

laser marking

LMV1000

Nd:YVO4 Laser Marker (Vanadate)

- High speed, fine marking of metals and plastics
- Lowest marking cost per watt of laser power
- Windows® XP based software
- Single phase power, 115 or 230V
- Air cooled
- Diode pumped
- Very small footprint
- Workstations and accessories available



Miyachi Unitek's LMV1000 diode pumped laser marker is specifically designed for high speed precision marking applications on both plastics and metals.

LMV1000 employs not only a different crystal lasing medium, Nd:YVO₄ (also known as vanadate), but also end pumping technology which offers a number of advantages; increased lasing efficiency, higher peak power density, shorter Q-switch pulse durations, and better beam quality. The result is a smaller spot size, finer line thickness and smaller character or feature sizes.

LMV1000 can produce line widths down to 20 microns, character sizes to 100 microns, and data matrix codes with 20 micron cell sizes using standard length lenses, such that working distances remain practical.

Marking Styles

- Alphanumerics, logos, graphics, bar codes, 2D codes
- TrueType® fonts
- Single stroke fonts

Marking Applications

The LMV1000 marks carbon and stainless steels, bare and anodized aluminum, ABS, lexan, titanium, automotive and other plastics, and more...

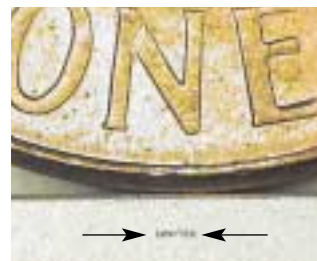
TYPICAL APPLICATIONS



2D Code in Titanium



Fine Bar Coding



Fine Metal Marking (Next to Penny)



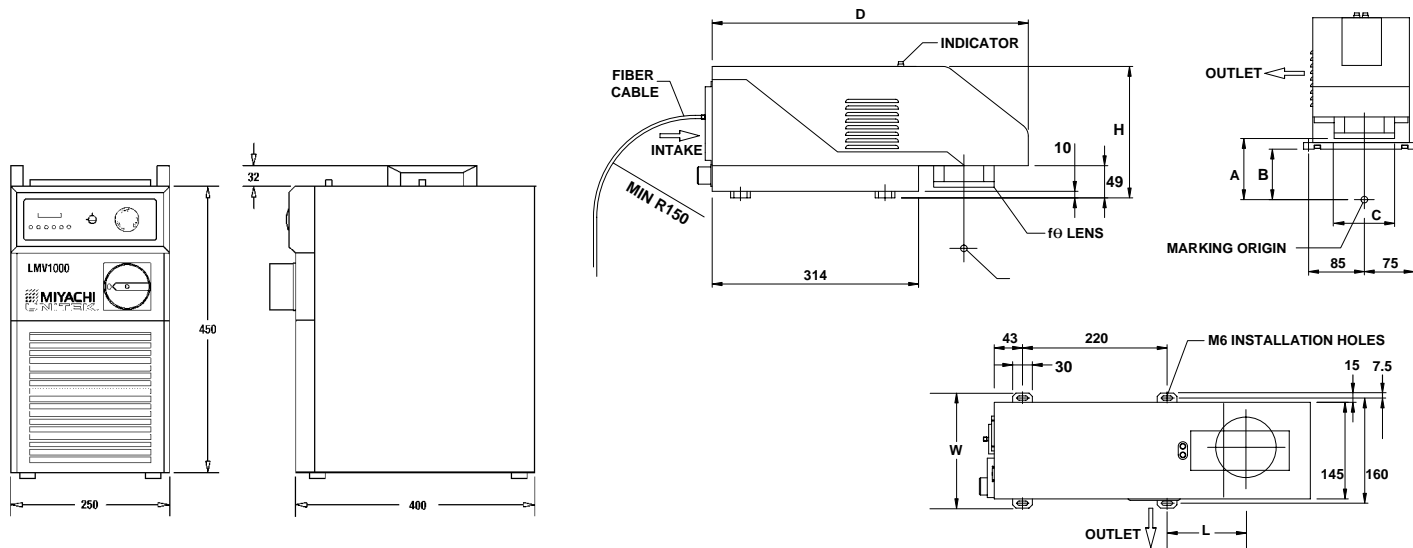
High-resolution Marking

LMV1000 Nd:YVO₄ SPECIFICATIONS

	F-θ Output Lens							
	75mm	100mm	150mm	160mm	254mm	270mm	300mm	420mm
Field Size: Inches (mm)	φ1.54 (39)	φ3.15 (80)	φ4.72 (120)	3.94 x 3.94 (100 x 100)	5.91 x 5.91 (150 x 150)	φ8.50 (216)	8.27 x 8.27 (210 x 210)	11.57 x 11.57 (294 x 294)
Working Distance: Inches (mm) (A)	3.66 ± .04 (93 ± 1)	4.33 ± .04 (110 ± 1)	6.69 ± .08 (170 ± 2)	6.89 ± .08 (175 ± 2)	11.77 ± .12 (299 ± 3)	12.32 ± .12 (313 ± 3)	14.09 ± .16 (358 ± 4)	19.45 ± .20 (494 ± 5)
Physical Mark Distance: (mm) (B)	(77.5 ± 1)	(103 ± 1)	(165 ± 2)	(159 ± 2)	(308 ± 3)	(327 ± 3)	(369 ± 4)	(508 ± 5)
Lens Dimension: (mm) (C)	(92 x 92)	(92 x 92)	(92 x 92)	(92 x 92)	φ120	φ106	φ124	φ120
Power / Q-switch:	10 W / 0.1 to 99.9 kHz pulse frequency							
Pump Source:	Laser diode, end pumped							
AC Power Requirements:	Single phase, 90-130 VAC/180-260 VAC, 50/60 Hz, 10A							
Environment: Ambient Temperature	68 ± 27°F (20 ± 15°C)							
Relative humidity	40% – 80% RH (Non-condensing)							
Installation Site	Free from vibration or impact							

PHYSICAL CHARACTERISTICS

	Power Supply	Laser Head (STD) Standard Head	Laser Head (EXP) Expandable Head
Footprint: Inches (mm) W x D x H	9.8 x 15.7 x 17.7 (250 x 400 x 450)	6.9 x 18.9 x 7.9 (175 x 480 x 200)	6.9 x 23.6 x 8.7 (175 x 600 x 220)
Weight: Lbs. (Kg)	52.9 (24)	28.7 (13)	35.3 (16)
Marking Origin Offset: Inches (mm) (L)		4.72 (120)	8.66 (220)



Your Local Representative



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