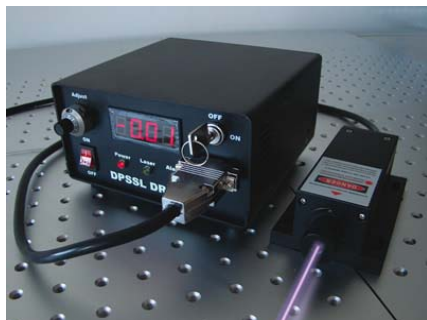


## DL CW Blue Violet Laser, 405nm



Wavelength	405 nm
Operating longitudinal mode	Several
Polarization ratio	> 100:1
Point stability	< 0.05 mrad
Expected lifetime	10 000 hours

### Applications:

- DNA Sequencing
- Flow Cytometry
- Cell Sorting
- Spectrum analysis
- Interference Measurements
- Holography
- Optical Instrument
- Laser lighting show

P/N	Out Put Power (mW)	M2 factor	Power stability rms, over 4hours	Transverse mode	Beam divergence (mrad)	Beam dia. at aperture (mm)	Warranty
5-405-DL-0.03	30	<1.5	<5%	Near TEM00	0.5	~4.0	one year
5-405-DL-0.03-LN	30	<1.5	<3%	Near TEM00	0.5	~4.0	one year
5-405-DL-0.05	50	<1.5	<5%	Near TEM00	0.5	~4.0	one year
5-405-DL-0.05-LN	50	<1.5	<3%	Near TEM00	0.5	~4.0	one year
5-405-DL-0.1	100	<1.5	<5%	Near TEM00	0.5	~4.0	one year
5-405-DL-0.1-LN	100	<1.5	<3%	Near TEM00	0.5	~4.0	one year
5-405-DL-0.2	200	<1.5	<5%	Near TEM00	0.5	~4.0	one year

Power Tunability is included option, that can be excluded for better price.

TTL modulation, Analog modulation, RS232 interface, fiber coupling are optional.

## DPSS CW Blue Laser, 457nm



Wavelength	457 nm
Operating longitudinal mode	Several/one (forSLM)
Polarization ratio	> 100:1
Point stability	< 0.05 mrad
Expected lifetime	10 000 hours

### Applications:

- DNA Sequencing
- Flow Cytometry
- Optical Instrument
- Spectrum analysis
- Interference Measurements
- Laser lighting show
- Holography
- Cell Sorting

P/N	Out Put Power (mW)	M2 factor	Power stability rms, over 4hours	Transverse mode	Beam divergence (mrad)	Beam dia. at aperture (mm)	Noise of amplitude (rms)
5-457-DPSS-0.01-SLM	10	<1.2	<1%	Near TEM00	<1.2	~ 2.0	<0.5%
5-457-DPSS-0.05	50	<2.0	<5%	Near TEM00	<1.5	~ 3.0	<30%
5-457-DPSS-0.05-LN	50	<2.0	<3%	Near TEM00	<1.5	~ 3.0	<3%
5-457-DPSS-0.1	100	<2.0	<5%	Near TEM00	<1.5	~ 3.0	<30%
5-457-DPSS-0.1-LN	100	<2.0	<3%	Near TEM00	<1.5	~ 3.0	<3%
5-457-DPSS-0.2	200	<2.0	<5%	Near TEM00	<1.5	~ 3.0	<30%
5-457-DPSS-0.5	500	<3.0	<5%	Near TEM00	<1.5	~ 3.0	<30%

Power Tunability is included option, that can be excluded for better price.

TTL modulation, Analog modulation, RS232 interface, fiber coupling are optional.

## DPSS CW Blue Violet Laser, 473nm



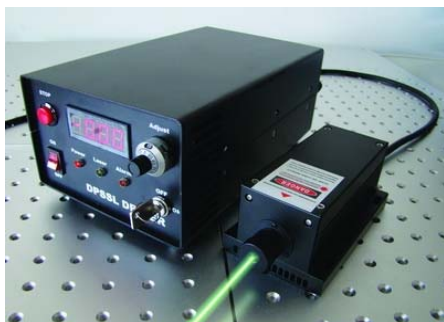
Wavelength	473 nm
Operating longitudinal mode	Several/one (forSLM)
Polarization ratio	> 100:1
Point stability	< 0.05 mrad
Expected lifetime	10 000 hours

P/N	Out Put Power (mW)	M2 factor	Power stability rms, over 4hours	Transverse mode	Beam divergence (mrad)	Beam dia. at aperture (mm)	Noise of amplitude (rms)
5-473-DPSS-0.02-SLM	20	<1.2	<1%	Near TEM00	< 1.2	~ 2.0	<0.5%
5-473-DPSS-0.03	30	<1.2	<5%	TEM00	< 1.5	~ 2.0	<30%
5-473-DPSS-0.03-LN	30	<1.2	<3%	Near TEM00	< 1.5	~ 2.0	<1%
5-473-DPSS-0.05	50	<1.2	<5%	TEM00	< 1.5	~ 2.0	<30%
5-473-DPSS-0.05-LN	50	<1.2	<3%	Near TEM00	< 1.5	~ 2.0	<1%
5-473-DPSS-0.1	100	<1.2	<5%	TEM00	< 1.5	~ 2.0	<30%
5-473-DPSS-0.2	200	<1.2	<5%	TEM00	< 1.5	~ 2.0	<30%

Power Tunability is included option, that can be excluded for better price.

TTL modulation, Analog modulation, RS232 interface, fiber coupling are optional.

## DPSS CW Green laser, 532nm



Wavelength	532 nm
Operating longitudinal mode	Several/one (forSLM)
Polarization ratio	> 100:1
Point stability	< 0.05 mrad
Expected lifetime	10 000 hours

P/N	Out Put Power (mW)	M2 factor	Power stability rms, over 4hours	Transverse mode	Beam divergence (mrad)	Beam dia. at aperture (mm)	Noise of amplitude (rms)
5-532-DPSS-0.03-SLM	30	<1.2	<1%	TEM00	<1.2	~ 2.0	<0.5%
5-532-DPSS-0.1	100	<1.2	<5%	TEM00	<1.5	~ 2.0	<5%
5-532-DPSS-0.1-LN	100	<1.2	<3%	Near TEM00	<1.5	~ 2.0	<1%
5-532-DPSS-0.5	500	<2.0	<5%	Near TEM00	<2.0	~ 3.0	<5%
5-532-DPSS-0.5-LN	500	<1.2	<3%	Near TEM00	<1.5	~ 2.0	<1%
5-532-DPSS-1.0	1000	<2.0	<5%	Near TEM00	<2.0	~ 3.0	<5%
5-532-DPSS-5.0	5000	<2.0	<5%	Near TEM00	<2.0	~ 3.0	<5%

Power Tunability is included option, that can be excluded for better price.

TTL modulation, Analog modulation, RS232 interface, fiber coupling are optional.

## DPSS CW Yellow Laser, 593.5nm



Wavelength	593.5 nm
Operating longitudinal mode	Several
Polarization ratio	> 100:1
Point stability	< 0.05 mrad
Expected lifetime	10 000 hours

P/N	Out Put Power (mW)	Beam divergence (mrad)	M2 factor	Power stability rms, over 4hours	Beam dia. at aperture (mm)	Noise of amplitude (rms)	Warranty
5-593-DPSS-0.005	5	<1.5	<1.5	<5%	~ 2.0	< 30%	One year
5-593-DPSS-0.005-LN	5	<1.5	<1.5	<3%	~ 2.0	< 2%	One year
5-593-DPSS-0.01	10	<1.5	<1.5	<5%	~ 2.0	< 30%	One year
5-593-DPSS-0.01-LN	10	<1.5	<1.5	<3%	~ 2.0	< 2%	One year
5-593-DPSS-0.03	30	<1.5	<1.5	<5%	~ 2.0	< 30%	One year
5-593-DPSS-0.05	50	<2.0	<1.5	<5%	~ 3.0	< 30%	One year
5-593-DPSS-0.1	100	<2.0	<1.5	<5%	~ 3.0	< 30%	One year

Power Tunability is included option, that can be excluded for better price.

TTL modulation, Analog modulation, RS232 interface, fiber coupling are optional.

## DPSS CW Red Laser, 671nm



Wavelength	671 nm
Operating longitudinal mode	Several/one (forSLM)
Polarization ratio	> 100:1
Point stability	< 0.05 mrad
Expected lifetime	10 000 hours

P/N	Out Put Power (mW)	Beam divergence (mrad)	M2 factor	Power stability rms, over 4hours	Beam dia. at aperture (mm)	Noise of amplitude (rms)	Warranty
5-671-DPSS-0.02-SLM	20	<1.2	<1.2	<1%	~ 2.0	<0.5%	One year
5-671-DPSS-0.1	100	<1.5	<1.2	<5%	~ 2.0	<30%	One year
5-671-DPSS-0.1-LN	100	<1.5	<1.2	<3%	~ 2.0	<1%	One year
5-671-DPSS-0.2	200	<1.5	<1.2	<5%	~ 2.0	<30%	One year
5-671-DPSS-0.2-LN	200	<1.5	<1.2	<3%	~ 2.0	<1%	One year
5-671-DPSS-0.5	500	<1.5	<1.2	<5%	~ 2.0	<30%	One year
5-671-DPSS-0.5-LN	500	<1.5	<1.2	<3%	~ 2.0	<1%	One year
5-671-DPSS-1.0	1000	<1.5	<2.0	<5%	~ 2.0	<30%	One year

Power Tunability is included option, that can be excluded for better price.

TTL modulation, Analog modulation, RS232 interface, fiber coupling are optional.

## DPSS CW IR Laser, 1064nm



Wavelength	671 nm
Operating longitudinal mode	Several/one (forSLM)
Polarization ratio	> 100:1
Point stability	< 0.05 mrad
Expected lifetime	10 000 hours

P/N	Out Put Power (mW)	Beam divergence (mrad)	M2 factor	Power stability rms, over 4hours	Beam dia. at aperture (mm)	Noise of amplitude (rms)	Warranty
5-671-DPSS-0.02-SLM	20	<1.2	<1.2	<1%	~ 2.0	<0.5%	One year
5-671-DPSS-0.1	100	<1.5	<1.2	<5%	~ 2.0	<30%	One year
5-671-DPSS-0.1-LN	100	<1.5	<1.2	<3%	~ 2.0	<1%	One year
5-671-DPSS-0.2	200	<1.5	<1.2	<5%	~ 2.0	<30%	One year
5-671-DPSS-0.2-LN	200	<1.5	<1.2	<3%	~ 2.0	<1%	One year
5-671-DPSS-0.5	500	<1.5	<1.2	<5%	~ 2.0	<30%	One year
5-671-DPSS-0.5-LN	500	<1.5	<1.2	<3%	~ 2.0	<1%	One year
5-671-DPSS-1.0	1000	<1.5	<2.0	<5%	~ 2.0	<30%	One year

Power Tunability is included option, that can be excluded for better price.

TTL modulation, Analog modulation, RS232 interface, fiber coupling are optional.

## DPSS CW IR Laser, 1550nm



Wavelength	1550 nm
Operating longitudinal mode	Several
Polarization ratio	> 50:1
Point stability	< 0.05 mrad
Expected lifetime	10 000 hours

### Applications:

- Scientific experiment
- Optical sensor
- Optical Instrument
- Measurement
- Communication
- Spectrum analysis

P/N	Out Put Power (mW)	M2 factor	Power stability	Transverse mode	Beam divergence (mrad)	Beam dia. at aperture (mm)	Noise of amplitude (rms)
5-1550-DL-0.1	100	<20	<5%	Near TEM00	<3.0	~ 5 x 8	<30%
5-1550-DL-0.1-LN	100	<20	<3%	Near TEM00	<3.0	~ 5 x 8	<1%
5-1550-DL-0.2	200	<20	<5%	Near TEM00	<3.0	~ 5 x 8	<30%
5-1550-DL-0.2-LN	200	<20	<3%	Near TEM00	<3.0	~ 5 x 8	<1%
5-1550-DL-0.5	500	<20	<5%	Near TEM00	<3.0	~ 5 x 8	<30%
5-1550-DL-0.5-LN	500	<20	<3%	Near TEM00	<3.0	~ 5 x 8	<1%
5-1550-DL-1.0	1000	<20	<5%	Near TEM00	<3.0	~ 5 x 8	<30%
5-1550-DL-2.0	2000	<20	<5%	Near TEM00	<3.0	~ 5 x 8	<30%

Power Tunability is included option, that can be excluded for better price.

TTL modulation, Analog modulation, RS232 interface, fiber coupling are optional.

## Q1 – Active Q-switched Laser



Wavelength	1064 nm
Pulse Energy	100 $\mu$ J
Pulse Width (FWHM)	$\leq 1$ ns
Repetition Rate	1–1000 Hz
Timing Jitter (PtP)	$\leq 350$ ps
Pulse to Pulse Energy Stability (RMS)	$< 3$ % over 5 hours
Warm Up Time	$< 20$ min
Interfaces	USB, External Trigger (TTL, rising edge)
Operating Voltage	110–230 VAC

P/N	Beam profile	Beam divergence 1/e2, full angle (mrad)	beam waist Dia. (1/e2) ( $\mu$ m)	M2 factor	Pulse spectral structure	Polarization ratio	Spectral linewidth (FWHM) (pm)
STANDA-Q1	TEM00	$< 5$	$200 \pm 20$	$< 1.2$	SLM	$> 100:1$ , horizontal	$< 3.7$

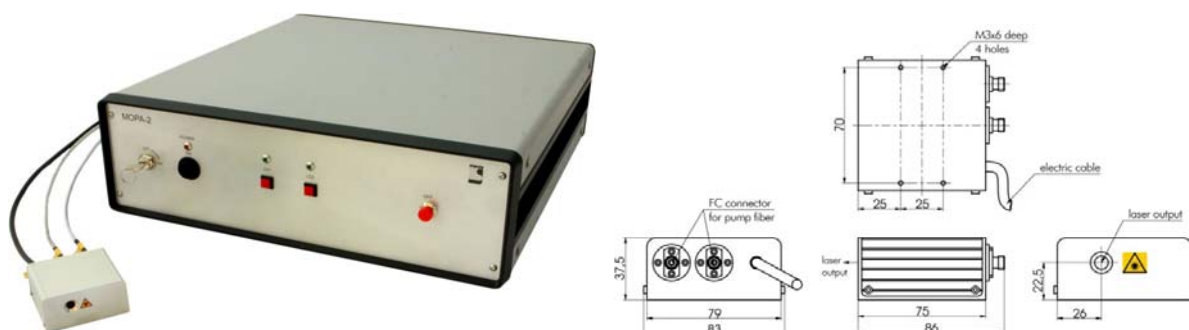
## Q10 – Active Q-switched Laser



Wavelength	1064 nm
Pulse Energy	70 $\mu$ J
Pulse Width (FWHM)	0.9 – 3 ns
Repetition Rate	1 – 10000 Hz
Timing Jitter (PtP)	$\leq 350$ ps
Pulse to Pulse Energy Stability (RMS)	$< 3$ % over 5 hours
Warm Up Time	$< 20$ min
Interfaces	USB, External Trigger (TTL, rising edge)
Operating Voltage	110–230 VAC

P/N	Beam profile	Beam divergence 1/e2, full angle (mrad)	beam waist Dia. (1/e2) ( $\mu$ m)	M2 factor	Pulse spectral structure	Polarization ratio	Spectral linewidth (FWHM) (pm)
STANDA-Q10	TEM00	$< 5$	$200 \pm 20$	$< 1.3$	SLM	$> 100:1$ , horizontal	$< 3.7$

## STA-MOPA – Master Oscillator Power Amplifier Laser System



Repetition Rate	Up to 50 kHz
Peak Power	up to 1.2 MW
Beam Divergence (1/e <sup>2</sup> , full angle)	<6 mrad
Pulse Spectral Structure	SLM
Spatial Mode	TEM00
M2 factor	<1.5
Polarization Ratio (linear)	>100:1
Power Stability RMS	<1 %
Operating Voltage	100 – 230 VAC
Power Consumption	<100 W

P/N	STA-01-MOPA	STA-01SH-MOPA	STA-01TH-MOPA
wavelength	1064	532	355
Average Output Power	>2.5W	>1.2W	>2.5W
Pulse Energy	50–500 μ J	25–250 μ J	50–500 μ J
Pulse Width (FWHM)	200–500ps	200–500ps	200–500ps
Repetition Rate	up to 50kHz	up to 50kHz	up to 50kHz
Peak Power	up to 1,2MW	up to 1,2MW	up to 1,2MW
Beam Divergence (1/e <sup>2</sup> , full angle)	<6	<6	<6
Pulse Spectral Structure	SLM	SLM	SLM
Spatial Mode	TEM00	TEM00	TEM00
Beam Propagation Factor M <sup>2</sup>	<1.5	<1.5	<1.5
Polarization Ratio (linear)	>100:1	>100:1	>100:1
Power Stability RMS	<1%	<1%	<1%
Operation Voltage	100–230VAC	100–230VAC	100–230VAC
Power Consumption	<100W	<100W	<100W
Operating Temperature	20–35°C	20–35°C	20–35°C
Interfaces	USB, External Trigger (TTL, Rising edge)	USB, External Trigger (TTL, Rising edge)	USB, External Trigger (TTL, Rising edge)
Operating Voltage	110–230VAC	110–230VAC	110–230VAC
Dimensions of Laser Head	79mmx37.5mmx75mm	79mmx37.5mmx75mm	79mmx37.5mmx75mm
Dimensions of Controller	471mmx157mmx458mm	471mmx157mmx458mm	471mmx157mmx458mm