Techno series

Industrial grade Q-switched diode pumped Nd: YVO_4 UV laser

Short pulse duration, high repetition rate and robust design make these lasers an attractive tool for wide range of material processing applications, including polymers, semiconductors, composites, dielectrics.

A diode pumped solid state Nd:YVO_4 UV lasers offer high output power of UV radiation together with high repetition rate.

The **innovative** electro-optical Q-switch is a key technology for generation of the record short pulses between all high power nanosecond lasers.

High beam quality together with short pulse duration and high output power make the UV laser to **high brilliance** source (tool) for processing of almost all engineering materials used in semiconductor and electronic industry.

Rugged body made of machined aluminum as well as **sealed cavity** ensures stable and reliable operation in diverse conditions of laboratory and factory working place.

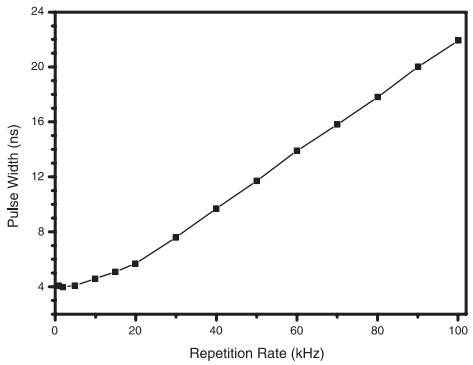
The Techno series lasers are equipped with **intelligent control system**. Output power as well as other parameters of the laser is monitored continuously in order to ensure long term repeatability of performance and easy adaptation of the laser into high throughput material processing systems.

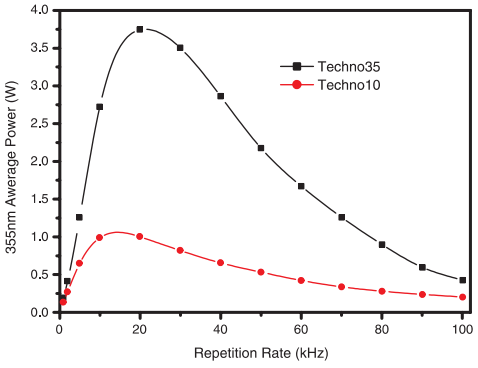
APPLICATIONS

- Marking
- Engraving
- Micromachining
- Ablation
- Drilling
- Cutting
- Structuring
- Trimming
- Mask repair
- Cleaning
- Your application is welcome...

FEATURES

- 3.5 W output power at 355 nm
- High brilliance UV radiation
- Up to 100 kHz repetition rate
- Robust and sealed cavity
- Low operating costs
- Electro-optical Q-switching
- First pulse suppression
- Internal output power monitoring
- Internal/external triggering
- Processor control via USB/CAN
- Remote control via keypad
- No external water cooling





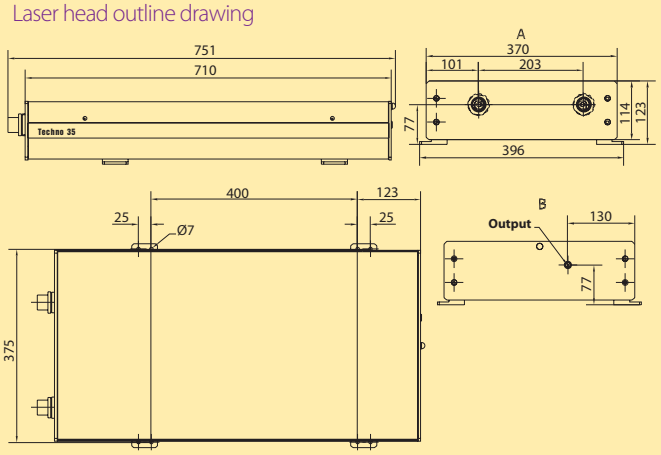
EKSPLA
An EKSMA Group Company

Specifications

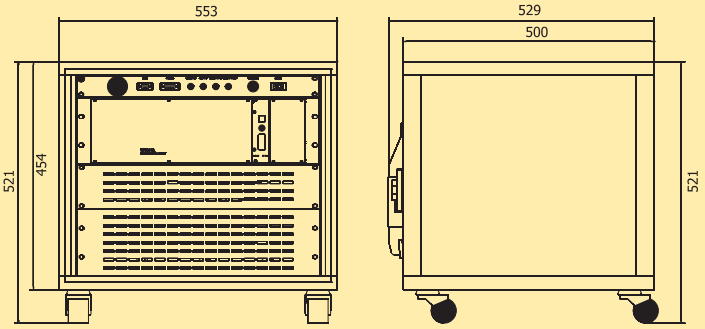
Model	Techno 35	Techno10
Output wavelength	355 nm	
Output power, W	3.5	1
Pulse to Pulse energy stability	3% (rms) at 20 kHz	
Power stability	± 2% over 8 hours	
Pulse duration, ns	4-25	
Repetition rate, kHz	up to 100	
Beam diameter, mm	~1.5	~1.2
Beam profile	TEM00	
M^2	<1.5	
Beam divergence, mrad	0.9	<1.1
Beam ellipticity	>0.8 @ 20 kHz	
Polarization	Linear, horizontal>100:1	
Timing jitter	<0.5 ns @ 1-50kHz	
Physical characteristics		
Laser head size (W x H x L) , mm	375 x 123 x 710	286 x 114 x 710
Power supply/pump diode unit (W x H x L) , mm	553 x 521 x 529	472 x 289 x 461
Umbilical length, m	2.8	
Operating requirements		
Ambient temperature, ^{0}C	18-27	
Relative humidity (non-condensing), %	10-80	
Voltage	100-240 VAC, single phase 50/60 Hz	
Power, kW	<0.6	<0.25

Techno 35

Laser head outline drawing

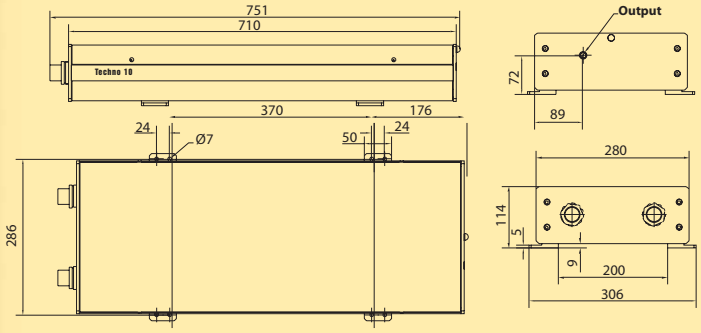


Power supply outline drawing

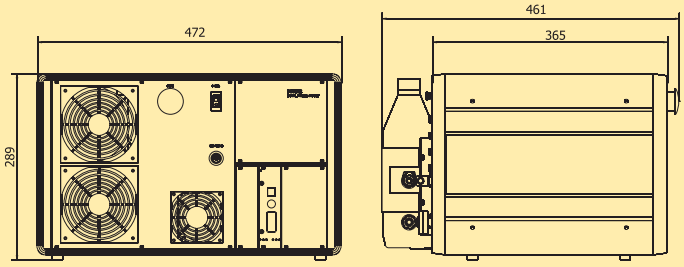


Techno 10

Laser head outline drawing

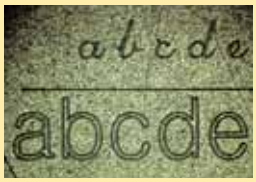


Power supply outline drawing



MATERIAL PROCESSING SAMPLES

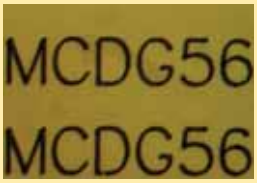
Cutting of polymer film



Marking of sapphire

Marking of medical pills

Marking of glass



Marking of ID cards

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