

## OPTICAL AMPLIFICATION **DEPOLARIZER SERIES**

ITF's All-Fiber® Depolarizer Series opens the way for a simplification of the design of Raman amplifiers.

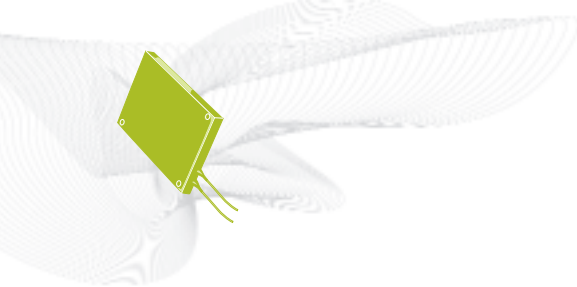
Currently Raman designs are constrained by the need to multiplex each pair of pumps by polarization in order to obtain a stable performance of the amplifier.

As a consequence, Raman amplifiers are still very highly priced and most designers are looking for alternatives that could bring significant cost reductions.

ITF's Depolarizers can be used in a variety of ways. One model can be used directly at the output of a single high power pump, replacing the pair of multiplexed pumps. Another version can be used at the output of a Polarization Pump Combiner, simplifying the expensive power control required by the multiplexed pumps. Finally, another model can be placed at the top of the multiplexing tree and act as a Universal Depolarizer, which is depolarizing any states of polarization over a wide band.

REMOVES LASER COHERENCE LIMITATIONS ~  
ELIMINATES MANUFACTURING CONSTRAINTS ~  
THREE MODELS TO COVER ALL NEEDS ~

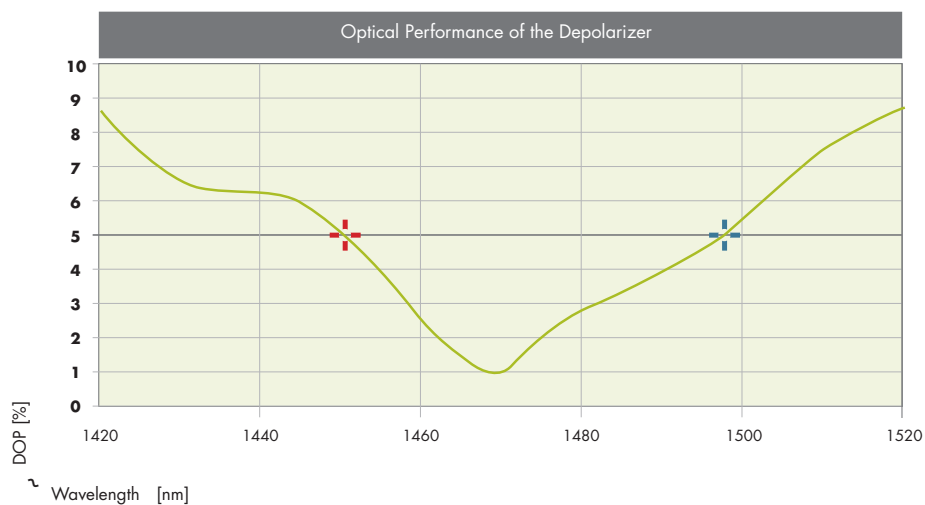




## TECHNICAL DATA

### ALL-FIBER® DEPOLARIZER SERIES SPECIFICATIONS

Parameter	1 $\lambda$ /1SOP	1 $\lambda$ /All SOP	Universal
Center Wavelength	1420-1500 nm	1420-1500 nm	1420-1500 nm
Wavelength Range	1 $\lambda$	1 $\lambda$	$\pm 25$ nm
Input Characteristics			
~ Coherence Length	<1 m	<1 m	<1 m
~ State of Polarization	1	All	All
Degree of Polarization	5%	5%	5%
Insertion Loss	0.6 dB	1 dB	1.5 dB
Residual Extinction Ratio	0.5 dB	0.5 dB	0.5 dB
Return Loss	50 dB	50 dB	50 dB
Operating Temperature	-5 - 70°C	-5 - 70°C	-5 - 70°C
Input Fiber	PM	SMF 28	SMF 28



ITF OPTICAL TECHNOLOGIES

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*All-Fiber®*