LaserMark® 950/960 Series

Mask-Based Pulsed CO_2 Laser Marking Systems

Reliable, fast, on-the-fly marking and coding of pharmaceutical products, electronic components and consumer packaging

- **Eliminates inks and other high cost / environmentally-unfriendly consumables**
- **Fast “on-the-fly” marking of moving parts**
- **Permanent, multi-character marks applied instantaneously in a single pulse**
- **Reliable, proven fourth-generation product with solid-state technology for low cost of ownership**
- **Range of beam delivery modules**
- **Easy integration with full support from LightMachinery**

LightMachinery
Excellence in lasers and optics

LaserMark® Means Marking and Coding

Move away from messy ink-based marking systems with their high consumables costs, environmentally-unfriendly chemicals and non-permanent mark characteristics. The **LightMachinery LaserMark Series** provides a fast and reliable means of applying high-quality permanent marks (for example: logos, date and batch codes, security codes, product designations) to pharmaceutical products, consumer packages and electronic components. High throughput, fast-moving parts can be marked "on-the-fly" without smearing or degradation of mark quality onto inked papers and cards, foils, painted or anodized metals, glass and many types of plastics.

On-the-Fly Mask-Based Marking

LaserMark lasers operate on a mask or stencil principle – similar to that of a slide projector. The mark is defined by an etched metal mask which is illuminated by a large-area infrared pulse from the **LaserMark** laser. The mask / stencil is imaged with a lens onto the target product so that its pattern is permanently applied to the surface of the product. Since this happens almost instantaneously (a few microseconds), motion of the part has no effect on mark quality. Multi-character marks or complex patterns such as logos and data-matrix codes can be applied in a single pulse.

For applications involving serialisation or other frequent mark changes, automated mask changers are available

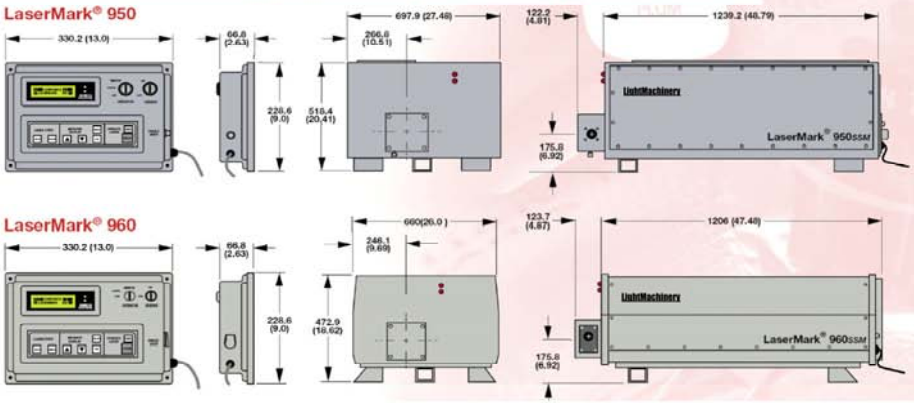
Efficiency and Reliability Assured

The **LaserMark Series** (originally developed by Lumonics Inc. and now offered by LightMachinery Inc.) provides ease of operation, extreme reliability, and high uptime in production environments. Solid-state SSM modulators and ultra-low gas flow ensure minimal consumable and maintenance costs. The **LaserMark 960 Series** lasers are sealed to NEMA 12 standards for general purpose marking applications. For more demanding environments, the **LaserMark 950** Series offers NEMA 4 compatibility.

The unique features of the **LaserMark Series** have established it as the marking and coding system of choice for many customers in the food and beverage packaging, cosmetic, pharmaceutical and electronics industries

Specifications	950	960
Sealing Standard	IEC 529 (IP66), NEMA 4	NEMA 12
High Voltage Switch	*SSM* – Solid State Modulator	
Electrical Standards	IEC 204:EN 60204	
Weight	188 kg (414 lbs) with remote	181 kg (398 lbs) with remote
Laser Gas Mix	LaserMark 5 commercial laser premix	
Voltage Options	100V, 115V, 200V, 230V, 240V, 50/60 Hz, 2.0 kVA, single phase	
EMI	EN50081-2; EN50082-1; FCC Part 15, Subpart Class A	
Water Cooling	90 litres (24 US gal) per hour at 10-25°C (50-77°F)	
RS-484 Interface	Yes	Yes
Internal Gas Bottle Option	Yes	No

Model	950/960	952/962	954/964	956/966	958/968VHS
Marks per Second	12	15	20	30	150
Marks per Hour	43200	54000	72000	108000	540000
Pulse Energy (J)	5.7	3.9	2.5	1.8	0.5
Beam size (HxV, mm) at laser	25 x 25	25 x 25	18 x 25	12 x 16	14 x 11



Dimensions in mm (inches)

Specifications are subject to change. Please consult LightMachinery for further details.

www.lightmachinery.com

LightMachinery

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INVISIBLE LASER RADIATION
AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION
CLASS 4 LASER PRODUCT
BS EN 60825-1:2001
MAX.OUTPUT: 10J 200W
LASER MEDIUM: CO_2
PULSE DURATION: 1 - 10µs
WAVELENGTH: 9 - 11µm

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