



RAM-20-200-PSD

Rack Mounted DWDM Demux for 200 GHz with Integrated Protection Switch

Key Features

- Intelligent Solution for Optical Restoration
- Quick Restoration Time
- Automatic or Manual 2x1 Switching
- Alarm and Status LEDs
- EDFA loop connectors
- Remote Configuration and Monitoring

Applications

- HFC DWDM Links with Protection Fiber
- Metropolitan DWDM Networks



Product Overview

The RAM-20-200-PSD Protection Switch/Demux combo is a 2RU rack-mount solution targeted for Broadband and Telco applications requiring redundant DWDM links. The unit integrates a fast latching 2X1 optical switch and a low-loss DWDM demultiplexer with value-added monitoring and control electronics. The automatic power detection and decision circuitry quickly reroutes the link to protection fiber in case of primary fiber failure or selects the better fiber if the power level is simply degraded, thus preventing loss of service. An enhanced set of power alarms informs the operator about the health of the optical transmission. The unit is recommended to use in conjunction with the model RAM-20-200-PSM Power Splitter/Mux.

Product Specifications

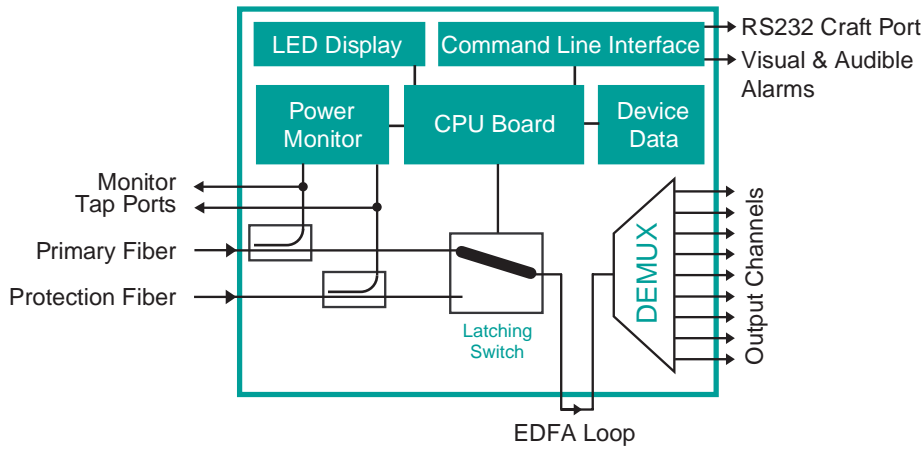
(Valid over full temperature range, within specified passband, across all channels and polarizations)

Channel Count	20 ¹⁾	Typical Min/Max Insertion Loss (IL)	3.5/4.0 dB
Channel Spacing	200 GHz	Guaranteed Max. IL (Including demux, switch, taps, connectors)	5.2 dB
Channel Plan	Customer specified on ITU Grid, C- or L-Band	IL Uniformity Across All Channels	≤1.0 dB
Max. Restoration Latency (Incl. power detection and switching time)	50 ms	Ripple	≤0.5 dB
Switching Mode	Automatic or Manual	Filter Shape	Flat
Alarms	Absolute power level and differential	0.5-dB Filter Width	0.52 nm
Power Alarms Range	-45 to +24 dBm	Channel Passband	0.33 nm
Power Resolution	0.1 dB	Adjacent Wavelength Isolation	≥27 dB
CLI Interface	RS232	Non-adjacent Wavelength Isolation	≥35 dB
Electrical Requirements	-48 VDC or 120 VAC ²⁾	Primary/Protection Fiber Crosstalk	>60 dB
Operating Temperature Range	-5 to +65 °C	Polarization Dependent Loss (Typ.)	<0.35 dB
Dimensions	16" W x 3.5" H x 12" D	Optical Return Loss	>40 dB
		Chromatic Dispersion	<5 ps/nm
		Polarization Mode Dispersion	<0.1 ps/nm

1) Other configurations available up to 52 channels

2) With optional adapter

RAM-20-200-PSD Block Diagram



Integrated Intelligence

- Primary and protection fiber power monitor
- User defined power alarms
- Automatic and manual switching
- Access to device data

LED Display

- Optical switch position
- Alarm notification
- Power supply status

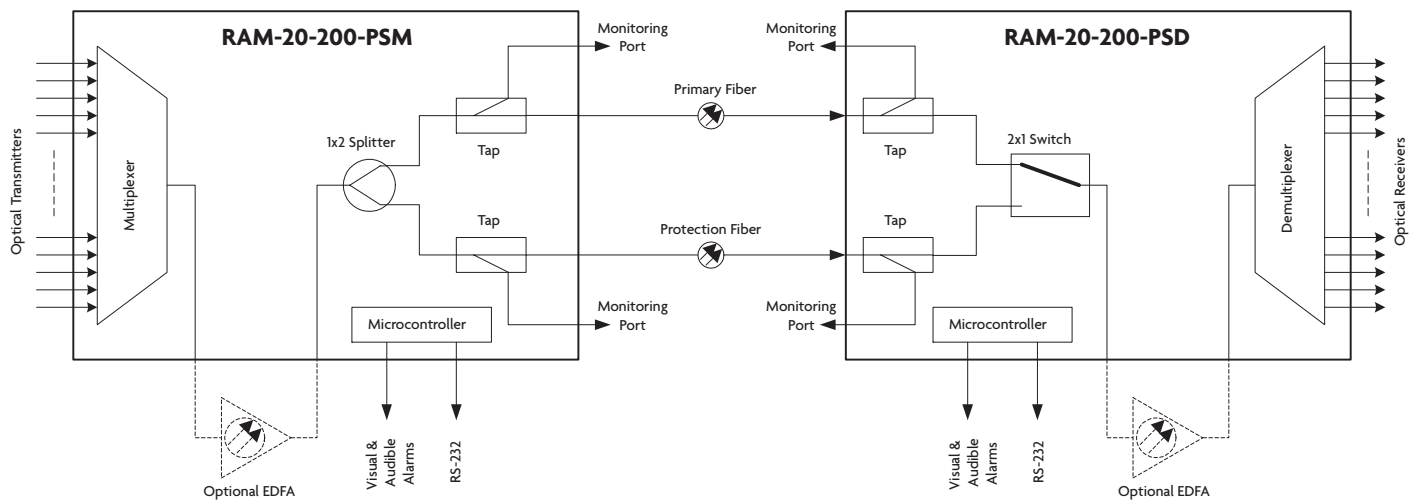
Interface

- Serial port RS232
- Command line interface (CLI)
- Relays for visual and audible alarms

Monitor Tap Ports

- 0.5% splitting ratio
- Primary and protection

Application Example (Two-fiber link with restoration)



Specifications subject to change without notice. Rev. 06/04
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