



Laser Marking System

Videojet® 3140

Increase throughput and productivity with the Videojet 3140 laser marking system, engineered to mark high-quality codes at moderate speeds.

The Videojet 10-Watt 3140 CO₂ laser marking system offers all of the performance features found in higher wattage Videojet lasers, but with a power source better matched for moderate line speed applications.

With print speeds up to 2000 characters/sec. and line speeds up to 900m/min., the 3140 laser solution is ideal for both simple and complex codes across a range of substrates including paperboard, glass, painted metal, paper labels, PET and other plastic materials.



Uptime Advantage

- Maximum performance and extended laser source life expectancy up to 45,000 hours through optimized total power output
- Air-cooled laser source virtually eliminates maintenance intervals
- Line set up wizard, available with optional CLARiTY™ Laser Controller, aids fast product changeovers, eliminating set up trial and error and minimizing planned downtime

Built-in productivity

- Largest marking window in the industry offers optimally matched applications for higher throughput
- On-screen diagnostics, available with optional CLARiTY™ Laser Controller, track causes of downtime and help troubleshooting to get the line back up and running quickly

Code Assurance

- Optional CLARiTY™ Laser Controller offers built-in software features that help reduce operator errors and ensure products are coded correctly
- High-quality, permanent codes help assure product traceability and tamper-proofing
- High-resolution marking head delivers consistent, crisp codes

Simple usability

- Most flexible integration solution with 32 standard beam delivery options
- Quick set up and easy redeployment via detachable umbilical cable for easy routing on the line and simple-to-use accessory connections
- 5 interface options plus a choice of networking communications to match your preferred workflow

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Marking speed

Up to 2,000 characters/sec.⁽¹⁾

Line speed

Up to 15 m/sec. (49ft/sec.)⁽¹⁾

Marking window

Approx. 30.8x38.2mm² to 350.8x294.7mm²

Wavelengths

10.6µm and 9.3µm

Marking formats

Standard industrial fonts (Type 1 Windows® TrueType®) and Single line fonts
Machine readable codes (OCR, 2D-matrix, etc.)
Bar codes: BC25, BC25i, BC39, BC128, GS1-128, EAN13, UPC_A, RSS14, RSS14 Truncated, RSS14 Stacked, RSS14 Stacked Omnidirectional, RSS Limited, RSS Expanded, etc.
Graphics, logos, symbols, etc.
Linear, circular, angular, reverse, rotate
Sequential and batch numbering
Automatic date, layer and time coding; real-time clock
Dot mode enables marking 2D codes faster than traditional grid mode

Laser tube

Sealed CO₂ laser, power class 10-Watt

Beam deflection

Steered beam with digital high-speed galvanometer scanners

Focusing

Focal lengths: 64/ 95/ 127/ 190/ 254 mm (2.5/ 3.75/ 5.0/ 7.5/ 10.0 inches);
63.5/ 85/ 100/ 150/ 200/ 300/ 351/ 400 mm (2.50/ 3.35/ 3.94/ 5.9/ 7.87/ 11.8/ 13.8/ 15.75 inches)

Multiple operator interface options

Handheld controller
PC software
TCS Touch Control Software
CLARiTY™ Laser Controller
Smart Graph Com

Language capabilities⁽²⁾

Arabic, Bulgarian, Czech, Danish, English, German, Greek, Finnish, French, Hebrew, Hungarian, Italian, Japanese, Korean, Dutch, Norwegian, Polish, Portuguese, Romanian, Russian, Serbian, Simplified Chinese, Slovak, Spanish, Swedish, Thai, Traditional Chinese, Turkish, Vietnamese; interface dependent. Additional languages available with Smart Graph software.

⁽¹⁾ Maximum marking and line speed is application dependent

⁽²⁾ With optional CLARiTY™ Laser Controller

INVISIBLE LASER RADIATION

AVOID EYE OR SKIN EXPOSURE
TO DIRECT OR SCATTERED RADIATION

MAX. AVERAGE POWER: 15 W
WAVELENGTH: λ = 9-11 nm
LASER CLASS 4
(EN 60825-1:2014)

Communication

Ethernet, TCP/IP and RS232 optional
Inputs for encoders and product detector triggers
16 inputs / 11 outputs for start/stop signals, machine/operator interlocks, alarm outputs; in addition to the safety circuits
Customer-specific solution available

Integration

Direct integration into complex production lines via scripting interface
Flexible beam delivery options (beam extension unit/ beam turning unit)
Detachable umbilical for simple integration; available in 3 lengths

Electrical requirements

100-240 VAC (autorange), ~50/60Hz, 1PH, 0.40KW

Cooling system

Air cooled

Environment

Temperature 40-105° F (5-40° C)
Humidity 10%-90%, non-condensing

Sealing and safety standards

Supply unit: standard IP54, optional IP65
Marking Unit: IP54, optional IP65
Optional safety module provides Performance Level d (PFL-d) in accordance to EN 13849-1
IEC/EN 60825-1:2014

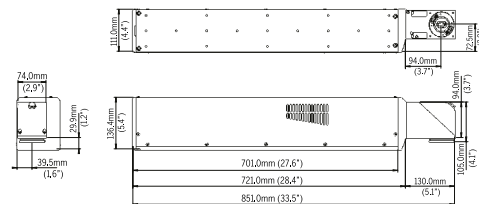
Approximate weight

Supply unit: IP54/IP65 25.4lbs. (11.5kg)
Marking unit: IP54 28.7lbs. (13kg); IP65 30.9lbs. (14kg)

Applicable certifications

CE, TÜV/NRTL, FCC
Compliance (no certification required): ROHS, CDRH/FDA

Marking unit dimensions - IP54 with SHC60c marking head



Supply cabinet dimensions - IP54

