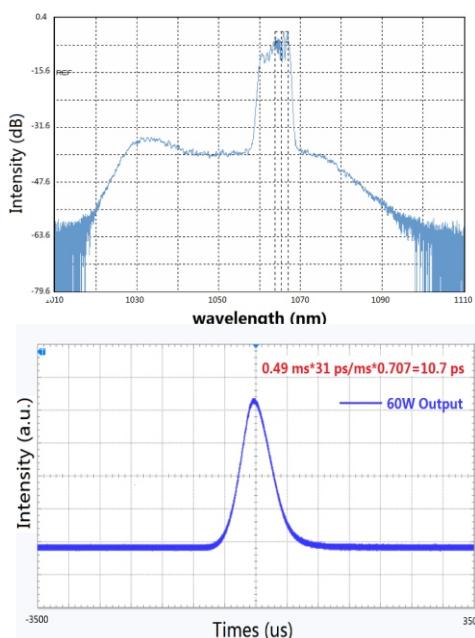
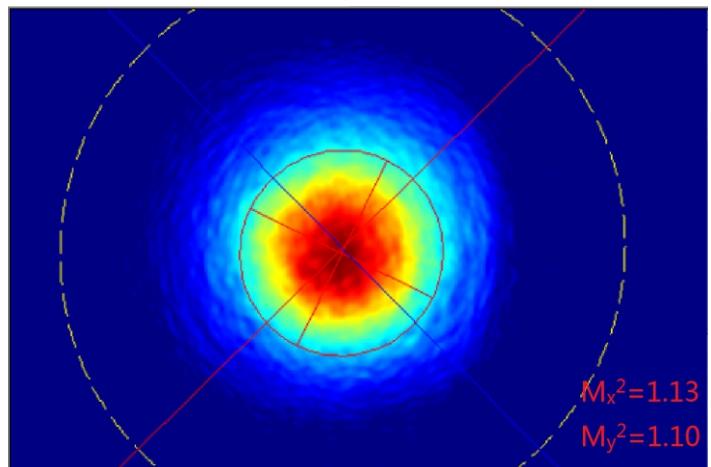
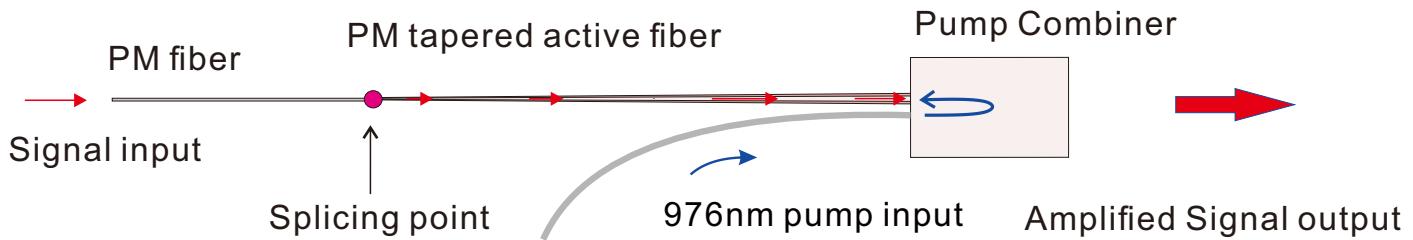


# PM Tapered Amplifier



This amplifier module incorporates ytterbium doped tapered double clad fibers (T-DCF) to amplify of ultra-short optical pulses. This T-DCF amplifier module shows excellent performance on all parameters.



Parameter		Unit	Specification
Wavelength		nm	1064
Core D	Thin end	μm	8.6
	Thick end	μm	43
Mode field diameter MFD	Thin end	μm	~9
	Thick end	μm	~30
Silica/F-doped clad D	Thin end	μm	71/82
	Thick end	μm	352/410
First Clad NA			0.28 (Relative to the highly F-doped silica secondary cladding)
Core NA			0.09
Clad shape			PANDA with F-doped second cladding
Input signal fiber			PM 10/125 DCF or PM 6/125 DCF
Pump fiber (thick end)			105/125 NA 0.22
Output Power <sup>1</sup>		W	60 W @ 22 MHz, fully pumped >30 W @ 1 MHz
Max. pulse energy <sup>2</sup>		μJ	>200
Max. peak power		kW	>450
Polarization extinction ratio (PER)		dB	Depends on the Active PM tapered fiber
Beam quality (M <sup>2</sup> )			<1.2
Recommended min. water flow		l/min	5 @ 20 °C
Min. coiling diameter		cm	36

\*1 1MHz @ pulse burst mode

\*2 pulse burst mode