



Laser Marking System

Videojet® 7810 UV Laser

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 Videojet UV 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 7810 applies crisp 2D, alphanumeric and other typical codes at high speeds onto high-density polyethylene fibers such as DuPont™ Tyvek® and commonly used, rigid plastic materials such as white HDPE and LDPE. Videojet 360° Arc Compensation Software helps ensure the same mark quality can be achieved on rotational devices as well as straight line applications.



Uptime Advantage

- 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 downtime
- 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/LDPE packaging 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
- Videojet 360° Arc Compensation Software feature enables consistent high-quality marks on 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, in any 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

Videojet® 7810

UV Laser Marking System

Marking fields

64x76 mm² (SS10, f=103 mm) - 375x375 (SS07/SS10, f=511 mm)

Marking heads

SS10 and SS7 with focusing lenses: f=103 mm/160 mm/214 mm/511 mm

Marking speed

Up to 500 characters per second; 984 ft/min (300 m/min)

Laser source

Pulsed Nd: YVO₄ (Vanadat)
Power class 2-Watt
Central emission wavelength: 355nm

Beam deflection

2 high-speed galvanometer scanners

Beam orientation

90-degree

Operator interface

Smart Graph software on PC; configurable in 12 languages

Language capabilities

Chinese, Czech, Dutch, English US, French, German, Italian, Japanese, Polish, Portuguese, Russian, and Spanish

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
Highly precise side guided height adjustment via mounting with T-nut baseplate

Electrical requirements

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

Power consumption

Typically 400Watt, 10A

Cooling system

Air cooled

Environment

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

Sealing and safety standards

Marking unit: IP20
Supply unit: IP21
LASER CLASS 4 product (acc. to IEC / EN 60825-1:2014)

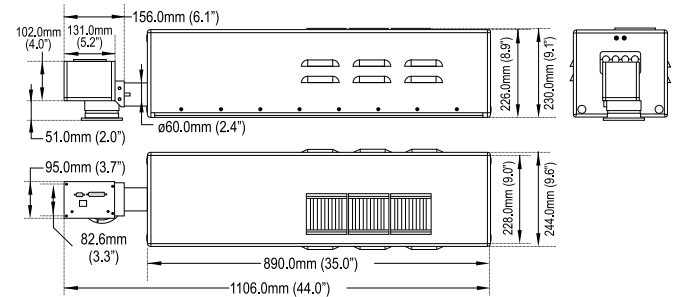
Approximate weight

Supply unit: 44 lbs. (20 kg)
Marking unit: 106 lbs. (48 kg) max, without F-Theta lens

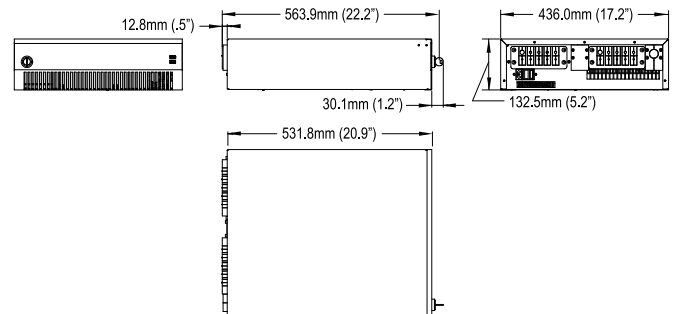
Applicable certifications

CE, CB, TÜV/NRTL

Marking unit dimensions



Supply cabinet dimensions



CAUTION VISIBLE AND INVISIBLE LASER RADIATION LASER CLASS 4

AVOID EYE OR SKIN EXPOSURE TO
DIRECT OR SCATTERED RADIATION

WAVELENGTH	MAX. POWER	MAX. PULSE
0.35 - 0.36 µm	10 W	1 mJ / 4 ns
0.52 - 0.55 µm	1 mW	0.4 µJ / 5 ns
0.79 - 0.82 µm	1 mW	cw
1.04 - 1.07 µm	5 mW	2 µJ / 5 ns

(EN 60825-1:2014)

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