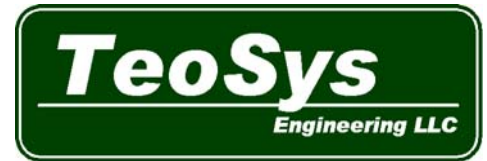


# QUOTATION

## T200 General Quotation



2138 Priest Bridge Court Ste. 10  
 Crofton, Maryland 21114  
 Tel: 410-451-8058  
 FAX: 410-451-8059  
 Email: teosys@teosys.com

<b>Customer:</b>	
<b>Contact:</b>	
<b>Date:</b>	<b>09/8/09</b>
<b>Quote #:</b>	<b>T200 09-0908</b>

**T200 Laser @ 193nm ..... \$45,000.00**  
*Other wavelength (157, 248) specifications and quotes available upon request.*

• **T200 General Features**

- 1 – 300 Hertz Repetition Rate.
- Max 16 mJ Power Output.
- Less than 8 ns Pulse Width.
- Ceramic / Metallic Construction.
- 1500 Watt Power Supply for laser operation at 10-13 kV.
- Dual blower design for enhanced gas circulation with long lifetime bearing design.
- Gas premix used for simplicity with no hazardous concentrations of fluorine. (suitable for office usage)
- Patented Intra-Cavity Gain Control (ICVA) for convenient beam size control and optical longevity.
  - Exclusive patented beam-shaping system which provides TM<sub>00</sub> performance.
  - Improves downstream depth of focus by orders of magnitude (optical path design dependent).
  - Ensures beam symmetry and provides exceptional homogeneity
  - Eliminates electrode reflection.
  - Allows the utilization of only the portion of the resonating optics that is required for the job thereby increasing longevity of optics.
- Laser optics may be rotated up to 7 times for optical longevity. Recommended changing is during chamber refurbishment at 1 Billion shots (at continuous operation).
- Thermal and voltage over-temp and under-temp protection.
- Integrated microprocessor control requiring only 3 TTL signals for operation (Trigger signal for laser pulse, HV Enable, Gas Fill)
- Custom Cable designed to Interface to Customer Laser Control System included.
- Optional External Laser Control Box -- Available Separately
- Optional Solid State Trigger Device – Available Separately

- Terms: 50% DP Due ARO  
Balance NET 30
- Shipping: Not Included
- Installation: Not Included
- Integration into Existing System: Not Included Consulting Services Available
- Travel & Expenses: Not Included
- Delivery: 5-8 Weeks ARO
- Warranty: One Year Parts & Labor– does not cover consumables.

T200 Specifications	
<b>Wavelength</b>	ArF 193 nm
<b>Peak Energy</b>	
> Max Peak NRG (mJ)	16
> Nominal Peak NRG (mJ)	10
<b>Repetition Rate (Hz)</b>	
> Max Rated	500
> Nominal	300
<b>Average Power (W)</b>	
> Maximum	6.4
> Nominal	2
<b>Optical Pulse Width</b>	
> Max (ns, FWHM)	8
> Nominal (ns, FWHM)	6
<b>Beam Size (ICVA Full Open)</b>	
> Vertical @ 1/e <sup>2</sup> in mm	5
> Vertical @ 1/e <sup>2</sup> in mm	3
> Aspect Ratio @ 1/e <sup>2</sup>	1.7
<b>Fluence at Aperture</b>	
> Full Beam Max (mJ/sqmm)	1.07
> Full Beam Avg (mJ/sqmm)	0.67
<b>Divergence</b>	
> X Axis, 1/2 Angle (mR)	1
> Y Axis, 1/2 Angle (mR)	1.5
> Aspect Ratio (Y/X)	1.5
<b>Fluence w/ 3mm Aperture</b>	
> Max, (mJ/sqmm)	7.54
> Typ, (mJ/sqmm)	4.71
<b>Fluence at Worksurface</b>	
> Max, 50% Loss	3.77
> Nom, 50% Loss	2.36
> Max, 20 um Beam (J/sqcm)	47.10
> Nom, 20 um Beam (J/sqcm)	29.44