

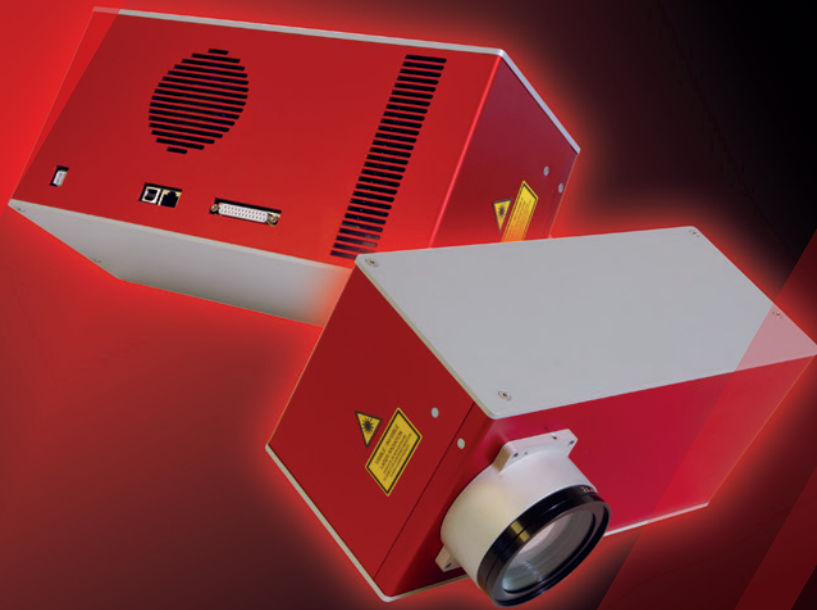
mpix
Laser • solutions

MP
DPSS
MARKING
LASER



**Advanced laser
marking systems
designed for
integration**

**MP2
MP3**



MP2/MP3 • DPSS MARKING LASER all in one

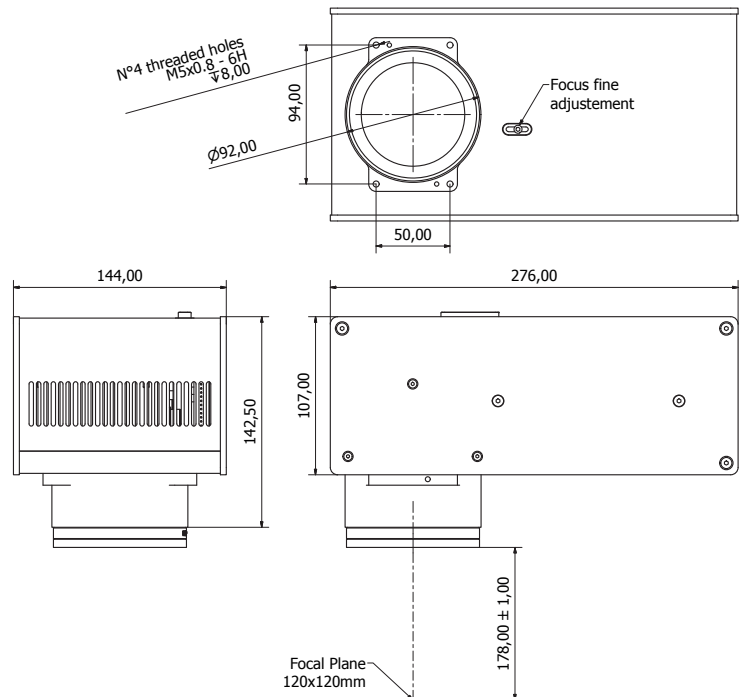
A new tool for your imagination

SYSTEM HIGHLIGHTS

- High peak power
- Large marking area
- Long lasting diode lifetime
- Extremely compact design: 4.5 kg
- Maintenance free
- The best “entry level” solution on the market
- Low price, high performance, no consumable
- Laser marker easy to plug, no warm-up

BEAM SPECIFICATIONS

	MP2	MP3
Output power	2 W	3 W
Mode of operation	High frequency pulsed	
Typical pulse width	3 ns	
Repetition rate	30 kHz	45 kHz
Operating voltage 24VDC	4,2 A	4,2 A
Pulse energy	67 μJ	67 μJ
Instantaneous power	22 kW	22 kW
Beam quality	M ₂ < 2	M ₂ < 2
Main wavelength	1064 nm (Infrared)	
Aiming beam wavelength	640 nm (Red)	



Dimensions are referred to F.L. 160 mm, objective diameter 85 mm.
Other different Focal Length objective are available upon request.

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Laser • solutions

OUR MISSION

Promote and provide laser solutions for data marking and industrial demanding applications by offering high value systems, products and services.

- DSP (Digital Signals Processing) card integrated
- USB and Ethernet connections available
- Extended variety of libraries & customized industrial software on demand

MARKING CAPABILITIES

	mm		mm		mm	
Nominal focal length	100		160		254	
Objective diameter	M85	M39	M85	M39	M85	M39
Marking area	60x60	50x50	120x120	100x100	175x175	160x160

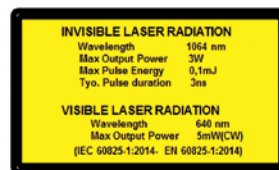
MATERIALS TO BE PROCESSED

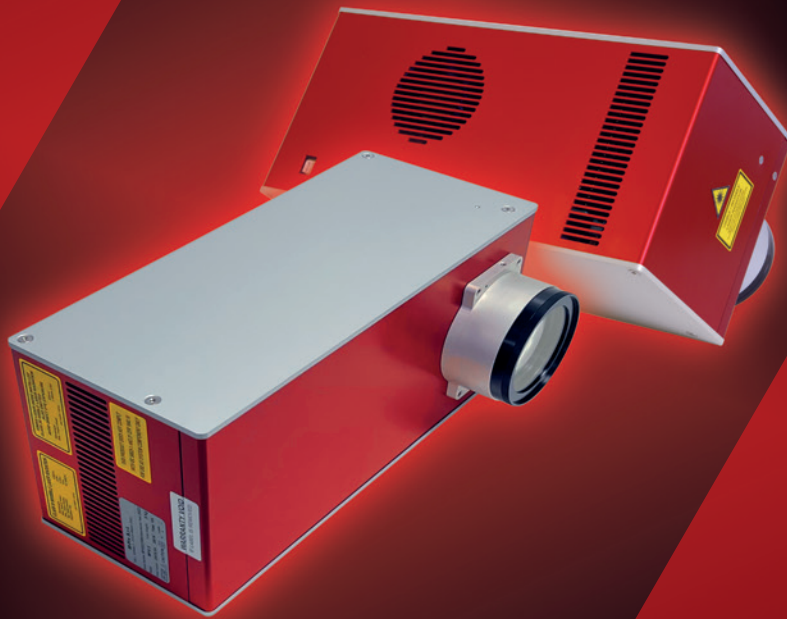
- Plastics
- Anodized aluminium
- Stainless steel / Titanium
- Hard Metals for Tools (Widia / Cr Mo)
- Gold and other precious materials
- Brass and copper

ENVIRONMENT SPECIFICATIONS

Working temperature	15 – 35 °C
Thermoelectric cooling system	Forced Air Loop / Integrated
Relative humidity	Max Rh 85% non Condensing

CLASS 4 Laser Product (EN 60825-1)





MP10

MP10 • DPSS MARKING LASER all in one

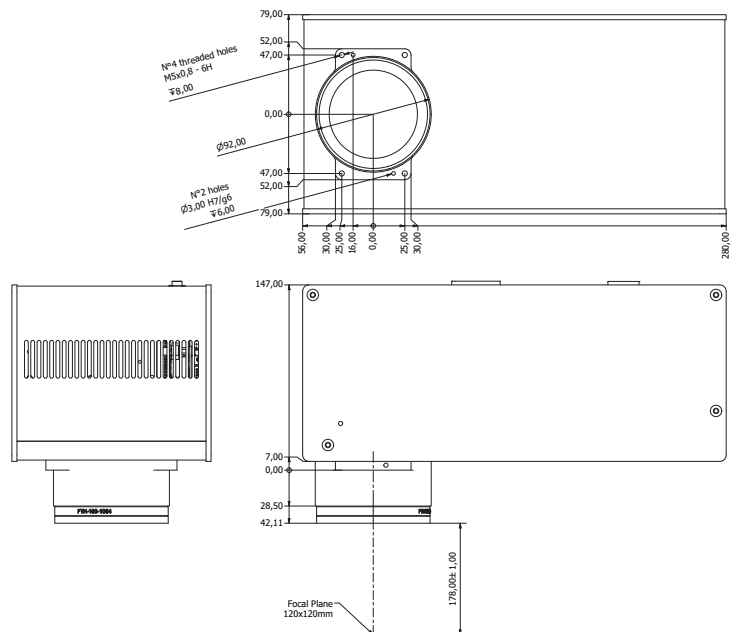
A new tool for integration

SYSTEM HIGHLIGHTS

- High power diode pumped YVO laser
- Adjustable repetition rate
- Two blocks, the laser head and the control box for flexible integration
- All on board, DSP digital signal processor, marking software
- USB and Ethernet connectivity
- Air cooled
- Long lasting laser diode lifetime based on single emitter diode technology
- Excellent dynamic response in grey tones for bit map files in ID plastic card

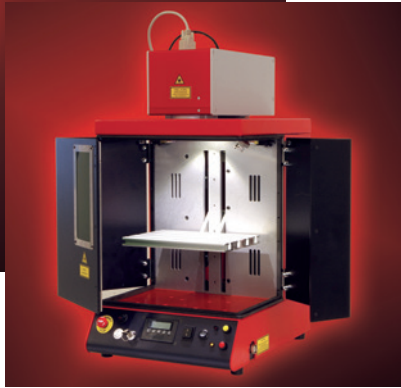
BEAM SPECIFICATIONS

	MP10S
Output power	8.6 W (@80kHz)
Mode of operation	Active Q-switched
Typical pulse width	12 ns (@20kHz)
Repetition rate	10 up to 100 kHz
Operating voltage 24VDC	8.5 A
Pulse energy	400 μ J (@10kHz)
Instantaneous power	40 kW (@10kHz)
Beam quality	$M_2 < 2$
Main wavelength	1064 nm (Infrared)
Aiming beam wavelength	635 nm (Red)



Dimensions are referred to F.L. 160 mm, objective diameter 85 mm. Other different Focal Length objective are available upon request.

MARKING ACCESSORIES

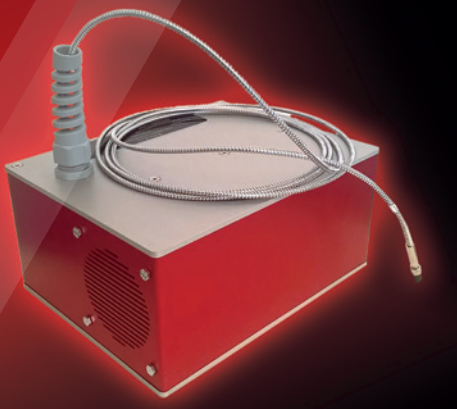


GULLWING • BELLBOX • ROTATING DEVICE • EXHAUST/FILTER •

- Protective housing, class 1 laser safety, suitable for the integration of all MP family lasers: from 2 up to 20 W
- Two standard sizes: Gullwing, the “entry level” and BelBox the “professional one”
- Complete choice of accessories to improve the productivity and make easier your laser operations
- Filter for exhaust marking fumes

SOLDERING

by optical fiber



MP-DD-30/60 •

- Direct diode soldering solutions
- Single direct laser emitting diode
- Compact dimension for an easy integration
- Fiber core from 100µm
- 30W and 60W nominal CW output power
- Available also 100W
- Several optics peripherals to match and make easier the process

CODING

on the fly

MP-DOTS •

- High speed dot marking laser “on the fly” (reaching up to 180 m/min)
- Cutting edge technology based on multihead single direct laser emitting diode
- Respect for the environment, no waste, no ink, no smoke and no consumable
- 400W max power
- Typical 100 micron spot diameter
- Typical 7x5 dots matrix character
- Multi rows possibilities



The Company

M-Pix is an Italian company that produce innovative solutions and products for industrial marking for the personalization of cards and passports in the ID sector, and for the marking of IVD Medical instruments.

M-Pix develops, designs and manufactures laser sources, thanks to the expertise and experience of a team of talented engineers.

We have extensive capability in laser application and integration thanks to many years of experience in the international laser market, working closely with first-class laser component suppliers and leading integration companies

M-Pix S.r.l.

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