

# Optical Metro 4000 Series

## Introduction

Metropolitan networks represent a difficult planning challenge, especially when you are trying to determine what services will make up the most profitable mix, and where they should be deployed. In order to build networks for unpredictable growth while ensuring the optimized utilization of bandwidth and existing assets, the Optical Metro 4000 solution provides in-service nodal and network scalability. Its compact footprint serves all central office, remote office and enterprise customer premise applications.

The Optical Metro 4000 platform is a field-proven solution for multiservice STM-4/16 SDH applications. The Optical Metro 4000 has a rich feature set developed to support multiple applications covering access, metro edge or regional requirements. The common STM-4/16 platform provides key functional consolidation in a single network element that reduces nodal/network spending and operational costs by leveraging powerful 4/3/1 cross-connect features, a common service interface set and operationally simple management that features a scalable data communication architecture.

The key benefits of the Optical Metro 4000 are realized through its simple architecture, supported by a high level of integration. The result is an application-efficient multiservice platform, which results in reduced ownership costs.

With more than 34,000 nodes deployed globally, the Optical Metro 4000 series of products represent proven reliable solutions.

## Flexible and scalable configurations

The Optical Metro 4000 is available in two fully non-blocking VC-12 switching matrix configurations that are interchangeable and upgradeable in-service.

The Optical Metro 4150 is a hybrid STM-4/16 full access multiplexer with a switching matrix that supports a protected STM-16 interconnection and fan out, with STM-4 line aggregates. It is optimized for metro edge and managed extension applications including an extremely efficient hub node for high-density protected STM-1/4 access ring closure or spurs.

The Optical Metro 4200 is an STM-16 full-access multiplexer for metro core and regional applications and supports DWDM line interfaces.

## Platform configurations

The network elements are capable of providing full access; they support mixed payloads and can be configured for terminal multiplexer, hub, add/drop multiplexer and regenerator. The key benefits of the Optical Metro 4000 are realized through its simple architecture supported by a high level of integration: a single multiplexer that consists of a shelf assembly, universal service slots for a common set of service tributaries and two optimized combined aggregate multiplexer cards that make up the Optical Metro 4150 and Optical Metro 4200 shelf configurations. The result is a simple and application-efficient platform that lowers ownership costs through:

- Multiple services/single platform
- Less staff training
- Space saving
- Lower spares holding
- Simpler, scalable network management

## Features & Benefits

- Offers 10/100BT Plug-in for Managed Ethernet Services
- Includes fully non-blocking switching matrices providing unrestricted VC-12 granularity
- Supports a wide range of Network Applications, from broadband/TDM terminal mux to small cross connect
- Provides a full range of PDH/SDH Interfaces, with unrestricted use of tributary slots
- Provides full redundancy with all major functions duplicated
- Enables a highly resilient network with inter-ring connections
- Features integrated DWDM reducing Optical-Electrical-Optical conversion costs
- Shares common wavelength plan with the Optical Metro 5000 series
- Compact size saves space and power
- Reduces operating costs