

## 6325 Edge Node

### *Compact Multi-Service Provisioning Platform*

The Coriant 6325 Edge Node is a compact Multi-Service Provisioning Platform (MSPP) supporting WDM, SDH, PDH and data services. High reliability and redundancy enable the node to be used in regional and core networks in addition to access networks.

### USE ANYWHERE IN THE NETWORK

Although only 1U (44mm) high, the 6325 Edge Node is a complete, full-scale SDH transport node. It offers speeds of up to 2.5 Gbps (STM-16) and enables a wide mix of services from traditional SDH and PDH to colored WDM and IP interfaces.

With single slot CWDM and DWDM multiplexer, transponder and repeater modules, the node fits perfectly as a WDM add/drop node in access, metro and regional transport networks. SDH cross-connection matrices are all fully non-blocking. In addition, a redundant cross-connection matrix and Ethernet switching capabilities are included. This provides an extremely powerful MSPP which supports all grooming and transport needs.

### SUPPORT MULTIPLE SERVICES AND APPLICATIONS

The compact design of the 6325 Edge Node makes it an ideal choice for customer-located equipment. The combination of PDH and Ethernet capabilities is a perfect fit for leased lines services. For companies with several branches, the 6325 Edge Node offers efficient utilization of the SDH transport network. Combining VoIP PABXs with the 6325 Edge Node's Ethernet switching and traffic policing enables leased line capacity to be reduced to a minimum without affecting service quality.

The 6325 Edge Node works perfectly as a POP node serving residential and business customers. When combined with the 6305 Ethernet Media Converters in the first mile, triple play is easily enabled. Support for Quality of Service (QoS) ensures the quality of IP telephony. IGMP snooping is fully supported for the effective distribution of radio and TV signals without overloading the transport network. At the same time, the 6325 Edge Node easily switches and grooms traffic from business customers. CWDM is a mature technology used in access networks to distribute a high number of TV channels. With the growth of Video-on-Demand (VoD), CWDM becomes a very efficient technology to energize the capacity of the existing fiber infrastructure.

Redundant cross-connection matrices make the 6325 Edge Node well suited for deployment in access networks and customer locations, as well as regional and core networks. Cross-connection redundancy ensures reliability of the 6325 Edge Node when used as a hub node handling high traffic loads. This enables the 6325 Edge Node to be configured as ADM16, which is able to terminate up to 16 x STM-1.

All traffic going through the 6325 Edge Node, either in ring or meshed networks, is fully protected against any single point of failure. Ethernet switching capabilities enable the 6325 Edge Node to be used as a hub node to offload Ethernet traffic (e.g., in IP core networks). Equipped with DWDM interfaces, the node easily connects directly to the DWDM transport networks.

### BENEFITS OF CORIANT'S 6325 EDGE NODE

- **Save space** with a compact MSPP only 1RU (44mm) high
- Utilize a **complete, full-scale SDH transport node** with speeds up to 2.5 Gbps
- **Handle multiple services** and applications
- **Deploy anywhere** in the WDM and SDH transport network
- **Reduce the need for leased lines**
- Leverage a **modular, flexible design**
- **Reduce operational expenses** with intelligent network management



## The Coriant 6325 Edge Node

The 6325 Edge Node is a compact Multi-Service Provisioning Platform supporting WDM, SDH, PDH and data services. High reliability and redundancy enable the node to be used in regional and core networks in addition to access networks.

## COMPACT, MODULAR AND FLEXIBLE

The 6325 Edge Node has a modular, flexible design and can be delivered pre-configured. The plug & play set up means all you need for installation are power and 44mm of rack space. All in all, the compact design combined with the advanced feature set makes the 6325 Edge Node the world's smallest fully-featured MSPP. The modules are hot swappable, enabling the configuration and mix of service support to be changed while the node is in-service without loss of traffic. A range of traffic modules is available to cost-effectively adjust the node configuration and application as required.

## TECHNICAL SPECIFICATIONS

### Feature Summary

- Compact Multi-Service Provisioning Platform
- Standard SDH as well as WDM interfaces
- Standard PDH and Ethernet interfaces
- Redundant cross-connecting matrices and Power Supplies
- MAC, VLAN and MPLS Ethernet switching & protection
- SDH, Ethernet and MPLS fault and performance monitoring
- Hard QoS, L2 and L3-aware differentiated services
- Efficient bandwidth utilization for triple play
- Cost-effective Ethernet first mile solution
- Standard SDH ECC channels
- Embedded DCN channels for remote access across third-party networks
- Remote software download
- Advanced network and element management support
- Local configuration with craft terminal

### Interfaces

#### Optical SDH interface

- STM-1, STM-4, STM-16, CWDM, DWDM according to ITU-T G.957, ITU-T G.959.1, ITU-T G.691, ITU-T G.694.2, and ITU-T G.995

#### Electrical PDH and SDH interface

- E1, E3, DS3 and STM-1 according to ITU-T G.703
- E1 performance monitoring according to ITU-T G.704
- Jitter transfer ITU-T G.783, G.823 and G.825

#### Ethernet interface

- Fast and Gigabit Ethernet with a wide range of optical and electrical interfaces according to IEEE 802.3ah. This also includes CWDM and bi-directional transmission on single fiber

#### Fiber Channel interface

- FC-100, FC-200 and FC-400 are supported in both CWDM and DWDM colors according to ANSI and ITU-T G.691 and ITU-T G.694.2

### Packet Switching Features

#### Ethernet services

- Ethernet Private Lines (EPL), Ethernet Virtual Private Lines (EVPL) and Ethernet Local Area Networks (E-LAN) in accordance with MEF (MEF-9, MEF-14 certified)

#### Layer 3 agnostics

- IP DSCP aware QoS
- IGMP v1, v2 and v3 Snooping according to IETF RFC3376

#### Layer 2 – Ethernet

- IEEE 802.3, IEEE 802.1D (MAC switching), IEEE 802.1Q/1p (priority bit), IEEE 802.1ad
- (Q-in-Q), IEEE 802.3ah (Ethernet Link OAM), ITU-T Y.1731 (Ethernet Flow OAM), IEEE 802.3ad (Link Aggregation), IEEE 802.1s (MSTP), and IEEE 802.1w (RSTP)

#### Layer 2 – T-MPLS

- T-MPLS in accordance with ITU-T G.8110.1 (Architecture), ITU-T G.8112 (Interfaces), ITU-T G.8121 (Functional blocks), ITU-T Y.1711 (MPLS OAM), ITU-T Y.1720 (1:1 LSP Protection)
- Ethernet pseudowire support (PWE3)

#### Layer 1

- Encapsulation according to ITU-T G.7041 (GFP mapping into SDH), ITU-T G.8040 (GFP mapping into PDH), Link Fault Pass-Through
- LCAS according to ITU-T G.7042 (SDH) and G.7043 (PDH)

### WDM Features

- Up to 15 bi-directional CWDM and DWDM channels
- Add/drop of single or dual color with remaining colors passing through in single slot modules
- Transponders, Repeaters, Muxponders and Optical Amplifiers available



## TECHNICAL SPECIFICATIONS

### Protection

#### Network protection

- SNC/I and SNC/N according to ITU-T G.783 and G.841
- MSP1+1 according to ITU-T G.841

#### Equipment protection

- 1+1 Cross-connection matrix protection
- 1:1 and 1+1 power supply protection (configurable)

### Connectivity

#### Cross-connect levels

- VC-12, VC-3, VC-4

#### Cross-connect size

- 80 ports 4/4 switch matrix
- 8 ports 4/3/1 switch matrix

#### Multiplexing specification

- ETSI: ETS 300 147

### Synchronization

#### Synchronization sources

- STM-N interface (T1)
- 2 Mbps tributaries (T2)
- 2 MHz station clock ports (T3)

#### Synchronization outputs

- 2 MHz station clock ports (T4)

#### Synchronization management

- SSM support according to ETS 300 417-6-1

### Other Features

#### Fault and Performance monitoring

- SDH According to ITU-T G.784
- Ethernet and MPLS performance data including availability measurements.
- Operations, Administration, and Maintenance (OAM) is supported on Ethernet links in accordance to IEEE 802.3ah

#### User channels

- V.11/V.28 interfaces
- EOW

### Management

#### 6300 Network Manager

- Integrated Ethernet/MPLS, SDH and DWDM Network Management

#### 8000 Intelligent Network Manager

- End-to-end network manager across 6300/8100/8600 networks

### Power Specifications

#### DC power supply

- 2 inputs at -48V with 1+1 redundancy
- Operation range: -40.5V to -72V DC

#### AC power supply with external AC/DC adaptor

- Nominal inputs: 100V or 240V
- Operation range: 96V to 264V
- Frequency range: 47Hz to 63Hz

### Power Consumption

- Maximum consumption: 80W
- Consumption of typical configuration: 25W

### Environmental Conditions

#### Environmental specifications

- According to ETS 300 019-1-3 class 3.3

#### EMC

- According to EN 300 386

#### Safety

- According to EN 60950-1

### Dimensions

- Compatible with 19" and ETSI systems

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