

Series CL100

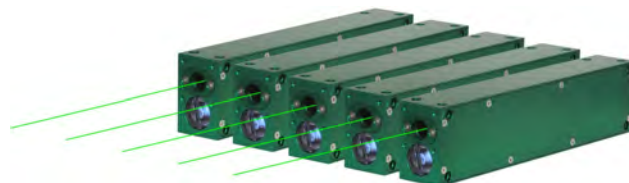
3 Watt 1064 nm
1,5 Watt 532 nm



- high repetition rate solid-state diode pumped Q-switched laser
- fundamental 1064 nm and green 532 nm available
- compact laser for micro and precision processing
- excellent beam quality
- short pulses at high repetition rates
- high reliability for 24/7 operation
- ports for TTL, analog and RS 232 control
- cost-effective operation
- one of smallest laser in its class
- customised modifications possible

Applications

- rapid prototyping
- micro-machining
- thin film structuring
- marking, trimming



Model	CL 100-1064	CL 100-532
Wavelength	1064 nm	532 nm
Power	3 W @ 25 kHz	1,5 W @ 25 kHz
Pulse Repetition Rate	1 – 200 kHz	1 – 200 kHz
Pulse Width	15 ns @ 25 kHz	15 ns @ 25 kHz
Pulse Energy	120 µJ 25 kHz	60 µJ 25 kHz
Beam Quality	$M^2 < 1,4$	$M^2 < 1,5$
Polarization	linear	linear
Dimension Laserhead (W/H/L)	39 mm × 69 mm × 280 mm	39 mm × 69 mm × 280 mm
Dimension Power Supply (W/H/L)	320 mm × 120 mm × 320 mm	320 mm × 120 mm × 320 mm
Power Consumption	110 –240 V, 50–60 Hz, 300 W	110 –240 V, 50–60 Hz, 300 W
Operating Temperature	15 – 35 °C	15 – 35 °C



Series CL200

6 Watt 532 nm

2 Watt 355 nm



CL200-532/355

Applications

- rapid prototyping
- micro-machining
- thin film structuring
- marking, trimming

Features

- high repetition rate solid state diode-pumped Q-switched laser
- 532 nm and 355 nm available
- air-cooled, compact laser for micro and precision processing
- no additional cooling unit required
- excellent beam quality
- short pulses at high repetition rates
- high peak power
- first pulse suppression by fast energy modulation
- high reliability for 24/7 operation
- ports for TTL, analog and RS 232 control
- cost-effective operation
- customised modifications possible

Model	CL 200-532	CL 200-355
Wavelength	532 nm	355 nm
Power	6 W @ 20 kHz	2 W @ 20 kHz
Pulse Repetition Rate	1 ... 100 kHz	
Pulse Width	15 ns @ 20 kHz	15 ns @ 20 kHz
Pulse Energy	300 µJ @ 20 kHz	100 µJ @ 20 kHz
Beam Quality	$M^2 < 1,4$	$M^2 < 1,4$
Polarisation	linear	
Dimension Laserhead (W/H/L)	132 mm × 116 mm × 530 mm	
Dimension Power Supply (W/H/L)	19 Inch, 3 RU	
Power Consumption	110 ... 240 V, 50 ... 60 Hz, 300 W	
Operating Temperature	15 ... 35 °C	

Series CL200

20 Watt 1064 nm



CL200-1064

Applications

- rapid prototyping
- micro-machining
- thin film structuring
- marking, trimming
- gray-scale photoprinting

Features

- high repetition rate solid state diode-pumped Q-switched laser
- air-cooled, compact laser for micro and precision processing
- no additional cooling unit required
- excellent beam quality
- short pulses at high repetition rates
- high peak power
- first pulse suppression by fast energy modulation
- high reliability for 24/7 operation
- ports for TTL, analog and RS 232 control
- cost-effective operation
- customised modifications possible

Model	CL 200-1064
Wavelength	1064 nm
Power	22 W cw 20 W @ 50 kHz 10 W @ 20 kHz
Pulse Repetition Rate	1 ... 400 kHz
Pulse Width	25 ns @ 50 kHz 15 ns @ 20 kHz
Pulse Energy	400 µJ @ 50 kHz 500 µJ @ 20 kHz
Beam Quality	$M^2 < 1,2$
Polarisation	linear
Dimension Laserhead (W/H/L)	80 mm × 138 mm × 495 mm
Dimension Power Supply (W/H/L)	19 Inch, 3 RU
Power Consumption	110 ... 240 V, 50 ... 60 Hz, 300 W
Operating Temperature	15 ... 35 °C

Series CL210



35 Watt 1064 nm
15 Watt 532 nm
3 Watt 355 nm

- high repetition rate solid-state diode pumped Q-switched laser in oscillator-amplifier configuration
- fundamental 1064 nm, green 532 nm and UV 355 nm available
- air-cooled, compact laser for micro and precision processing
- no additional cooling unit required
- excellent beam quality
- short pulses at high repetition rates
- high Peak Power
- first pulse suppression by fast energy modulation
- high reliability for 24/7 operation
- ports for TTL, analog and RS 232 control
- cost-effective operation
- customised modifications possible

Applications

- rapid prototyping
- micro-machining
- thin film structuring
- marking, trimming

Model	CL 210-1064	CL 210-532	CL 210-355
Wavelength	1064 nm	532 nm	355 nm
Power	10 W @10 kHz 30 W @ 30 kHz 35 W @ 100 kHz	5 W @10 kHz 15 W @ 30 kHz	3 W @ 10 kHz 2 W @ 30 kHz
Pulse Repetition Rate	1 – 200 kHz		
Pulse Width	15 ns @10 kHz 20 ns @ 30 kHz 40 ns @100 kHz	10 ns @ 10 kHz 15 ns @ 30 kHz	10 ns @10 kHz 15 ns @ 30 kHz
Pulse Energy	1,0 mJ @10 kHz 1,0 mJ @ 30 kHz 0,35 mJ @100 kHz	0,5 mJ @10 kHz 0,5 mJ @ 30 kHz	0,3 mJ @10 kHz 0,06 mJ @30 kHz
Beam Quality	$M^2 < 1,4$	$M^2 < 1,4$	
Polarisation	Linear		
Dimension Laserhead (W/H/L)	125 mm × 129 mm × 600 mm		
Dimension Power Supply (W/H/L)	2 × 19 Inch, 3 RU		
Power Consumption	110 –240 V, 50–60 Hz, 800 W		
Operating Temperature	15 – 35 °C		

Series CL240 *short pulse*



60 Watt 1064 nm

**High rep. rate
pulse-to-pulse energy modulation**

Applications

- pulse-to-pulse addressable pulse energy up to 400kHz repetition rate
- high repetition rate solid-state diode pumped Q-switched laser in oscillator-amplifier configuration
- short pulses at high repetition rates
- excellent beam quality
- 1064 nm , 532 nm (*)355 nm available soon)
- compact laser for micro and precision processing
- ports for TTL, analog and RS 232 control
- cost-effective operation
- customised modifications possible

- grayscale laser printing
- micro-machining
- marking, thin film structuring, trimming



Model		CL 240 - 1064	CL 240 - 532
Wavelength		1064 nm	532 nm
Pulse Repetition Rate		1 ... 400 kHz	
Pulse Width @	20 KHz	10 ns	8 ns
	50 kHz	12 ns	10 ns
	100 kHz	20 ns	15 ns
	200 kHz	25 ns	20 ns
Power @	20 kHz	30 W	20 W
	50 kHz	40 W	15 W
	100 kHz	50 W	15 W
	200 kHz	60 W	12 W
Beam Quality		M ² < 1,4	M ² < 1,5
Polarisation		Linear	
Dimension Laserhead (W/H/L)		260 mm × 138 mm × 500 mm (water cooled)	
Dimension Power Supply (W/H/L) without cooler		19 Inch, 3 RU (water cooled)	
Power Consumption		110 –240 V, 50–60 Hz, 2.000 W	
Operating Temperature		15 ... 35 °C	



Series CL240 *short pulse*



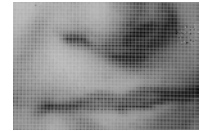
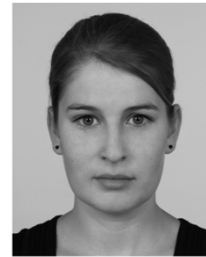
60 Watt 1064 nm

**High rep. rate
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Applications

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- high repetition rate solid-state diode pumped Q-switched laser in oscillator-amplifier configuration
- short pulses at high repetition rates
- excellent beam quality
- 1064 nm , 532 nm (*)355 nm available soon)
- compact laser for micro and precision processing
- ports for TTL, analog and RS 232 control
- cost-effective operation
- customised modifications possible

- grayscale laser printing
- micro-machining
- marking, thin film structuring, trimming



Model		CL 240 - 1064	CL 240 - 532
Wavelength		1064 nm	532 nm
Pulse Repetition Rate		1 ... 400 kHz	
Pulse Width @	20 KHz	10 ns	8 ns
	50 kHz	12 ns	10 ns
	100 kHz	20 ns	15 ns
	200 kHz	25 ns	20 ns
Power @	20 kHz	30 W	20 W
	50 kHz	40 W	15 W
	100 kHz	50 W	15 W
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