



### System Features

- 32 Channel Platform
- Forward Error Correction (FEC)
- B1 bit Error Monitoring
- Supports C Band and L Band system
- Stand alone –DWDM System
- OADM functionality
- Low power consumption
- Flexible networking –Ring, Mesh & point to Point Networking
- Hot Swapping of cards
- Optional line protection.
- Programmable gains at optical amplifier to meet the actual engineering requirements.
- Optical line switching
- SNMP IP based NMS System
- Optional Tunable Optical module for optical transponder/muxponder card
- Support Daisy chaining control network configuration
- Orderwire and Supervisory channel at 1510nm

### INTRODUCTION

UTL DWDM-32 system is a DWDM optical transmission system that supports up to 40 discrete wavelengths in the C-band centered around 193.1 THz frequency as per ITU-T Rec. G.694.1 grid, at 100GHz channel spacing. System can be smoothly configured as per Customer requirements for transmission capacities of 2.5GHz at various interfaces. The system can be configured for short haul, Long haul applications. FEC Technology is adopted to provide improved optical signal/noise ratio.

### Key Specifications

- Terminal Capacity: 4/8/16/32 ITU\_T
- Carriers in C-band/L- Band
- OADM channels: 4 / 8 / 16 Channels
- Interfaces supported:
  - . OC-12/ STM-4, OC-48/ STM-16
  - . Gigabit Ethernet

### Network Management system

- Fault Management
- Configuration Management
- Alarm Management
- Performance Management
- Security Management
- Power pre-balance is to adjust the output power of optical transponder unit.
- Optical interface parameters such as wavelength of OTU, power, gains of EDFA are remotely controlled
- User-friendly GUI (Through NMS) for Maintenance during active operation of the system.
- North-bound CORBA Interface in compliance to TMF 814 specifications.
- Multi-route management with client-server based EMS.

### Modularity

- Modular construction
- Robust

### Environmental

- Operating temp : 0°C to 50° C
- Relative humidity: 10% to 96%

**Applications**

- Large capacity internet data links for metropolitan areas
- Quasi long-haul & very long-haul transmission links
- Optical add/drop configuration
- Composite network configuration

**Power Supply**

- -48Vnominal ( -40 to -60VDC)
- Reverse polarity protection for the input supply
- Over voltage, short circuit, over load Protection for all derived DC voltages
- Provision for Dual power source

**Transponder / Muxponder**

- FEC Transponder: Supports STM-4, STM-16, and GigE Grey Clients, and can Map them onto an OTU Frame as per ITU-T Rec. G.709, or Transparently Transmit them, after Performing 3R Functionality.

- SDH & GigE Muxponder: Supports Two Numbers of STM-4 and/or GigE Grey Clients, and can Map and/or Multiplex them onto an STM-16 Frame. In Case of Two GigE Client Signals, they are Mapped into GFP-F as per ITU-T Rec. G.7041, and VCAT Individually, the Resulting Signals are then Multiplexed into STM-16.

**Approvals**

- BSNL TSEC Approved  
(No:TSEC/BG/WDM-02/02/314)

**Deployment**

- Deployed more than 16,000 wavelengths across India.