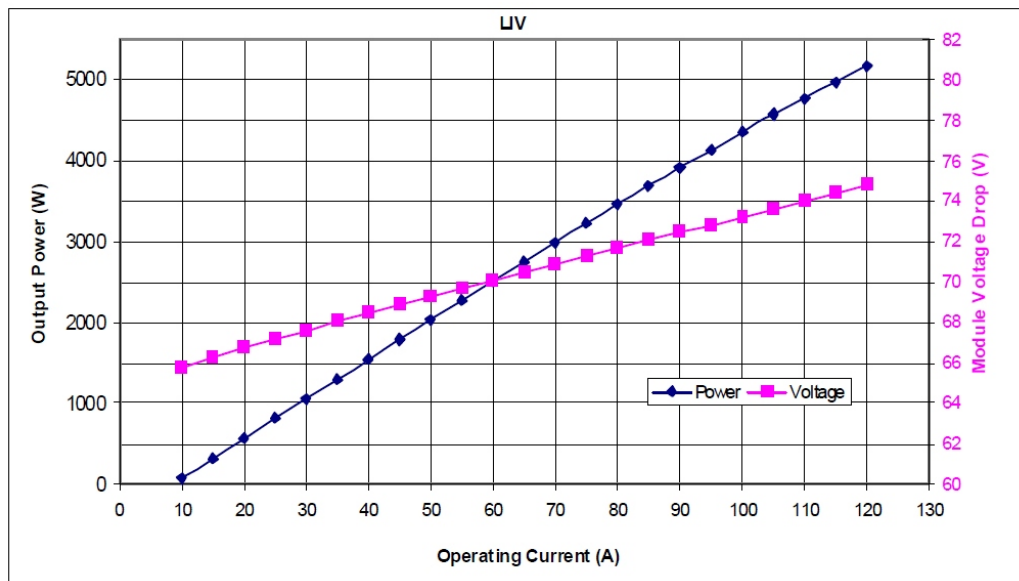


BrightLase[®] Ultra-5000 KW Lasers

Features

- BrightLase[®] technology
- Laser line generator with power up to 5KW
- Optimized for cladding and heat treating applications
- High- power free space beam for a large working distance (>300 mm)
- >50% wall plug efficiency
- Temperature sensors and aiming beams standard
- Compact design, small footprint
- Insensitivity to back - reflection



Warning: Class 4 Laser, Invisible Laser Radiation – Avoid Eye or Skin Exposure to Direct or Scattered Radiation.

For reference only. Product specifications may change without notice.

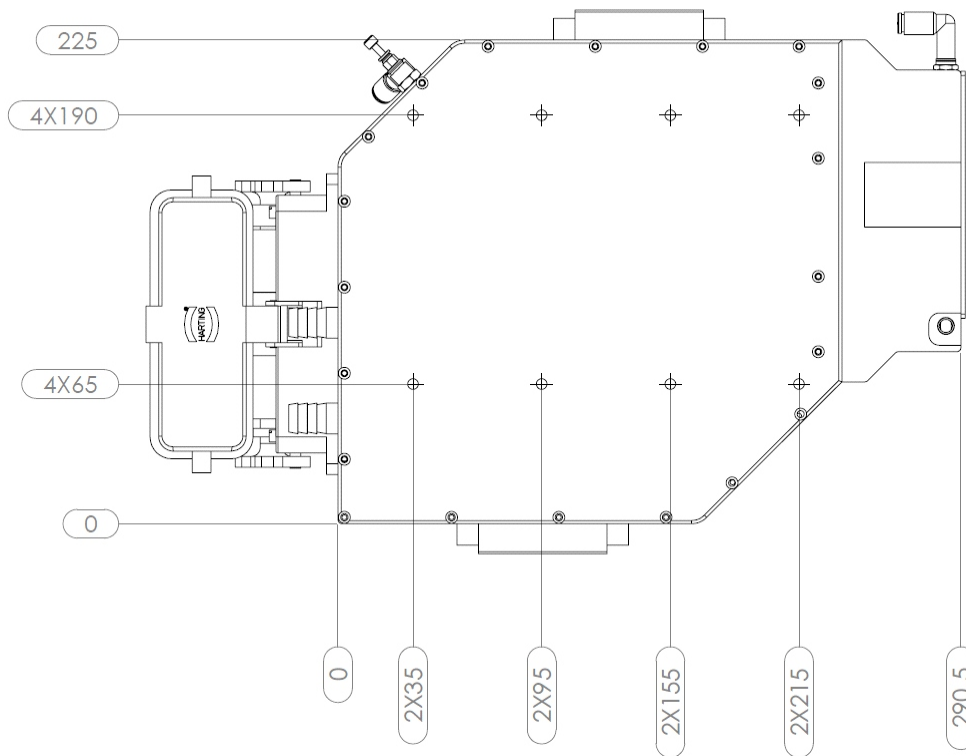
BrightLase[®] Ultra-5000 KW Lasers

Module P/N	Units	8509-0002	8509-0004
Optical Parameters			
Output power	W	2000	4000
Operating Current	A	<95	<95
Operating Voltage	V	<37	<74
Wavelength	nm	976+/-10	976+/-10
Laser beam size			
a)Focusing lens EFL=375mm	mm	3.0×14	3.0×14
b)Focusing lens EFL=350mm	mm	2.8×13	2.8×13
c)Focusing lens EFL=300mm	mm	2.4×11	2.4×11
Thermal Paramters			
Operating Temperature	°C	5 to 45	5 to 45
Storage Temperature	°C	0 to 60	0 to 60
Mechanical			
Medule dimensions	mm	See outline drawing	See outline drawing
MCC cooling requirement			
Coolant		DI water	DI water
DI water resistivity	MΩ • CM	0.2~0.5	0.2~0.5
Water Temperature	°C	20	20
Water flow rate	LPM	>=10	>=20
Particle filter (block all particles greater than this size)	μ m	35	35
Module housing cooling requirement			
Coolant		Tap water	Tap water
Water Temperature	°C	10~25	10~25
Water flow rate	LPM	10	10
Purging air requirement			
Air type		Filtered dry air	Filtered dry air
Particle size	μ m	<5	<5
Oil concentration	mg/m ³	<5	<5
Air pressure	KPa	100~300	100~300
Air flow	L/Min	>0.1	>0.1

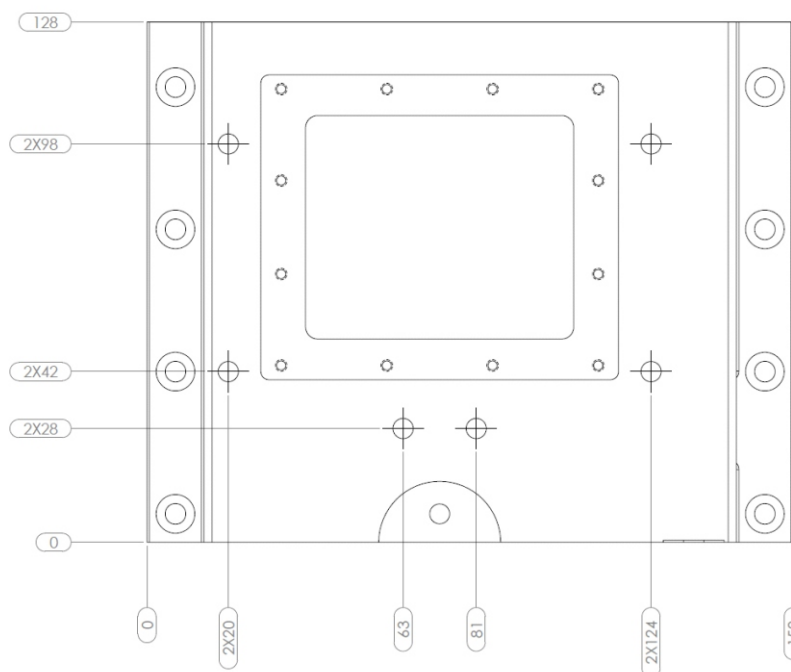
Notes:

- 1) Data at operating temperature, unless otherwise stated
- 2) Reduced lifetime if used above nominal operating conditions
- 3) A non-condensing environment is required for storage and operation
- 4) A qualified LD driver is required to operate the Ultra-5000 series high power lasers, consult factory for recommendations

BrightLase[®] Ultra-5000 KW Lasers



Bottom View: Laser head mounting holes location



Front View: Hood mounting holes location