

## C-Laser ND: Yag 12 and 20W



ND:YAG 1064 nm for static or dynamic  
"On Fly" marking on electrical, electro-  
nic components and metallic materials.

# C-Laser ND:Yag

The laser marking system ND:YAG 1064 nm offers many advantages compared to the systems available on the market: better marking quality (diameter of the laser beam – 80 µm), smaller dimensions of the marking head, more duration (over 20.000 hours of operation) and less costs thanks to its low consumption, air cooling, maintenance and downtimes.

C-LASER series, with an average power of 12W and 20W, can mark metals thanks to the laser process of the “black marking” (alteration of colour due to micro-variations at surface level) or of the “deep marking” (engraving).

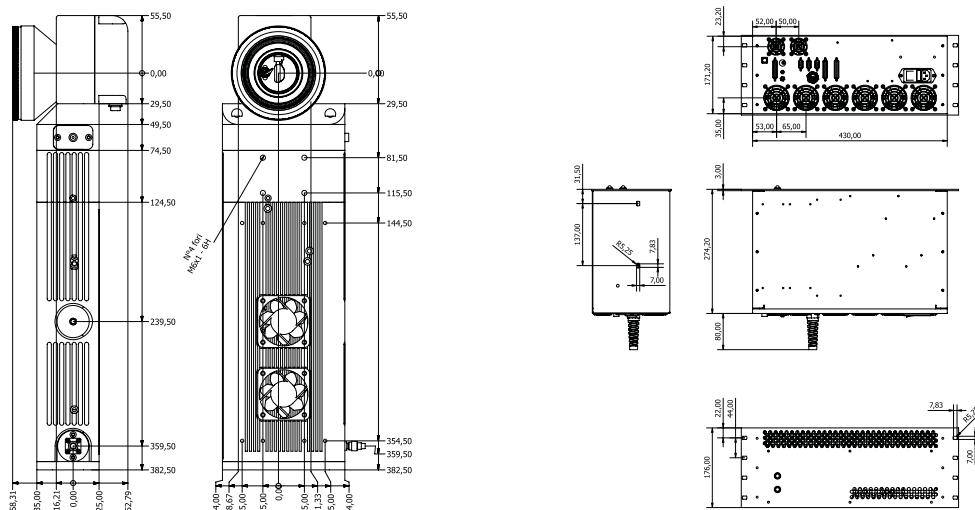
Plastic resins, instead, can be marked in high quality through processes of colour variation (carbonization), decolouring or formation of internal foam.

C-LASER12 is particularly suitable for the marking of products of the electronic industry such as semi-conductors, thanks to a reduced diameter of the laser beam of 50 µm.

C-LASER20 is particularly suitable for the marking of products of the mechanical industry such as metal parts (aluminium, steel, iron, brass, etc.) in high speed automatic working cycles with minimum marking times.

The series C-LASER MOF, “Marking On Fly”, is equipped with an encoder interface allowing to mark moving objects; besides linear and bi-dimensional barcodes (Datamatrix) and standard functions such as counters, expiry date and generation of lot numbers.



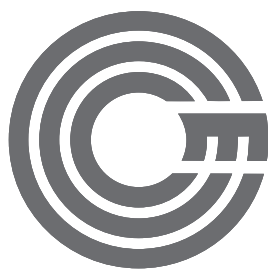


Laser Model	12W	20W
Rack Dimensions	19" ; 4U ; Altezza 250 mm	
Weight	18	
Power Supply	100 ÷ 240V ; 50/60 Hz	
Power	< 800W	< 1 KW
Cooling	Ad aria	
Resonator Sizes	118 x 60 x 353 mm (L x H x W)	
Scanner Head Sizes	69 x 77,9 x 78,5 mm (L x H x W)	
Resonator Weight	4	
Scanner Head Weight*	1,5	
Type	D.P.S.S.L.	
Wavelength	1064	
Polarization	Linear (100:1)	
Average Power CW	12 W	20 W
Beam Quality M2	< 1,5 (1,2 ÷ 1,3 Typ.)	< 1,5
Beam Diameter	3,5 mm (1/ez)	5 mm (1/ez)
Frequency Range	5 ÷ 200 KHz @ full power	10 ÷ 200 KHz @ full power
Peak Power	> 30 KW@10KHz (> 55 KW@5KHz)	> 330 KW@10KHz
Impulse Energy	> 700 µJ @ 10KHz	> 1 mJ a 10KHz
Impulse Duration	~ 18ns @ 10KHz	~ 30ns @ 10 KHz
Diameter F 100mm**	~ 50 µm	~ 45 µm
Diameter F 160mm**	~ 80 µm	~ 75 µm
Diameter F 254mm**	~ 130 µm	~ 115 µm

\* = with lens F-THETA 160mm

\*\* = based on the peculiar optics of the laser and calculations. Marking diameter may be much different according to the features of the material and working parameters.





Cicrespi SpA  
Industry  
I-20060 Liscate Milano Italy  
Via Trieste, 11  
Tel. +39.02.95.75.42.59  
Fax +39.02.95.75.42.68  
[marcatura@cicrespi.com](mailto:marcatura@cicrespi.com)  
[www.cicrespi.com](http://www.cicrespi.com)

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