



# UV Laser Marking System

# Grentsun® GSL9105

Our UV laser delivers high-contrast, permanent codes enabling product lifetime track and trace security for pharmaceutical, medical and cosmetic manufacturers.

Packaging operations that require high-quality, traceable codes for camera readability can rely on the G r e n t s u n UV  $% \left( {{\rm UV}_{\rm s}} \right) = 0$ 

laser to help meet industry regulatory requirements, such as the U.S. Food and Drug Administration' s Unique Device Identification. Direct marking of permanent codes helps prevent the risk of counterfeiting or manipulation to your product identification.

The 9105 applies crisp 2D,

alphanumeric and other typical

codes at high speeds onto high-density polyethylene fibers such as DuPont<sup>™</sup> Tyvek<sub>®</sub> and commonly used, rigid plastic materials such as white HDPE and LDPE. Grentsun multi-

I a n g u a g e Software helps ensure the same mark quality can be achieved on rotational devices as well as straight line applications.



# UptimeAdvantage

- Zero consumables to replace during day-to-day operation keeps lines running longer
- Maximum printer availability with air-cooled laser source that virtually eliminates unscheduled down time
- No daily mechanical maintenance procedures help increase uptime

# **Built-in productivity**

- High throughput on both rotary and linear applications up to 250 products per minute
- UV wavelength enables high speed marking-on-the-fly of HDPE/LDPEpackaging to increase efficiency
- Mark quality, vision readable 2D codes up to (5.0 m/sec.)

## **Code Assurance**

- Permanent codes help ensure complete product lifetime traceability and anti-counterfeiting
- Grentsun Software feature enables consistent high-quality markson rotational devices virtually eliminating distortion
- Repeatable high contrast color change for top grade vision readability on white HDPE/LDPE packaging

# Simple usability

- Coding processes are simplified through the ability to mark any code, inany orientation, anywhere on the product
- UV wavelength marks high resolution and high contrast onto HDPE/ LDPE without the need for additives and revalidation of packaging materials

# **Grentsun<sup>®</sup> GSL9105** UV Laser Marking System

Marking fields

175x175 mm² (SS10, f=103 mm) - 375x375 (SS07/SS10, f=511 mm)

Marking heads Zhibo-tech high accuracy galvanometer and Hansel lens

Marking speed Up to 500 characters per second;984 ft/min (300 m/min), 7000mm/s

Lasersource Pulsed Nd:YVO4(Vanadat) Powerclass: 4 Central emission wavelength:355nm

Beam deflection high-speed galvanometer scanners

Beamorientation

90-degree

Operator interface Ezcad software on PC/ PLC; configurable in 14 languages

### Language capabilities

Traditional Chinese, English, Arabic, Farsi, French, German, Korean, Polonais, Portugesa, Russian, Simplified Chinese, Spanish, Thai, Vietnamese

### Communication

Ethernet, TCP/IP and RS232, digital I/Os Inputs for encoders and product detector triggers I/Os for start, stop, external error, job select, trigger, trigger enable, encoder; system ready, ready to mark, marking, shutter closed, error, bad, good signals and machine/operator interlocks

#### Integration

Direct integration into complex production lines via scripting interface Integration via Ethernet and RS232 interface

 ${\sf Highly\ precise\ side\ guided\ height\ adjustment\ via\ mounting\ with\ T-nut\ baseplate}$ 

### CAUTION VISIBLE AND INVISIBLE LASER RADIATION LASER CLASS 4

AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION

WAVELENGTH 0.35 - 0.36 μm 0.52 - 0.55 μm 0.79 - 0.82 μm 1.04 - 1.07 μm MAX. POWER 5 W 1 mW 1 mW 5 mW MAX, PULSE

1 mJ/4 ns

0.4µJ/5 ns

cw 2uJ / 5 ns

(EN 60825-1:2014)

Electrical requirements 100-240 VAC (autorange), 50/60 Hz

Power consumption Typically 600Watt, 10A

Cooling system Aircooled

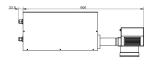
Environment 50 - 104° F (10-40°C) (non-condensing)

Sealing and safety standards Marking unit: IP54 Supply unit: IP54 LASER CLASS 4 product (acc. to IEC / EN 60825-1:2014)

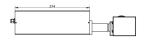
Approximate weight Supply unit: 44 lbs. (20 kg) Marking unit: 55 lbs. (25 kg)max, without F-Theta lens

Applicablecertifications CE, CB, TÜV/NRTL

#### Marking unit dimensions

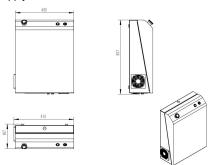








Supply cabinet dimensions



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