Two USB Ports
- Two Interfaces of WiFi 802.11n
- ToD Ports in compliance to G.984.3 Amd2 and IEEE 1588v2
- Dying Gasp Power Fail Indication

Sampark Damak

- Five 10/100/1000 Base-T Port
- Two RJ-11 Voice Ports
- Two USB Ports
- WiFi 802.11n Interface
- One RF Video Port
- Dying Gasp Power Loss Indication

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