

MONOLITH Series

Beam sources and marking lasers

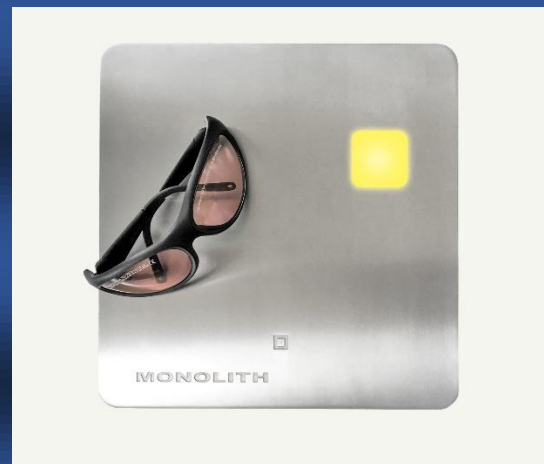
STATE-OF-THE-ART DIODE-PUMPED Q-SWITCHED, SOLID STATE LASER
EXTRAORDINARY WALL-PLUG EFFICIENCY COMBINED WITH WORLD-WIDE
SMALLEST FOOTPRINT OF ITS KIND
ALL COMPONENTS, LASER HEAD, POWER SUPPLY AND CONTROLLER, ARE
INTEGRATED INTO ONE ROBUST, COMPACT UNIT
ULTRA-COMPACT Q-SWITCH OEM-LASER SOURCES FOR MATERIAL MACHINING
AND MARKING APPLICATIONS

You have the choice

CORE

or

ALL-IN-ONE



- Average Power: 16W for 1064nm, 12W for 532nm, 6W for 355nm
- Short laser pulse width: 4 to 10ns
- High single pulse energy: e.g. 500μJ at 355nm and 6kHz
- Significant single pulse peak power: up to 100kW
- Arbitrary repetition rate: 1Hz to 500kHz
- Multiple Pulse Control (MPS) function
- THG-shifter implemented (UV-version)
- Integrated safety shutter
- Integrated laser indicator light
- Up to 100.000 hours laser-diode-lifetime
- Air-cooling, water-cooling also available for e.g. clean-room processing
- Also available as complete marking system with software package
- Made in Berlin, Germany

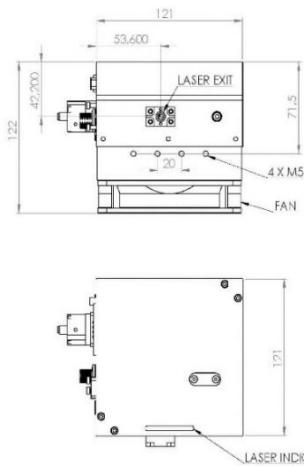
MONOLITH series

	MONOLITH IR			MONOLITH 532			MONOLITH UV		
	IR_6	IR_10	IR_16	532_3	532_8	532_12	355_1	355_3 HE	355_6
Betriebsart Mode of operation	Pulsed	Pulsed	Pulsed	Pulsed	Pulsed	Pulsed	Pulsed	Pulsed	Pulsed
Leistungsklasse Power class	6W	10W	16W	3W	8W	12W	1W	3W	6W
Wellenlänge Wavelength	1064nm	1064nm	1064nm	532nm	532nm	532nm	355nm	355nm	355nm
Strahlqualität Beam mode	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀
* M²	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3
Polarisation	Linear > 100:1								
Max. Pulsenergie Max. pulse energy	700µJ	350µJ	350µJ	550µJ	350µJ	350µJ	400µJ	500µJ	150µJ
Minimale Pulsbreite Minimal pulse width	8ns	10ns	10ns	9ns	9ns	9ns	7ns	12ns	8ns
Repetitionsrate Repetition rate	1Hz-100kHz	1Hz-500kHz	1Hz-500kHz	1Hz-100kHz	1Hz-500kHz	1Hz-500kHz	1Hz-100kHz	1Hz-100kHz	1Hz-500kHz
Mittlere Leistung Aver. output power	6W@50kHz	10W@50kHz	16W@100kHz	3W@6kHz	8W@40kHz	12W@60kHz	1W@5kHz	3W@6kHz	6W@50kHz
Laserklasse Laser class	4								
Kühlung Cooling	Luftkühlung oder optional Wasserkühlung air cooled or optional water cooled								
Kühlungssystem Cooling system	Thermo elektrische Kühlung thermo electric cooling								
Anschluss Electrical ratings	24V DC								
Leistungsaufnahme Power consumption	< 200W								

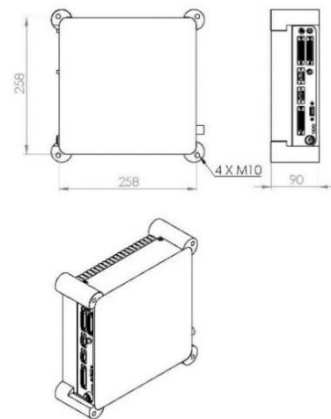
We reserve the right to make technical modifications without prior notice. Errors and omissions excepted, 10% tolerances for measured values.

* Average M² over the frequency range

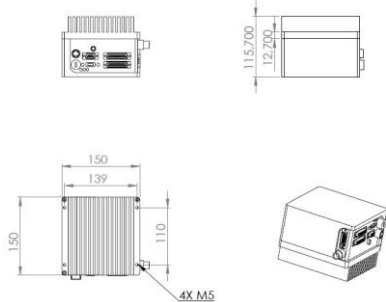
MONOLITH CORE beam source



MONOLITH ALL-IN-ONE beam source



Ultra-compact control unit



Standard control unit

