



TABLE I. STANDARD LASER PRODUCTS (Applications: Cutting, Marking, Welding, Drilling, etc.)

Model	LASY-5	LASY-5P	LASY-12	LASY-12P	LASY-20	LASY-20P	LASY-50	LASY-50P
CW power	5 watt	4 watt (ave)	12	7 (ave)	20 watt	12 watt (ave)	50 watt (ave)	30 watt (ave)
Peak power	5 watt	20 watt	12	30	20 watt	60 watt	50 watt	120 watt
M²	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
Beam waist dia.	2.4 mm	2.4 mm	2.4 mm	2.4 mm	2.4 mm	2.4 mm	2.4 mm	2.4 mm
Waist location	Output coupler	Output coupler	Output coupler	Output coupler	Output coupler	Output coupler	1 meter from OC	1 meter from OC
Full Div. Angle	5.5 mrad	5.5 mrad	5.5 mrad	5.5 mrad	5.5 mrad	5.5 mrad	5.5 mrad	5.5 mrad
Pw stability	±10%	±10%	±10%	±10%	±5%	±5%	±4%	±4%
Wavelength (µm)	Around 10.6	Around 10.6	Around 10.6	Around 10.6	Around 10.6	Around 10.6	Around 10.6	Around 10.6
Rise time (µs)	200	100	200	100	200	100	200	100
Fall time (µs)	200	100	200	100	200	100	200	100
Supply Voltage	28 VDC	48 VDC	28 VDC	48 VDC	28 VDC	48 VDC	28 VDC	48 VDC
Supply Current	5 Amp	3 Amp	7 Amp	4 Amp	14 Amp	8 Amp	28 Amp	16 Amp
Cooling Req	Forced air	Forced air	Forced air	Forced air	Forced air	Forced air	Forced air	Forced air
Working Temp	5-40 C	5-40 C	5-40 C	5-40 C	5-40 C	5-40 C	5-40 C	5-40 C
Dimensions(inch)	12.5x2.5x1.5	12.5x2.5x1.5	20x3.8x3	20x3.8x3	28x3.8x3	28x3.8x3	29x6x3.5	29x6x3.5

Options:

- Real time power monitoring
- 9.3 µm
- External modulation
- Water cooling
- Isotopic gas fill
- CO gas fill



TABLE II. LOW POWER AND STABILIZED LASER PRODUCTS

(Applications: Instrumentation, Interferometry, Night Vision Illumination, Accurate Thermal Source, Laboratory, etc.)

Model	LASY-3	LASY-3S	LASY-4	LASY-4S	MERIT	MERIT-S	Lasy-20S
CW power	400 mw	400 mw	1 watt	1 watt	8 watt	8 watt	20 watt
M ²	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
Beam waist dia.	2.4 mm	2.4 mm	2.4 mm	2.4 mm	2.4 mm	2.4 mm	2.4 mm
Waist location	Output coupler	Output coupler	Output coupler	Output coupler	Output coupler	Output coupler	Output coupler
Full Div. Angle	5.5 mrad	5.5 mrad	5.5 mrad	5.5 mrad	5.5 mrad	5.5 mrad	5.5 mrad
Power stability	±20%	±2%	±15%	±2%	±10%	±2%	±2%
Wavelength (μm)	10.3-10.8	10.3-10.8	10.3-10.8	10.6	10.6	10.6	10.6
Rise time (μs)	200	200	200	200	200	200	200
Fall time (μs)	200	200	200	200	200	200	200
Supply Voltage	12 VDC	12 VDC	12 VDC	12 VDC	28 VDC	28 VDC	28 VDC
Supply Current	4 Amp	4 Amp	4 Amp	4 Amp	5 Amp	5 Amp	14 Amp
Cooling Req	Forced air	Forced air	Forced air	Forced air	Forced air or water(±0.1C)	Forced air or water(±0.1C)	Water (±0.1C)
Working Temp	10-30 C	10-30 C	10-30 C	10-30 C	10-30 C	10-30 C	5-40 C
Dimensions(inch)	7.5x2.5x1.5	7.5x2.5x1.5	12.5x2.5x1.5	12.5x2.5x1.5	14x4x2.8	14x4x2.8	29x3.5x4

1. Other wavelength ranges can be achieved with special optics and/or isotope gas fills
2. Chiller not included in water cooled versions.
3. Options (some options exclude others. Please contact factory for details):
 - Real time power monitoring
 - Super pulse operation
 - Battery operation
 - External modulation
 - Closed-loop stabilization with Line Tracker
 - Isotopic gas fill
 - CO gas fill



TABLE IIIa. WAVELENGTH TUNABLE LASER PRODUCTS
(Applications: Spectral Analysis, Trace Gas Sensing, Medical Diagnostics, Laboratory, etc.)

Model	LASY-3S	LASY-4S	MERIT-S	LASY-4G	MERIT-G	Lasy-20G
CW power	400 mw	1 watt	8 watt	200 mw	3 watt	8 watt
M ²	< 1.1	< 1.1	< 1.1	<1.2	<1.2	<1.2
Beam waist dia.	2.4 mm	2.4 mm	2.4 mm	2.4 mm	2.4 mm	2.4 mm
Waist location	Output coupler	Output coupler	Output coupler	Output coupler	Output coupler	Rear End
Full Div. Angle	5.5 mrad	5.5 mrad	5.5 mrad	5.5 mrad	5.5 mrad	5.5 mrad
Power stability	±2%	±2%	±2%	±8%	±8%	±8%
Wavelgth (µm)	10.3-10.8	10.3-10.8	10.3-10.8	9.2-10.8	9.2-10.8	9.2-10.8
No. of Lines	15	12	10	35	50	55
Rise time (µs)	200	200	200	200	200	200
Fall time (µs)	200	200	200	200	200	200
Supply Voltage	12 VDC	12 VDC	28 VDC	12VDC	28VDC	28 VDC
Supply Current	3 Amp	3 Amp	7 Amp	3 Amp	7 Amp	14 amp
Cooling Req	Forced air	Forced air	Forced air or water	Forced air or water	Forced air or water	Water (±0.1C)
Working Temp	10-30 C	10-30 C	10-30 C	10-30 C	10-30 C	5-35 C
Dimensions(inch)	7.5x2.5x4.5	7.5x2.5x4.5	14x4x4.8	12x3x4.5 ¹	16x4x4.8 ¹	34x3.5x4

1. Other wavelength ranges can be achieved with special optics and/or isotope gas fills
2. Options:
 - Real time power monitoring
 - Super pulse operation
 - Battery operation
 - External high speed modulation
 - Closed-loop stabilization
 - Auto-tuning
 - Isotopic gas fill
 - CO gas fill