

Product Sheet

LaserEvo Green laser Emerald series

Category: Green Laser

Emerald series – Gentle laser technology for precise micro-marking

The Emerald series is designed for sensitive materials where heat must not affect the result. With extremely short pulses and a spot size of less than 20 μm , it creates sharp, detailed markings without burns or deformation. Perfect for micro-marking needs in plastics, reflective metals and delicate surfaces – an advanced solution where precision and safety are paramount.

- High-precision marking without heat impact
- Micro-marking with extreme sharpness
- Industrial performance & reliability

Product description

Emerald series – High-precision, cold laser marking for sensitive materials

The Emerald series is the perfect solution for marking plastics, reflective metals and heat-sensitive materials. Thanks to an extremely short pulse length, Emerald lasers create sharp, high-resolution markings without causing burns or deformation – a revolution in "cold" laser marking.

With a spot size of less than 20 μm , you can achieve exceptionally clear and accurate markings, making the Emerald series ideal for micro-marking applications. The laser is designed for industrial use and offers high performance, reliability and customisation options to meet specific needs.

We provide Class 1 enclosures for safe operation and a wide range of options such as linear axes, rotary axes and rotary tables. The Emerald series is the ultimate solution for companies that demand precision, durability and maximum customisation.

Description:

- High-precision marking without heat impact – Ideal for plastics, reflective metals and thin, delicate materials.
- Micro-marking with extreme sharpness – Dot size of less than 20 μm for incredible detail and readability.
- Flexible and adaptable – Can be integrated into production lines and customised with rotary tables, linear axes and more.
- Industrial performance & reliability – Designed for continuous operation and long service life.
- Safe and user-friendly – Class 1 enclosures and intuitive control systems ensure safe and efficient operation.

Marking materials

- Plastic (including transparent materials)
- Highly reflective metals (gold, silver, copper)
- Ceramics
- Thin or heat-sensitive materials

Supported file formats

- Vector: .ai, .dxf, .plt, .svg

Technical Specification

Machine Specifications	
• Laser source	DPSS laser
• Wave length	532 nm
• Output power	10W
• Cooling system	Water-cooled
• Power supply	230 V, single phase 50/60 Hz
• Energy consumption	400W
• Marking area (X/Y)	110×110 mm (with 163 mm marking area), optional 175×175 mm (with 254 mm marking area)
• Communication	Serial connection, TCP/IP, import of data from .txt or .xls
• Data management	Date code, time, serial number, barcode, QR code, DataMatrix