

MISTRAL UV

Diode pumped Master Oscillator Power Amplifier laser system combining a short pulse microlaser with a rod-type fiber amplifier

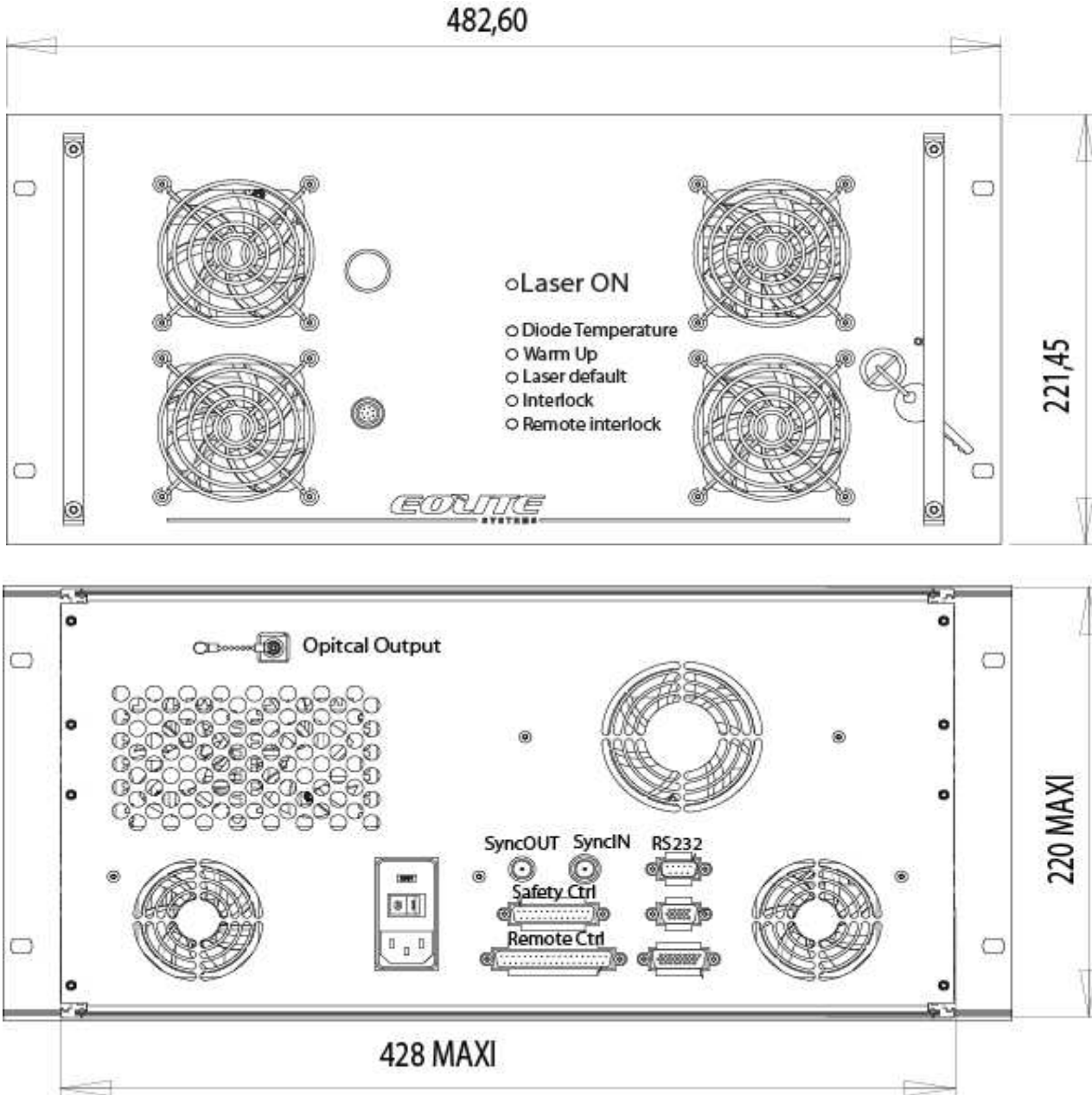
- 355 nm
- < 1.1 ns
- 4 – 22 kHz
- > 70 µJ @ 15 kHz
- air cooled system



micro-machining · LIDAR · analytics

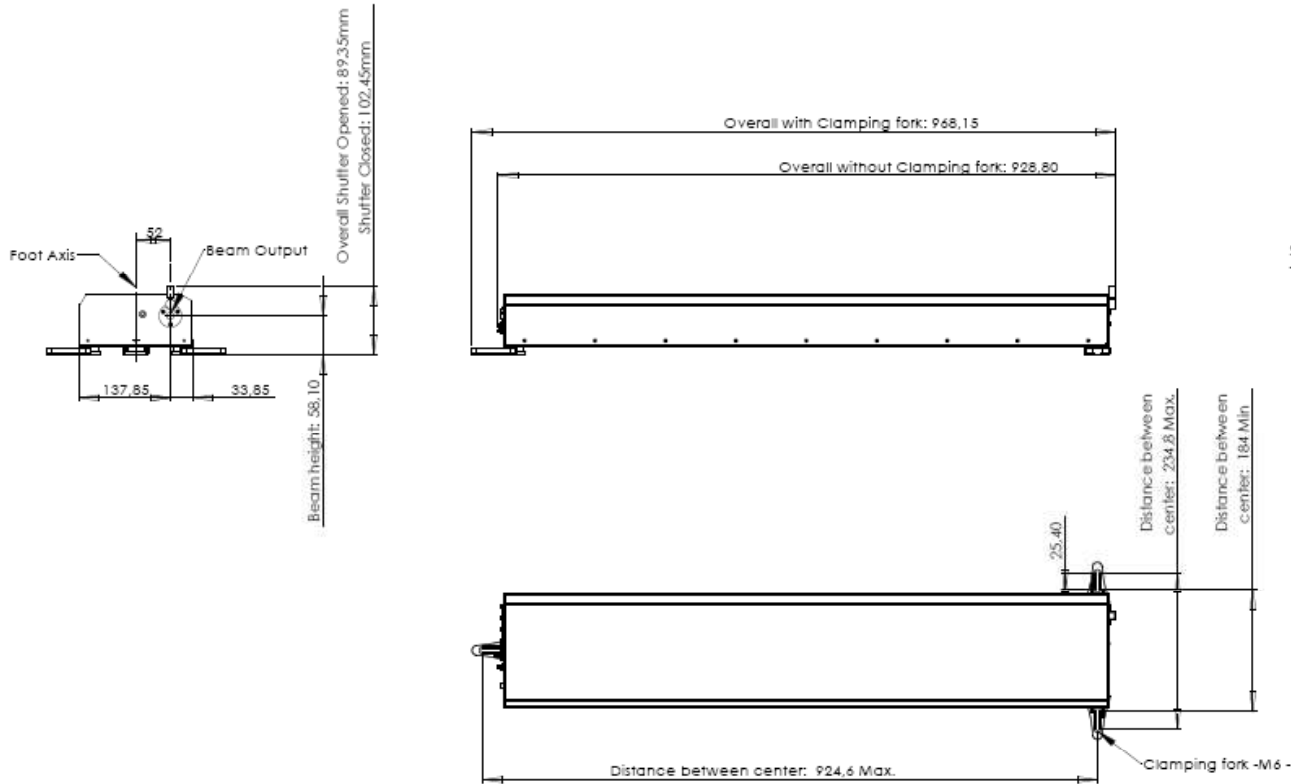
Optical Data	Wavelength	355 nm	
	Pulse Repetition Rate	4-15 kHz	10-22 kHz
	Spatial Mode	TEM ₀₀	
	M ²	≤ 1.4	
	Beam Divergence (full angle)	< 1.0 mrad	
	Beam Ellipticity	< 1.2	
	Waist Diameter	0.9 mm	
	Beam Diameter	1.1 mm ± 0.1 mm (at laser exit)	
	Average Power	> 1.0 W @ 15kHz	> 1.1 W @ 22kHz
	Pulse Energy	> 70 µJ @ 15kHz	> 50 µJ @ 22kHz
	Pulse Width (FWHM)	≤ 1.1 ns	
	Polarization Ratio	> 100:1, vertical	
	Long term pulse energy stability (6 hrs)	< ± 3 %	
	Laser Classification	4 / IV	
Optical Output	Free Beam		
Electrical Data	Electrical Power Consumption	< 550 W	
	Line Voltage	90 - 265 V AC (50-60 Hz)	
Interface	TTL and RS 232 and Remote Control		
Miscellaneous	Warm-up Time	< 5 min	
	Operating Temperature	15 - 35 °C	
	Weight	Laser Head	15 kg
		Electronic Unit	22 kg
Options	Electrical driven switch from 355 nm to 532 nm		
	Synchronization signal output (rise time < 2 ns)		

Laser Electronic Unit



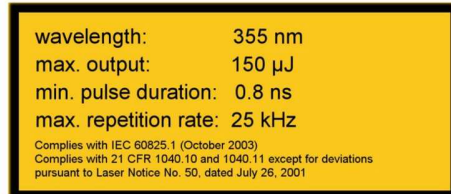
Front and back view of the Laser Electronic Unit
(length = 462mm)

Laser Head



Top and side view of the Laser Head

Laser Safety Labels



Dec 2008

MISTRAL laser family is a result of cooperation between

