

A-Series Lasers (SI) Fiber Limits

Laser Model	Fiber Dia	Optical Configuration											
		1E	2E	3E	4E	2T	3T	4T	5T	6T	2E2T	2E3T	3E2T
LW5AM	100um	0.1J 0.2W	0.05J 0.1W	0.03J 0.6W		0.1J 0.2W	0.1J 0.2W						
	200um	0.25J 0.25W	0.12J 0.12W	0.08J 0.8W		0.25J 0.25W	0.25J 0.25W						
LW5A	100um - 1mm	7J 7W	3J 3W	2J 2W		7J 7W	7J 7W						
LW15A	100um	15J ($< 0.3\text{pps}$)	7J ($< 0.3\text{pps}$)	5J ($< 0.3\text{pps}$)		15J ($< 0.3\text{pps}$)	15J ($< 0.3\text{pps}$)						
	200um - 1mm	15J 15W	7J 7W	5J 5W		15J 15W	15J 15W						
LW25A	100um	25J ($< 0.3\text{pps}$)	12J ($< 0.3\text{pps}$)	8J ($< 0.3\text{pps}$)		25J ($< 0.3\text{pps}$)	25J ($< 0.3\text{pps}$)						
	200um - 1mm	25J 25W	12J 12W	8J 8W		25J 25W	25J 25W						
LW50A	300um	50J 30W	25J 15W	16J 10W	12J 7W	50J 50W	50J 50W	50J 50W	50J 50W	50J 50W	25J 15W	25J 15W	16J 10W
	400um - 1mm	50J 50W	25J 25W	16J 16W	12J 12W	50J 50W	50J 50W	50J 50W	50J 50W	50J 50W	25J 25W	25J 25W	16J 16W
LW50A (w/2x BE)	200um - 1mm	50J 50W	25J 25W	16J 16W	12J 12W	50J 50W	50J 50W	50J 50W	50J 50W	50J 50W	25J 25W	25J 25W	16J 16W
LW70A	300um	70J 30W	35J 15W	23J 10W	17J 7W	70J 30W	70J 30W	70J 30W	70J 30W	70J 30W	35J 15W	35J 15W	23J 10W
	400um	70J 50W	35J 25W	23J 16W	17J 12W	70J 50W	70J 50W	70J 50W	70J 50W	70J 50W	35J 25W	35J 25W	23J 16W
	600um - 1mm	70J 70W	35J 35W	23J 23W	17J 17W	70J 70W	70J 70W	70J 70W	70J 70W	70J 70W	35J 35W	35J 35W	23J 23W
LW70A (w/2x BE)	200um	70J 30W	35J 15W	23J 10W	17J 7W	70J 30W	70J 30W	70J 30W	70J 30W	70J 30W	35J 15W	35J 15W	23J 10W
	300um - 1mm	70J 70W	35J 35W	23J 23W	17J 17W	70J 70W	70J 70W	70J 70W	70J 70W	70J 70W	35J 35W	35J 35W	23J 23W

A-Series Lasers (SI) Fiber Limits (cont.)

Laser Model	Fiber Dia	Optical Configuration											
		1E	2E	3E	4E	2T	3T	4T	5T	6T	2E2T	2E3T	3E2T
LW150A	300um	70J 30W	35J 15W	23J 10W	17J 7W	70J 30W	70J 30W	70J 30W	70J 30W	70J 30W	35J 15W	35J 15W	23J 10W
	400um	70J 50W	35J 25W	23J 16W	17J 12W	70J 50W	70J 50W	70J 50W	70J 50W	70J 50W	35J 25W	35J 25W	23J 16W
	600um - 1mm	70J 150W	35J 75W	23J 50W	17J 37W	70J 150W	70J 150W	70J 150W	70J 150W	70J 150W	35J 75W	35J 75W	23J 50W
LW150A (w/ 2x BE)	200um	70J 30W	35J 15W	23J 10W	17J 7W	70J 30W	70J 30W	70J 30W	70J 30W	70J 30W	35J 15W	35J 15W	23J 10W
	300um	70J 140W	35J 70W	23J 46W	17J 35W	70J 140W	70J 140W	70J 140W	70J 140W	70J 140W	35J 70W	35J 70W	23J 46W
	400um - 1mm	70J 150W	35J 75W	23J 50W	17J 37W	70J 150W	70J 150W	70J 150W	70J 150W	70J 150W	35J 75W	35J 75W	23J 50W
LW300A	300um	50J 200W	25J 100W	16J 66W	12J 50W	50J 200W	50J 200W	50J 200W			25J 100W		
	400um - 1mm	50J 300W	25J 150W	16J 100W	12J 75W	50J 300W	50J 300W	50J 300W			25J 150W		
LW300AH	200um	20J 150W	10J 75W	6J 50W	5J 37W	20J 150W	20J 150W	20J 150W			10J 75W		
	300um - 1mm	20J 150W	10J 125W	6J 83W	5J 62W	20J 150W	20J 150W	20J 150W			10J 125W		
LW400A	400um	80J 200W	40J 100W	26J 66W	20J 50W	80J 200W	80J 200W	80J 200W			40J 100W		
	600um - 1mm	80J 400W	40J 200W	26J 133W	20J 100W	80J 400W	80J 400W	80J 400W			40J 200W		
LW500A	300um	80J 200W	40J 100W	26J 66W	20J 50W	80J 200W	80J 200W	80J 200W			40J 100W		
	400um	80J 300W	40J 150W	26J 100W	20J 75W	80J 300W	80J 300W	80J 300W			40J 150W		
	600um - 1mm	80J 500W	40J 250W	26J 166W	230J 125W	80J 500W	80J 500W	80J 500W			40J 250W		
LW600A	400um	100J 200W	50J 100W	33J 66W	25J 50W	100J 200W	100J 200W	100J 200W			50J 100W		
	600um - 1mm	100J 600W	50J 300W	33J 200W	25J 150W	100J 600W	100J 600W	100J 600W			50J 300W		

A-Series Lasers (GI) Fiber Limits

Laser Model	Fiber Diameter	Maximum Output Power (per branch output)
LW5A & LW15A	200um	610W
	300um	690W
	400um - 1mm	870W
LW25A	400um - 1mm	690W
LW50A	300um - 1mm	700W
LW70A	300um - 1mm	700W
LW150A	300um - 1mm	<i>not specified</i>
LW300A	<i>not specified</i>	880W
LW400A	<i>not specified</i>	880W
LW500A	<i>not specified</i>	880W
LW600A	<i>not specified</i>	880W

Fiber Power Limit Notes:

1. "Not Specified" indicates that the data has not been determined.
2. Maximum Output Power (W) = [Peak Power Energy (kW) x (%)] x Pulse Width (mS) x Rep Rate (pps)
3. Output Energy (J) = [Peak Power Energy (kW) x (%)] x Pulse Width (mS)
4. All GI fibers shipped from Miyachi Unitek have a yellow jacket for easy identification.
5. All SI fibers shipped from Miyachi Unitek have a green jacket for easy identification.
6. w/2x BE = with 2x Beam Expander (MUC Pt # A-03045-005)
7. Benefits of using a Beam Expander: Launches more power into the smaller fibers.
Drawback: Must use FX style heads only, due to the increase in numerical aperture.
8. The fiber limits for the CE laser models are exactly as listed above (for the non-CE models).
9. The SI limits are given in Max Energy (J) and Max Power (W).
Neither limit must be exceeded for the given optical configuration.