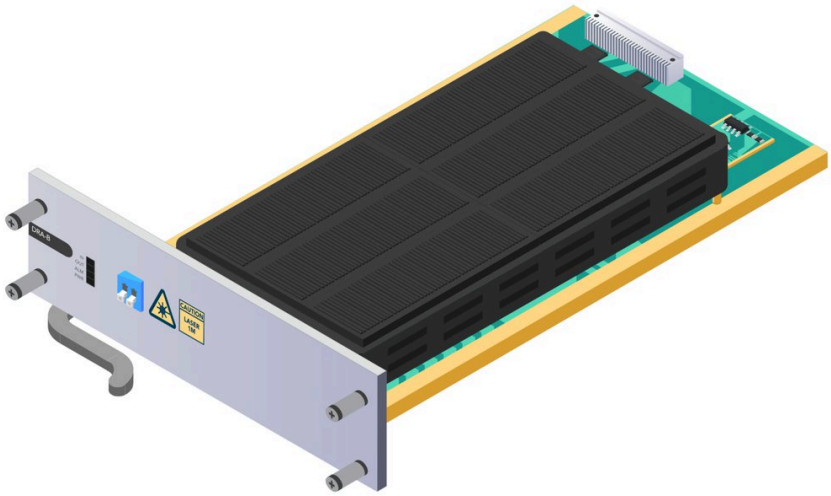
nex·gen

OTN SYSTEMS WDM PLATFORMS

Distributed Raman BoostAmplifier Card for WDM Chassis

The Distributed Raman BoostAmplifier Card uses stimulated Raman scattering in the transmission fibre itself to amplify the C-band signal immediately after it leaves the transmitter. A 14xx nm pump laser co-propagates with the outgoing signal, raising the effective launch power and extending the reach of the span before conventional attenuation takes hold. It works alongside conventional EDFA amplification rather than replacing it.



HIGHLIGHTS

Distributed fibre-based gain

Uses the transmission fibre itself as the gain medium via Raman scattering, rather than a discrete doped-fibre amplifier stage.

Raises effective launch power

Deployed immediately after the transmitter, extending the usable reach of the span before attenuation accumulates.

Co-propagating pump design

The pump laser travels in the same direction as the signal, reinforcing it from the very start of the link.

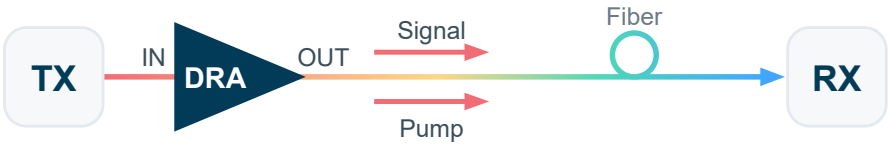
Dual-pump architecture

Two independently configurable pump lasers, each settable up to 500 mW, combine for up to 700 mW total pump power.

Configurable safety threshold

An input optical power threshold protects downstream equipment and can be configured to the link's needs.

FUNCTIONAL STRUCTURE



FRONT PANEL



FORMAT

CARD FOR WDM CHASSIS 2 SLOTS

SPECIFICATIONS

PARAMETER	MIN	NORMAL	MAX	UNIT	REMARK
Working Wavelength	1528		1565	nm	
Input Optical Power	0		14	dBm	
Effective Gain		10		dB	@Input optical power = 14 dBm, G.652 fibre >40km, attenuation 0.20 dB/km
Gain Flatness			2.2	dB	@Gain = 14 dB
Pump Wavelength	1423		1465	nm	
Total Pump Output Power	700			mW	Each pump settable to 500 mW, 2 pumps total
Noise Figure			0	dB	
Input Optical Power Threshold	0			dBm	Configurable
MECHANICAL & SAFETY					
Slots Occupied		2 (compatible with all OTN WDM chassis)			
Laser Safety Class		Class 1M			

ORDERING INFORMATION

NAME	Distributed Raman BoostAmplifier Card for WDM Chassis
DESCRIPTION	Distributed Raman boost amplifier card, 2 slots. Uses Raman scattering in the transmission fibre to raise launch power just after the transmitter (co-propagating pump), extending reach before attenuation accumulates; 14xx nm dual-pump laser, up to 700mW total pump power.
PART NUMBER	**WDM-DRA-B-2S**

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