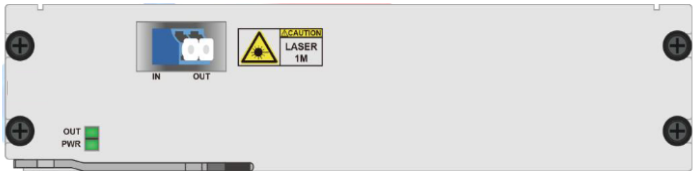
X86-DRA10F

Xenopt Raman amplifier, C-band, Forward Raman，gain 10dB, FC/UPC



APLICATIONS

Very Long distance amplification without additional intermediate amplification locations

Signal amplification for long distance communication for coherent transmission

Acts as low noise booster amplifier - effectively shortening optical signal path

FEATURES

Low noise amplification (N=0bB)

Performs distributed amplification in same fiber that carry optical data signals

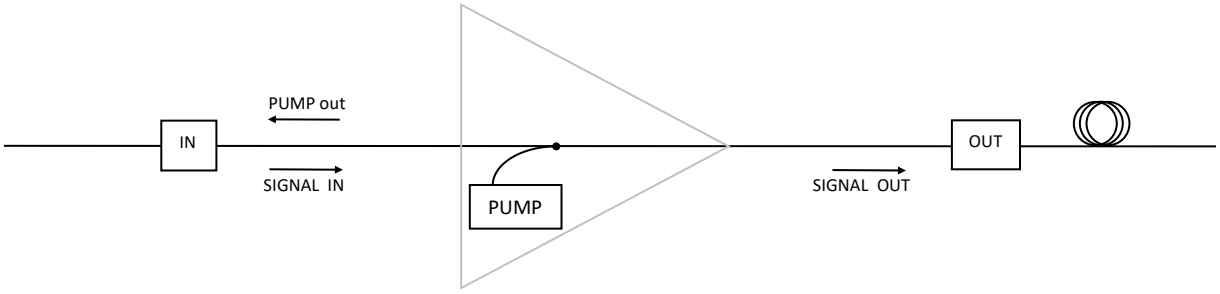
DESCRIPTION

X86-DRA10F is an advanced optical amplification module based on distributed Raman technology. This device enhances signal strength by leveraging Raman scattering within standard optical fiber, using laser pump sources in the 1423 to 1465 nm range to energize fiber that subsequently amplify C-band optical signals. Main feature of these amplifiers is low noise optical amplification and effective shortening of optical path.
By applying this technique, the amplifier effectively reduces signal degradation across extended fiber runs, allowing for longer transmission distances and/or improves optical signal-to-noise ratio (OSNR). Improving OSNR is especially important feature for long-distance optical communication networks that are using modern coherent modulations.

Key Functional Modes:
- Pre-Amplification (PRE-OA)
- Post-Amplification (BOOST-OA)

FUNCTIONAL STRUCTURE

DRA— RAF



RA Forward —Preamp

PRODUCT SPECIFICATION

Model	RAF				
Parameter	Minimum	Normal Value	Maximum	Unit	Remark
Working Wavelength	1528		1565	Nm	
Input optical power	0		14	dBm	
Effective gain @Input optical power = 14dBm		10		dB	@G.652 optical fiber > 40km attenuation coefficient 0.20dB/km
Gain fatness			2.2	dB	@Gain=14
Pump wavelength		1423~1465		Nm	@Each pump can be set to 500mw Total 2 pumps
Noice figure			0	dB	
Input optical power threshold	0			dBm	Configurable

Notes

For accurate order specification please contact XenOpt reseller before placing an order. The content of this document is subject to change without notice. XenOpt does not guarantee errorless or outdated information.

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