

PLC Reconfigurable Optical Add/Drop Multiplexer for C or L Bands (32 Channel)



Key Features



- Complete ROADM functionality
- C or L bands
- Fully integrated optical channel monitoring (OCM)
- Automatic per-channel optical power control (DCE)
- Fault detection
- 16 node cascadability
- East-west separable design
- Broadcast and select compatible architecture
- Plug-and-play functionality
- Full MSA compliance

Applications

- Metro DWDM
- CATV/MSO
- Enterprise

JDSU's Agile Optical Switch family provides the broadest portfolio of ROADM solutions designed to match the requirements of major market segments. They are the building blocks of Agile Optical Networks and provide the flexibility to remotely reconfigure any or all wavelengths, thereby reducing time-to-service, simplifying the network and streamlining planning and management. This results in significant Opex and Capex reductions and faster time to revenue. In addition, they enable the cost effective creation and deployment of more complex network architectures.

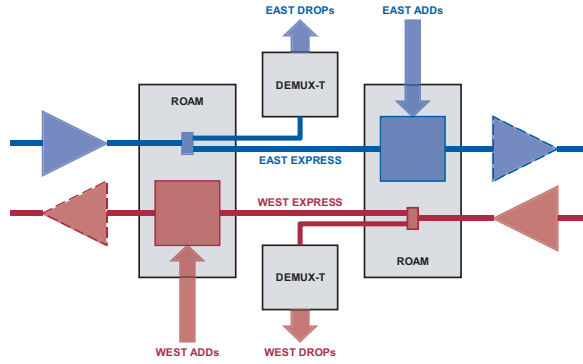
The JDSU PLC Reconfigurable Optical Add/Drop Multiplexer (PLC ROADM) is designed for system developers building dense wavelength division multiplexing (DWDM) networks for telecommunications, CATV/MSO, and enterprise applications.

The 8 to 32-channel JDSU PLC ROADM provides complete passive functionality, integrating fast (5 ms) reconfiguration/protection switches, per channel tap-monitors and variable optical attenuators (VOAs), and full MUX/DEMUX. In addition, all necessary control electronics are integrated internally, and the modules are provided with a high-level command interface. With this level of integration, the JDSU PLC ROADM provides full optical-channel monitoring (OCM) on every port, fault detection, automatic dynamic channel equalization (DCE), and supports SONET/SDH protection switching.

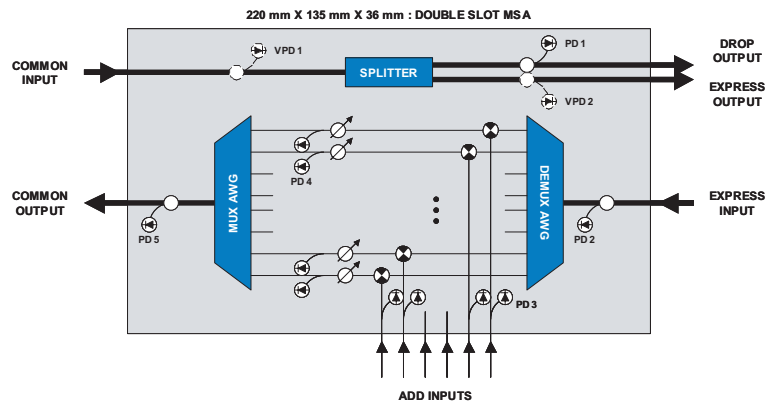
The JDSU PLC ROADM integrates a level of DWDM system management comparable to that found in SONET/SDH systems, eliminating the need for add-on monitoring and performance management technologies. Because it enables remote reconfiguration, it provides more flexibility than fixed OADM. The JDSU PLC ROADM greatly reduces day-one installation costs, operating complexity, and seamlessly enables future expansion.

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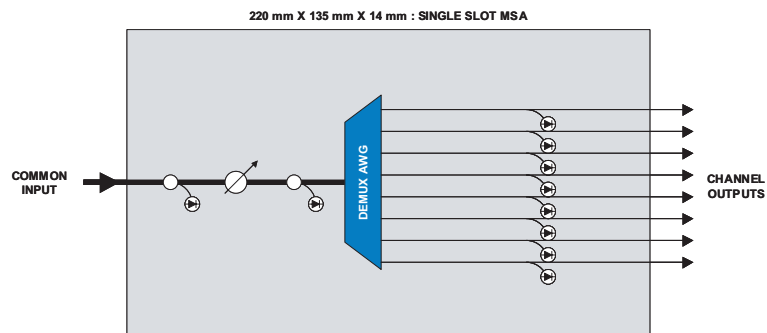
East-West Separable Node Architecture



Reconfigurable Optical Add Module



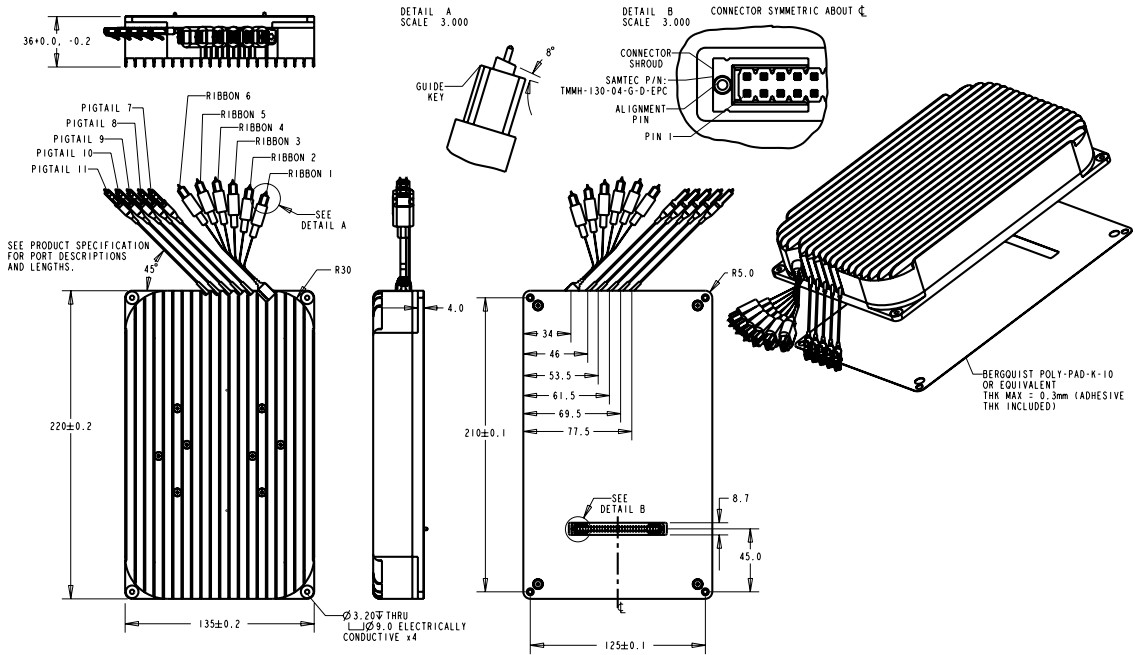
Monitored Demultiplexer Module



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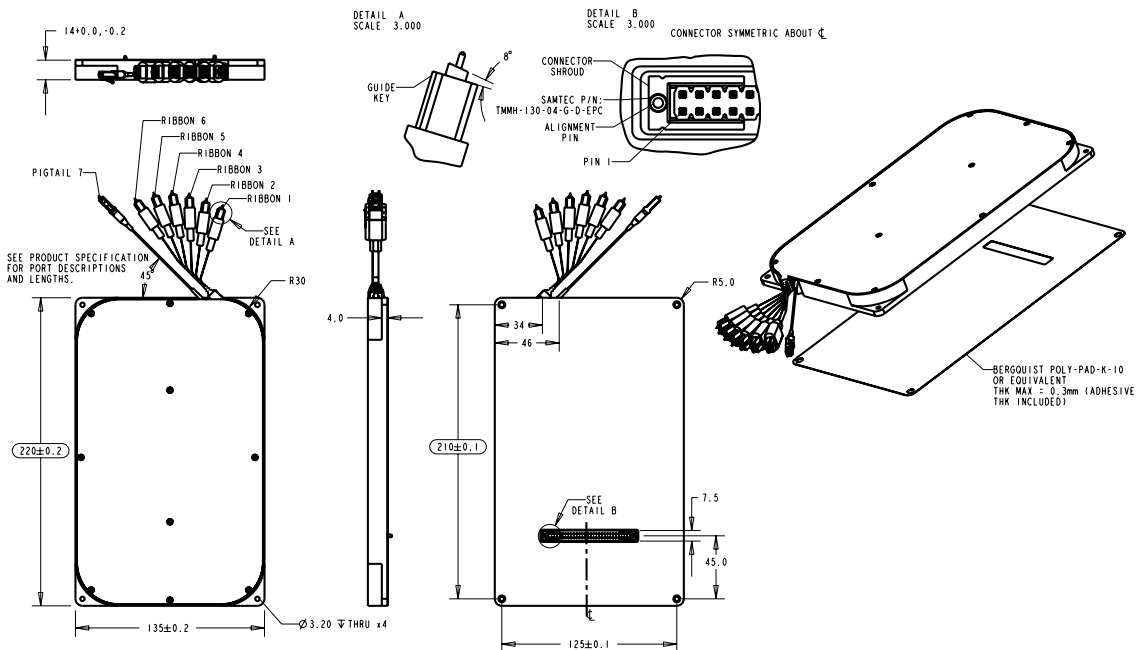
PLC Reconfigurable Optical Add Module (ROAM) Dimensions Diagram

(Specifications in mm unless otherwise noted.)



PLC Monitored DEMUX (DEMUX-T) Module Dimensions Diagram

(Specifications in mm unless otherwise noted.)



Fiber Pigtail Specifications

Parameter	ROADM Express Path	ROADM Add Path	DEMUX-T
Polarization dependent loss ¹ (PDL, open loop)			
0 to 5 dB	0.3 dB	0.3 dB	0.2 dB
5 to 10 dB	0.4 dB	0.4 dB	0.3 dB
10 to 20 dB	0.7 dB	0.7 dB	0.3 dB
Chromatic dispersion	±20 ps/nm	±20 ps/nm	±20 ps/nm
Adjacent channel isolation	-	33 dB	33 dB
Non-adjacent channel isolation	-	44 dB	44 dB
Multipath isolation	55 dB	-	-
VOA resolution	0.1 dB	0.1 dB	0.1 dB
VOA response time	100 ms	100 ms	200 ms
Switch response time	5 ms	5 ms	-
VOA dynamic range	25 dB	25 dB	25 dB
VOA blocking state attenuation	50 dB	50 dB	40 dB

1. Beginning of life values at 25 °C for a typical channel

Channel Wavelength Plan in the C or L Band

In order to meet specific customer requirements, JDSU offers customization for the following ROADM parameters:

- Channel wavelength plan
- Number of channels
- Filter bandwidth
- Splitter ratio on drop path
- Fiber pigtail lengths

Ordering Information

For more information on this or other products and their availability, please contact your local JDSU account manager or JDSU directly at 1-800-498-JDSU (5378) in North America and +800-5378-JDSU worldwide or via e-mail at customer.service@jdsu.com.

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