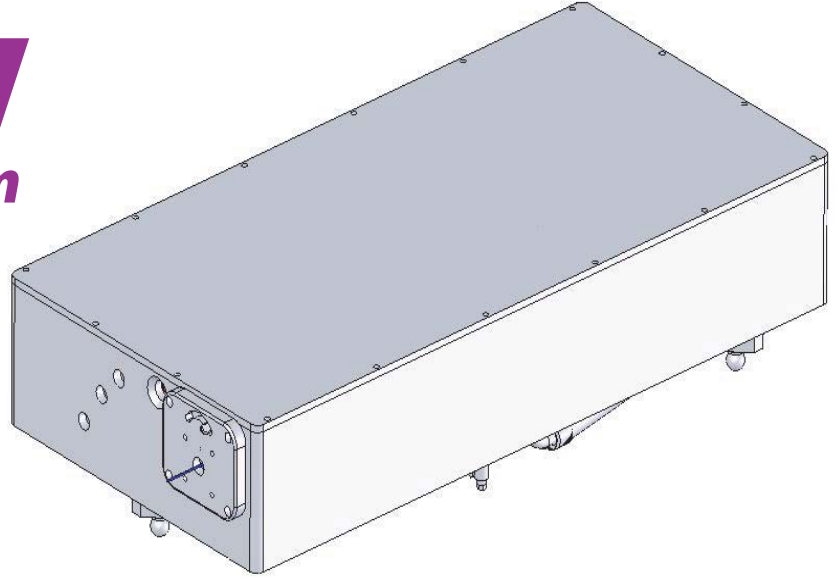


# Titan UV

## 355 nm



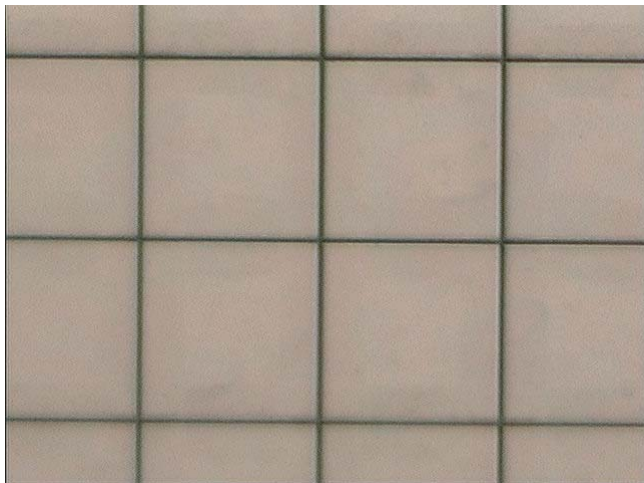
## FEATURES

- ~ Up to 5W Power at 355 nm
- ~ Low Cost
- ~ Excellent Beam Quality  $M2 < 1.2$
- ~ Industrial Design
- ~ Q-Switched--Single shot to 300 kHz
- ~ Stability Better Than 5% Over 8 Hours
- ~ Full RS-232 Interface

The Titan UV Series from DPSS Lasers Inc. is our most advanced UV laser to date. Built upon field-proven intra-cavity conversion technology (US Patent #6,002,695), the Titan UV is the low-cost leader in the UV market. This system boasts an impressive 5W UV output generated with an ultra-efficient power plant, all contained within a rigid sealed structure for years of trouble-free performance.

The new Titan UV is geared toward the rapidly growing UV marking and machining markets. Pulse energies up to 150 uJ/pulse make it ideally suited to both delicate scientific experiments as well as industrial 24/7 "workhorse" environments.

The Titan UV offers maximum flexibility without sacrificing performance and features. The system can be remotely operated and monitored through an integrated RS-232 port and through a TTL Remote connection for high-precision time-critical applications. The Titan UV also offers the flexibility of a customer settable variable repetition rate from single shot to 300 kHz.



355nm UV Sapphire Scribing

## APPLICATIONS

- \* Laser Marking
- \* Solar Cell Processing
- \* Thick/Thin Film Laser Trimming
- \* ITO Removal
- \* Sapphire Scribing
- \* Micromachining
- \* Direct Write/Repair
- \* Micro-via Hole Drilling
- \* Biological Threat Detection
- \* Polyamide Cutting & Drilling
- \* Photo Bleaching

# SPECIFICATIONS

Model	Avg. Power	Peak Power	Pulse Length	Repetition Rate	Pulse Energy
T20-150	> 2.0 W	> 150 W	< 80 ns	150 kHz	13 $\mu$ J
T30-100	> 3.0 W	> 500 W	< 60 ns	100 kHz	30 $\mu$ J
T40-50	> 4.0 W	> 2000 W	< 40 ns	50 kHz	80 $\mu$ J
T50-30	> 5.0 W	> 6000 W	< 30 ns	30 kHz	166 $\mu$ J

## PERFORMANCE

Wavelength	354.7 nm
Mode (M <sup>2</sup> )	TEM <sub>00</sub> (M <sup>2</sup> < 1.2)
Beam Diameter (1/e <sup>2</sup> )	3.0 mm
Pulse to Pulse Stability (30 - 100 kHz)	< 10%
Power Stability (8 hrs. at const. temp.)	< 5%
Beam Pointing Stability (const. temp.)	< 50 $\mu$ rad
Polarization (Linear, Horizontal)	> 100:1
Beam Divergence (full angle)	< 0.2 mrad

## ELECTRICAL

Input Voltage	90 - 240 VAC
Power Consumption (max.)	900 W
Ambient Operating Temp. (non-condensing)	10 - 35° C

## PHYSICAL

Laser Head Dim. (LWH)	52.1 x 25.4 x 12.4 cm
Laser Head Weight	15.9 kg
Laser Power Supply Dim. (LWH)	33.0 x 45.5 x 13.7 cm
Laser Power Supply Weight	10.5 kg
Cooling System Dim. (LWH)	28.7 x 22.4 x 38.9 cm
Cooling System Weight (dry)	9.1 kg

