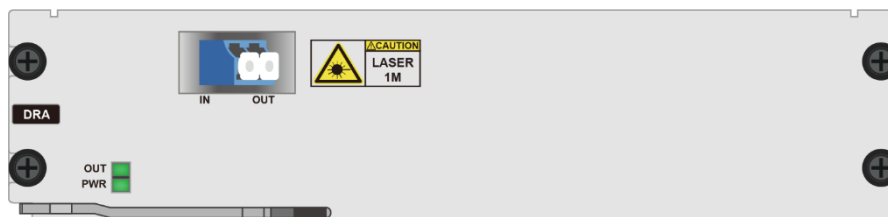


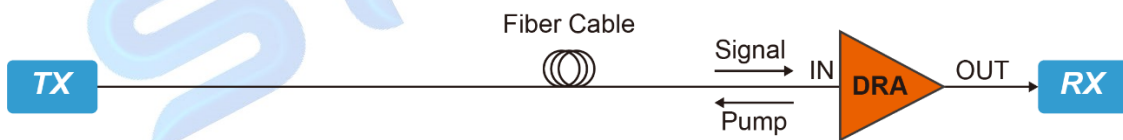
DRA: Raman Optical Amplifier Card

The DRA (Distributed Raman Amplifier) Raman Optical Amplifier Card launched by Guangzhou Sintai Communication Co., Ltd. utilizes the Raman scattering effect in the quartz fiber to provide gain to the optical signal. Adopting 14xxnm wavelength laser as Raman pumping, it provides gain to C-band signal light, which can effectively compensate for the attenuation of optical signal in fiber long-distance transmission to extend the power budget of optical link and significantly improve OSNR, suitable for long-distance optical transmission system.

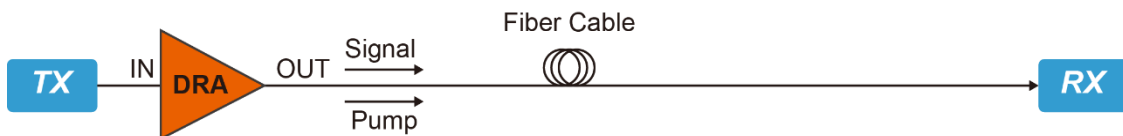


Functional structure

a. PRE-DRA



b. BOOST-DRA



Product specifications

Model	PRE-DRA				
Parameter	Minimum	Normal Value	Maximum	Unit	Remark
Working wavelength	1528		1565	nm	
Input optical power	-36		-10	dBm	
Effective gain	12	14	15	dB	@G.652 optical fiber > 40km, attenuation coefficient 0.20dB/km
Gain flatness			2.2	dB	@Gain=14
Pump wavelength		1423~1465		nm	
Total pump output power	700			mw	@Each pump can be set to 500mw, 2 pumps in total
Noise figure			0	dB	
Input optical power threshold	-38			dBm	Configurable
Number of slots occupied	Support all OTNS8600 series chassis, occupies 2 slots				

Model	BOOST-DRA				
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	
Total pump output power	700			mw	@Each pump can be set to 500mw Total 2 pumps
Noise figure			0	dB	
Input optical power threshold	0			dBm	Configurable
Number of slots occupied	Support all OTNS8600 series chassis, occupies 2 slots				