

## Dimmable green laser | 3D modelling | Metrology

The Skate Laser is a precision subsea laser designed for subsea applications that require a high quality image reference such as 3D modeling, machine vision, pipeline inspections, or marine species measurements.

It is available in various patterns and beam angles, including solid line beam or dotted grid pattern. SubC LEDs and lasers are plug-and-play when coupled with the [Rayfin camera](#).



Specifications		Skate Line Laser	Skate Grid Laser
Laser Specs	Uniformity	=/- 20% (related to average power, within 80% of the line)	Dot spacing 24mm @ 1m distance
	Pattern Type	53.6° - line	17.1° - 10 x 10 dot grid
	Focus (Depth of Field)	0.1m - 5m <i>*SubC can adjust the focus at factory</i>	
	Output Power	100 (mW-max.)	70 (mW-max.)
	Wavelength	520nm (green)	
	Class	3B (avoid direct exposure - laser protective eyewear required)	
Electrical	Input Voltage	17-30 Vdc (OV cutoff > 30 Vdc)	
	Power Consumption	3W	
	Serial Control	RS485 @ 9600	
	Diode Temperature Protection	Auto dimming after 47.5°C diode temperature and cutoff at 49.5°C	
Mechanical	Material	Sapphire, Grade 5 Titanium	
	Depth Rating	6000m	
	Weight (in air)	0.59kg	
	Weight (in water)	0.4kg	
	Operating Temperature	-20°C - +30°C	
	Storage Temperature	-20°C - +50°C	
TTL Specs	TTL Control	Can work both inverted and non-inverted TTL depending on the setting. The default is inverted TTL. If no TTL is present, the laser defaults ON.	
	TTL Max. Frequency	Up to 100 KHz	
	TTL Low	0-1.5 Vdc	
	TTL High	1.5-5 Vdc	

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Titanium and sapphire construction

# 6000m

6000m depth rating



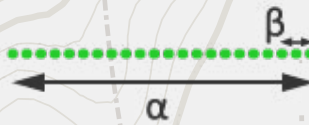
520nm, 100mW, Class 3B laser

# Skate Laser (Custom Options)

Line (Solid)



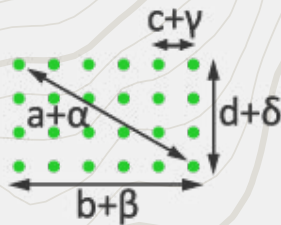
Line (Dot)



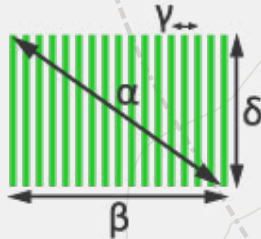
Cross (Solid)



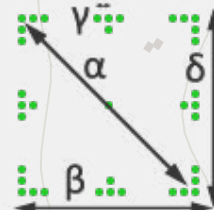
Grid (Dot Matrix)



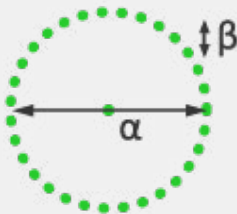
Parallel Lines (Solid)



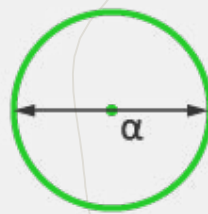
View Finder (Dots)



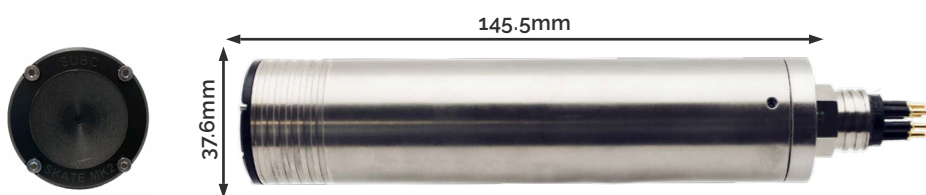
Circle (Dots)



Circle (Solid)



Single Dot



Pin #	MCBH5M Titanium
1	GND
2	17 - 30 Vdc
3	TTL Modulation
4	RS-485 B(-)
5	RS-485 A(+)



SubC is here to help you plan your next project.

Our equipment is available for direct purchase or rental. To speak with an expert or schedule a demo please [contact us](#).

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