



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 colour 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 mm<sup>2</sup> (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: YVO<sub>4</sub> (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)

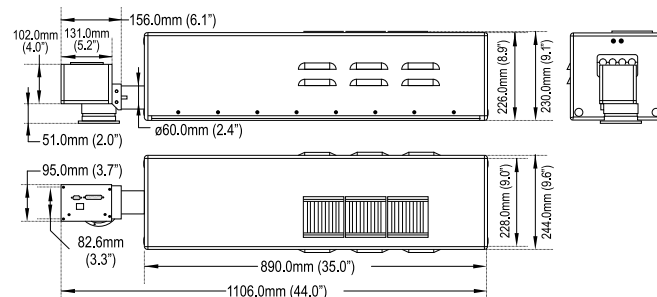
### Approximate weight

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

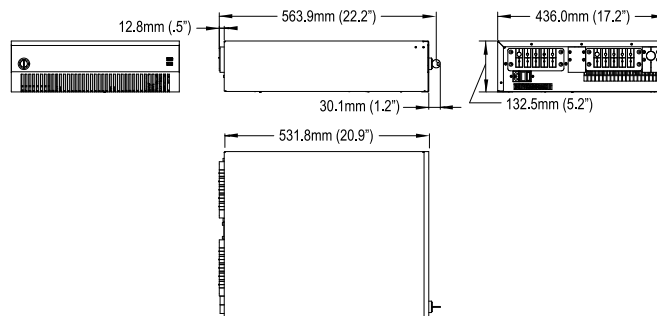
### Applicable certifications

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)

Call us free on **0800 500 3023**

Email **uksales@videojet.com**

or visit **www.videojet.co.uk**

Videojet Technologies Ltd.

4 & 5 Ermine Centre, Lancaster Way,

Huntingdon, Cambridgeshire PE29 6XX / UK

© 2017 Videojet Technologies Inc. — All rights reserved.

Videojet Technologies Inc.'s policy is one of continued product improvement. We reserve the right to alter design and/or specifications without notice. DuPont is a trademark and Tyvek is a registered trademarks of E. I. du Pont de Nemours and Company.

Part No. SL000612  
ss-7810-en-0517

