

## SCHILLING Megalight™ LASERS TECHNICAL SPECIFICATIONS

LASER MODEL	Megalight 10				Megalight 40			
Laser Medium	Nd:YAG				Nd:YVO <sub>4</sub> (Vanadate)			
Wavelength	1064 nm				1064 nm			
Nominal Power	5W ±5% (@ Laser aperture)				10W ±5% (@ C.W. multimode)			
Modulation	Fixed (typically 23 kHz)				TTL 10kHz to 100kHz			
Laser Pumping	Diode Laser				Diode Laser			
Expected Lifetime	>10000 hours				>10000 hours			
Aiming Beam	Red Laser Diode				Red Laser Diode			
Marking Head	Miniscan 8 (Objective Rodenstock)			Obj. Linos	Miniscan 8 (Objective Rodenstock)			Linus like ML10
Objective F-theta	63	160	254	160	100	160	254	330
Working distance D	90±2mm	175±3mm	322±5mm	195±3mm	97±2mm	175±4mm	322±5mm	387±5mm
Marking Area	35x35 mm	120x120 mm	170x170mm*	∅ 100 mm	60x60mm	120x120mm	170x170mm*	220x220mm*
Min. Beam Waist	10 µm	30 µm	50 µm	30 µm	25 µm	30 µm	50 µm	80 µm
Supply	90V to 240V, 16A / 1ph				90V to 240V, 16A / 1ph			
Frequency	50-60 Hz				50-60 Hz			
Power	< 400W				< 500W			
Operating Temp.	+15 to + 35°C (59 to 95°F)				+15 to + 35°C (59 to 95°F)			
Heat Exchanger	Air to Air (integrated)				Air to Air (integrated)			
	Overall Dimensions (LxWxH;mm)				Overall Dimensions (LxWxH;mm)			
Rack	180, 500, 450				180, 500, 450			
Resonator	70, 260, 70				120, 430, 150			
Marking Head	110, 122, 158				175, 120, 180			
	Approx. Weight				Approx. Weight			
Rack	19 kg (41.8 lb)				20 kg (44 lb)			
Resonator	3 kg (6.6 lb)				4,3 kg (9.4 lb)			
Marking Head	1 kg (2.2 lb)				3,8 kg (8.3 lb)			
	Protection Class				Protection Class			
Rack	IP 20				IP 20			
Resonator	IP 54				IP 54			
Marking Head	IP 54				IP 54			
	Environmental				Environmental			
Vibrations	Not allowed				Not allowed			
Max. Acceleration	0,5 G				0,5 G			
Storage temp. Non condensing	- 5°C to + 55°C < 24 h (23 to 131°F)				- 5°C to + 55°C < 24 h (23 to 131°F)			
Operating Altitude	< 1500m (5,000 feet)				< 1500m (5,000 feet)			
Insulation	3 kV AC				3 kV AC			
Pollution degree	Cat. II				Cat. II			
Conformance to EEC rules	89/336/EEC "Electromagnetic Compatibility" 73/23/EEC "Low Voltage"				89/336/EEC "Electromagnetic Compatibility" 73/23/EEC "Low Voltage"			
Conformance to EU Standard	EN 60204-1 Safety of machinery EN 60825-1 Safety of laser products EN 55011-1 Emission standard EN 61000-6-2 Immunity standard				EN 60204-1 Safety of machinery EN 60825-1 Safety of laser products EN 55011-1 Emission standard EN 61000-6-2 Immunity standard			
Laser Class	Working Laser @ 1064nm: Class IV		Pumping Laser @ 808nm: Class IV		Working Laser @ 1064nm: Class IV		Pumping Laser @ 808nm: Class IV	
	Aiming Beam @ 635nm: Class 2M				Aiming Beam @ 635nm: Class 2M			
Laser Safety Cabinet	Dimensions: WxDxH 550x790x750 mm				Part Size max. WxDxH: 475x255x285 mm			
NOTE:	<b>Specifications subject to change without notice</b>				<b>Specifications subject to change without notice</b>			
*Effective marking area subjected to approval, depending on the application!								

## SCHILLING Megalight™ LASERS TECHNICAL SPECIFICATIONS

LASER MODEL	Megalight 80				Megalight 110			
Laser Medium	Nd:YVO <sub>4</sub> (Vanadate)				Nd:YVO <sub>4</sub> (Vanadate)			
Wavelength	1064 nm				1064 nm			
Nominal Power	20W ±5% (@ C.W. multimode)				27W ±5% (@ C.W. multimode)			
Modulation	TTL 20kHz to 200kHz				TTL 20kHz to 100kHz			
Laser Pumping	Diode Laser				Diode Laser			
Expected Lifetime	>10000 hours				>10000 hours			
Aiming Beam	Red Laser Diode				Red Laser Diode			
Marking Head	Miniscan 8				Miniscan 8			
Objective F-theta	100	160	254	330	100	160	254	330
Working distance D	93±2mm	170±4mm	320±5mm	387±5mm	93±2mm	170±4mm	320±5mm	387±5mm
Marking Area	50x50mm	120x120mm	170x170mm	220x220mm	50x50mm	120x120mm	170x170mm	220x220mm
Min. Beam Waist	30 µm	50 µm	80 µm	100 µm	30 µm	50 µm	80 µm	100 µm
Supply	90V to 240V,16A				90V to 240V,16A			
Frequency	50-60 Hz				50-60 Hz			
Power	< 700W				750W			
Operating Temp.	+15 to + 35°C (59 to 95°F)				+10 to + 35°C (46 to 95°F)			
Heat Exchanger	Air to Air (integrated)				Air to Air (integrated)			
	Overall Dimensions (LxWxH;mm)				Overall Dimensions (LxWxH;mm)			
Rack	180, 500, 450				180, 500, 450			
Resonator	120, 435, 150				120, 435, 150			
Marking Head	175, 120, 180				175, 120, 180			
	Approx. Weight				Approx. Weight			
Rack	34 kg (75 lb)				34 kg (75 lb)			
Resonator	4,9 kg (10 lb)				4,9 kg (10 lb)			
Marking Head	3,8 kg (8.3 lb)				3,8 kg (8.3 lb)			
	Protection Class				Protection Class			
Rack	IP 20				IP 20			
Resonator	IP 54				IP 54			
Marking Head	IP 54				IP 54			
	Environmental				Environmental			
Vibrations	Not allowed				Not allowed			
Max. Acceleration	0,5 G				0,5 G			
Storage temp. Non condensing	- 5°C to + 55°C < 24 h (23 to 131°F)				- 5°C to + 55°C < 24 h (23 to 131°F)			
Operating Altitude	< 1500m (5,000 feet)				< 1500m (5,000 feet)			
Insulation	3 kV AC				3 kV AC			
Pollution degree	Cat. II				Cat. II			
Conformance to EEC rules	89/336/EEC "Electromagnetic Compatibility" 73/23/EEC "Low Voltage"				89/336/EEC "Electromagnetic Compatibility" 73/23/EEC "Low Voltage"			
Conformance to EU Standard	EN 60204-1 Safety of machinery EN 60825-1 Safety of laser products EN 55011-1 Emission standard EN 61000-6-2 Immunity standard				EN 60204-1 Safety of machinery EN 60825-1 Safety of laser products EN 55011-1 Emission standard EN 61000-6-2 Immunity standard			
Laser Class	Working Laser @ 1064nm: Class IV Pumping Laser @ 808nm: Class IV Aiming Beam @ 635nm: Class 2M				Working Laser @ 1064nm: Class IV Pumping Laser @ 808nm: Class IV Aiming Beam @ 635nm: Class 2M			
Laser Safety Cabinet	Dimensions: WxDxH 550x790x750 mm			Part Size max.	WxDxH: 475x255x285 mm			
NOTE:	<b>Specifications subject to change without notice</b>				<b>Specifications subject to change without notice</b>			

## SCHILLING Megalight™ LASERS TECHNICAL SPECIFICATIONS

LASER MODEL	Megalight ML C60				Megalight 80 GREEN		
Laser Medium	Nd:YAG				L.B.O.		
Wavelength	1064 nm				532 nm		
Nominal Power	60W ±5% (@ Laser aperture)				7W ±5% (@ Laser aperture)		
Modulation	TTL 5kHz to 100kHz				TTL 20kHz to 100kHz		
Laser Pumping	Diode Laser				Diode Laser		
Expected Lifetime	>10000 hours				>10000 hours		
Aiming Beam	Red Laser Diode				Red Laser Diode		
Marking Head	Scanlab				Scanlab		
Objective F-theta	100	160	254	330	100	160	
Working distance D	93±2mm	170±4mm	322±5mm	387±5mm	93±2mm	170±4mm	
Marking Area	60x60mm	120x120mm	170x170mm	220x220mm	60x60mm	120x120mm	
Min. Beam Waist	55 µm	80 µm	130 µm	160 µm	10 µm	15 µm	
Supply	230V a.c., 16A / 1ph (optionally 115V)				90V to 240V, 16A		
Frequency	50 Hz (optionally 60 Hz)				50-60 Hz		
Power	< 1200W				< 700W		
Operating Temp.	+15 to + 35°C (59 to 95°F)				+15 to + 35°C (59 to 95°F)		
Heat Exchanger	Chiller (ext. Unit)				Air to Air (integrated)		
	Overall Dimensions (LxWxH;mm)				Overall Dimensions (LxWxH;mm)		
Rack	180, 500, 450				180, 500, 450		
Resonator	140, 500, 90				133, 390, 175		
Marking Head	175, 120, 180				175, 120, 180		
	Approx. Weight				Approx. Weight		
Rack	20 kg (44 lb) - Chiller 45kg (100 lb)				35 kg (77 lb)		
Resonator	8 kg (17 lb)				4,9 kg (10 lb)		
Marking Head	3,8 kg (8.3 lb)				3,8 kg (8.3 lb)		
	Protection Class				Protection Class		
Rack	IP 20				IP 20		
Resonator	IP 54				IP 54		
Marking Head	IP 54				IP 54		
	Environmental				Environmental		
Vibrations	Not allowed				Not allowed		
Max. Acceleration	0,2 G				0,2 G		
Storage temp. Non condensing	+ 5°C to + 55°C < 24 h (41 to 131°F)				- 5°C to + 55°C < 24 h (23 to 131°F)		
Operating Altitude	< 1500m (5,000 feet)				< 1500m (5,000 feet)		
Insulation	3 kV AC				3 kV AC		
Pollution degree	Cat. II				Cat. II		
Conformance to EEC rules	89/336/EEC "Electromagnetic Compatibility" 73/23/EEC "Low Voltage"				89/336/EEC "Electromagnetic Compatibility" 73/23/EEC "Low Voltage"		
Conformance to EU Standard	EN 60204-1 Safety of machinery EN 60825-1 Safety of laser products EN 55011-1 Emission standard EN 61000-6-2 Immunity standard				EN 60204-1 Safety of machinery EN 60825-1 Safety of laser products EN 55011-1 Emission standard EN 61000-6-2 Immunity standard		
Laser Class	Working Laser @ 1064nm: Class IV Pumping Laser @ 808nm: Class IV Aiming Beam @ 635nm: Class 2M				Working Laser @ 1064nm: Class IV Pumping Laser @ 808nm: Class IV Aiming Beam @ 635nm: Class 2M		
Laser Safety Cabinet	Dimensions: WxDxH 550x790x750 mm		Part Size max. WxDxH: 475x255x285 mm		Dimensions on request		
NOTE:	<b>Specifications subject to change without notice</b>				<b>Specifications subject to change without notice</b>		

## SCHILLING Megalight™ LASERS TECHNICAL SPECIFICATIONS

LASER MODEL	Megalight 80 U.V.		
Laser Medium	L.B.O.		
Wavelength	355 nm		
Nominal Power	3W ±5% (@ Laser aperture)		
Modulation	TTL 20kHz to 100kHz		
Laser Pumping	Diode Laser		
Expected Lifetime	>2500 hours		
Aiming Beam	Red Laser Diode		
Marking Head	Scanlab		
Objective F-theta	100	160	
Working distance D	93±2mm	170±4mm	
Marking Area	50x50mm	110x110mm	
Min. Beam Waist	7 µm	15 µm	
Supply	90V to 240V, 16A		
Frequency	50-60 Hz		
Power	< 700W		
Operating Temp.	+15 to + 35°C (59 to 95°F)		
Heat Exchanger	Air to Air (integrated)		
	Overall Dimensions (LxWxH;mm)		
Rack	180, 500, 450		
Resonator	150, 457, 175		
Marking Head	175, 120, 180		
	Approx. Weight		
Rack	35 kg (77 lb)		
Resonator	5,5 kg (12 lb)		
Marking Head	3,8 kg (8.3 lb)		
	Protection Class		
Rack	IP 20		
Resonator	IP 54		
Marking Head	IP 54		
	Environmental		
Vibrations	Not allowed		
Max. Acceleration	0,2 G		
Storage temp.	- 5°C to + 55°C < 24 h (23 to 131°F)		
Non condensing			
Operating Altitude	< 1500m (5,000 feet)		
Insulation	3 kV AC		
Pollution degree	Cat. II		
Conformance to EEC rules	89/336/EEC "Electromagnetic Compatibility" 73/23/EEC "Low Voltage"		
Conformance to EU Standard	EN 60204-1 Safety of machinery EN 60825-1 Safety of laser products EN 55011-1 Emission standard EN 61000-6-2 Immunity standard		
Laser Class	Working Laser @ 1064nm: Class IV Pumping Laser @ 808nm: Class IV Aiming Beam @ 635nm: Class 2M		
Laser Safety Cabinet	Dimensions on request		
NOTE:	<b>Specifications subject to change without notice</b>		