



# Domino D-Series lasers

Small things can make a big difference



The latest editions of our successful compact scribing laser are designed to fit in even the smallest of spaces.



Scan the code to find out more about D-Series

Domino. Do more.

## Domino D-Series – new, compact lasers are flexible in more ways than one.

The new **i-Tech** scan head is smaller and adjustable, allowing the **D-Series** lasers to be installed in the most restricted spaces.

A new IP65 version design adds greater protection for harsh environment installations.

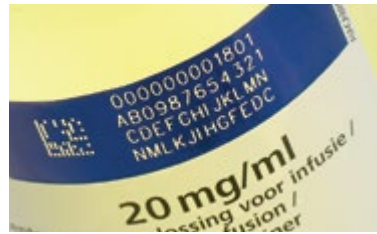
Flexible connectivity and a familiar interface now make it possible to control **D-Series** lasers from anywhere.

Improved performance at high line speeds through the patented optional **i-Tech RapidScan** technology.



## A diverse range of applications

The **D-Series** laser system produces unlimited lines of text in any orientation, and in many fonts and sizes. It is equally suitable for both graphics and 2D datamatrix codes. All are permanently applied to a wide range of materials from low to high production line speeds.



High code quality ideal for 2D datamatrix coding



Special lasers for clear codes on PET and PP materials plus a special scan head option for larger web coding applications



High quality at highest line speeds



## Greener credentials

Domino's commitment and investment in sound environmental practices means we frequently exceed the demanding governmental, industry and company standards and regulations. We are committed to minimising the consumption of natural resources and energy and the creation of waste. Wherever practical our products are RoHS and WEEE compliant so that they are recyclable.

### D-Series

The new D-Series, with no need for inks or solvents – minimising waste as well as 20% reduced weight (versus previous models) – helps you to reduce your carbon footprint. Automatic temperature controlled fan cooling means the coder saves energy whenever applications allow.

# More flexibility – simplifies integration

## Compact

Fit is a big issue, so we've gone small. We've also separated the components to create a modular design, making the **D-Series** laser easy to install. It simply adapts to your production line set-up.

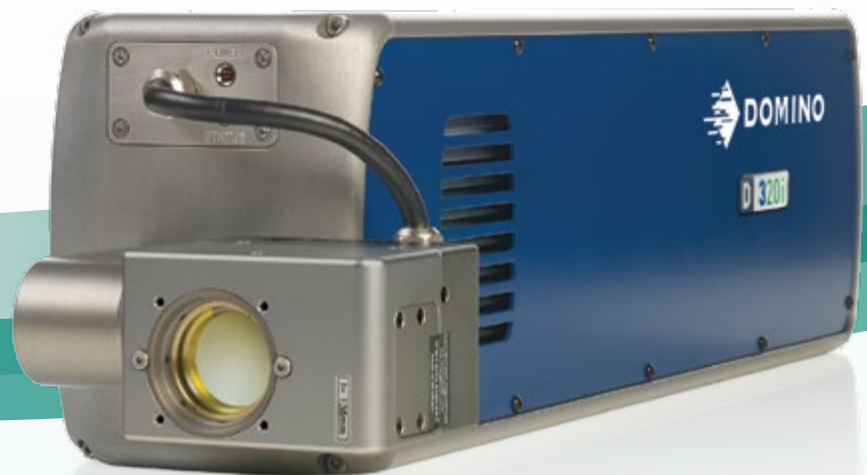


## Flexible

The key to the **D-Series** flexibility is a smaller **i-Tech** scan head, connected to the laser tube on a multi-position mount. The head can be rotated through 90 degree steps to allow for many mounting positions, and because it is so much smaller, it can easily fit where bigger lasers cannot.

## Easy to install

Full length integrated mounting rails on both sides of the laser head and its smaller overall footprint makes the **D-Series** an easy and safe installation.



# More convenience – saves time

## Accessible

As an operator, you can manage the coder by either our intuitive remote **TouchPanel** or via its web-based interface from any industrial PC. For the ultimate in flexibility, the **D-Series** can also be controlled via your production line interface.



## Easy to operate

**D-Series i-Tech** uses **QuickStep**, our unique simplified operator user interface for effortless control and status reporting. No complex menus or parameters, just enter the job and away you go.

- Large user friendly icons and customisable home screen for quick access
- Intuitive 3-tiers menu structure makes **QuickStep** WYSIWYG message creation and editing quick and easy to learn

## QuickDesign Lite - Simplifying message design

If you would like to create your laser coding message from a remote PC **D-Series** offers **QuickDesign**, a single, easy to use Windows® application. It also lays the foundation for providing increased automation of your coding needs.



## More protection – enhances reliability

### Built to last

An optional IP65 version adds protection to the laser tube while not compromising on overall size. Its aluminium and stainless steel construction gives you lasting performance in the harshest environments.

### Peace of mind

The robust controller is the ultimate in reliable equipment. It stores message data without the need for a hard drive, minimising the number of moving parts in the whole system. It can also be hidden under the production line, away from the laser, or rack mounted to save space and reduce the likelihood of accidental damage.



### Secure

Our pharma option offers unique user passwords and change reporting to be 21-CFR part 11 and GAMP compliant. This can be supplied and installed with validation packages to ensure that systems are tested and proven to the highest standards.

**D-Series** also ensures legally compliant solutions to cover the serialisation requirements of the European Falsified Medicines Directive (EU Directive 2011/62/EU) with both human readable and 2D datamatrix coding.

## More performance – increases efficiency

### Faster without compromise

The **i-Tech** scan head is the fastest scan head of its kind – resulting from its optimised mirror and software control plus the revolutionary patented **i-Tech RapidScan** technology.

**RapidScan** makes our lasers 20% faster for high-speed applications than other scribing lasers as **D-Series** can track the product for longer by using the optimum configuration of the mark field.

The new **i-Tech RapidScan** also improves the ability of **D-Series** to code difficult to mark materials and to print longer or more complex codes where more energy or time is required to scribe the code.

**D-Series** delivers results where other scribing lasers have already reached their limit.



### Versatile performance

The new **D-Series** offers a power range of 10W, 30W and 60W lasers to fit all your coding needs, from low to high speed applications, basic to complex codes, and for all production environments. There are two scan head options available for different application requirements, with the **i-Tech I5** scan head offering exceptional code quality on larger mark field applications, e.g. for coding on the web.

### Safe and clean

With any laser it is important to consider extraction of fumes and particles to maintain a safe and clean working environment. The Domino DPX fume extraction range integrates with **D-Series** and provides an efficient and simple solution.



**Domino. Do more.**



# A quick tour around the D-Series

## *intelligent Technology*

**i-Tech** components combine to create a system altogether more flexible and reliable.



IP65 option for more protection

Optional intuitive remote **TouchPanel**

Industrial connectors and detachable conduit for easier installation and servicing



Controller module that can be hidden under the production line, or rack mounted to save space

Full-length integrated mounting rails on each side for easy positioning

Energy efficient temperature controlled fan cooling

Compact **i-Tech** Scan head with flexible mount for head rotation in 90 degree steps

Compact footprint design and small head gets into tight spaces



New **i-Tech RapidScan** coding technology for ultra fast performance



Our next generation of primary coders deploy our unique *intelligent Technology* system, **i-Tech**. Our aim was to make production lines lower maintenance, lower cost and more efficient. **i-Tech** has helped us to achieve that aim.

## Domino. Do more.



## Technical Specification:

|                                | D120i   | D320i   | D620i   |
|--------------------------------|---|---|---|
| <b>Laser Type</b>              | Sealed-Off CO <sub>2</sub> Laser; approx. 45,000 hours MTBF   |   |   |
| <b>Laser Wavelength</b>        | 10.6µm typical (9.3µm as Blue Tube and 10.2µm as Red Tube option available)   |   |   |
| <b>Laser Power</b>             | 10W (approx. 8W for Blue Tube option @ wavelength of 9.3µm)   | 30W (approx. 20W Blue Tube (9.3µm); approx. 28W Red Tube (10.2µm))  | 60W   |
| <b>Marking Features</b>        |   |   |   |
| Characters per Second          | 800*  | 1500*   | 2000*   |
| Product Line speed             | 200m/min.* 650ft/min.*  | 400m/min.* 1300ft/min.*   | 600m/min.* 1970ft/min.*   |
| Number of Lines of Text        | As many as desired*   |   |   |
| Character Height               | 0.6mm to size of marking field  |   |   |
| Fonts                          | 24 fonts, multi-language including Unicode  |   |   |
| Mark Fields i-Tech 10          | 58 x 58, 68 x 68, 84 x 84, 102 x 102, 136 x 136, 180 x 180mm  |   |   |
| Mark Fields i-Tech 15          | 200 x 254, 262 x 334, 356 x 452   |   |   |
| Focal Length                   | i-Tech 10: 80, 100, 120, 150, 200, 250mm; i-Tech 15: 250, 325, 450mm  |   |   |
| <b>User Interface</b>          | Web Browser-based Graphical User Interface (GUI) (optional <b>TouchPanel</b> available) WYSIWYG entry, control language in English, German, French, Czech, Danish, Spanish, Finnish, Greek, Hungarian, Italian, Japanese, Dutch, Portuguese, Polish, Chinese, Korean, Romanian, Russian, Swedish, Slovak, Turkish, Arabic |   |   |
| <b>Operating System</b>        | Windows CE  |   |   |
| <b>Marking Software</b>        | Dynamark III Laser Marking Software   |   |   |
| <b>Scan Head</b>               | i-Tech Scan Head, mountable in various orientations including axial and radial  |   |   |
| <b>Laser Head</b>              | Stainless steel and anodised aluminium construction   |   |   |
| <b>Weight &amp; Dimensions</b> | 16.5kg 681 x 140 x 180mm**<br>36.4lbs 26.8 x 5.5 x 7.1in*   | 22kg 776 x 140 x 180mm**<br>48.5lbs 30.5 x 5.5 x 7.1in  | 27.3kg 846 x 140 x 180mm**<br>59.5lbs 33.3 x 5.5 x 7.1in<br>(IP65) 30kg 946 x 140 x 180mm**<br>66.1lbs 37.2 x 5.5 x 7.1 in  |
| <b>Control Cabinet</b>         |   |   |   |
| Weight & Dimensions            | Stainless steel construction<br>14.5kg, 430 x 371 x 154mm (WxDxH)<br>32lbs 16.9 x 14.6 x 6.1in<br>(IP55) 17.5kg, 541 x 401 x 229mm (WxDxH)<br>38.5lbs 21.2 x 15.7 x 9 in<br>4.5m (14.8ft), 9m (29.5ft) optional   | Stainless steel construction<br>14.5kg, 430 x 371 x 154mm (WxDxH)<br>32lbs 16.9 x 14.6 x 6.1in<br>(IP55) 17.5kg, 541 x 401 x 229mm (WxDxH)<br>38.5lbs 21.2 x 15.7 x 9 in<br>4.5m (14.8ft), 9m (29.5ft) optional | Stainless steel construction<br>27kg, 430 x 371 x 309mm (WxDxH)<br>60lbs 16.9 x 14.6 x 12.1in<br>(IP55) 34kg, 541 x 401 x 458mm<br>74lbs 21.2 x 15.7 x 18 in<br>4.5m (14.8ft), 9m (29.5ft) optional |
| <b>Conduit Length</b>          | 4.5m (14.8ft), 9m (29.5ft) optional   |   |   |
| <b>Inputs &amp; Outputs</b>    |   |   |   |
| Product Detect Inputs          | NPN / PNP / 24V – Sensor  |   |   |
| Product Speed Detect           | Shaft Encoder (differential) or single ended signal   |   |   |
| Signal Inputs                  |   |   |   |
| Signal Outputs                 | Laser Ready, Busy Signal, fume extractor control, compressed air control  |   |   |
| <b>Interfaces</b>              | RS232, Ethernet (10/100 MBit), USB Port   |   |   |
| <b>Electrical Requirements</b> | 90-264V, 47-63Hz, 1050VA (D120i/D320i) / 2000VA (D620i)   |   |   |
| <b>Environment</b>             |   |   |   |
| Controller                     | Standard version (air cooled, fan) and IP55-version for higher protection   |   |   |
| Laser heads                    | Standard version (air cooled, fan) and IP65 version (compressed air cooled / water cooled (D620i))  |   |   |
| Environmental Standard         | Operating Temperature 5° to 40° C / higher temperatures on request. (41° to 104° F)   |   |   |
| Operating Humidity             | Max. 90% RH, non condensing   |   |   |
| <b>Options</b>                 | Aiming Beam, User Port Kit I/O, Fume Extraction Shroud, USB Image Backup/Restore Kit, Rack Mounting Kit, Daisy-Chaining, i-Tech <b>RapidScan</b> technology   |   |   |

\*Characters per second and production line speeds are substrate and code dependent \*\*Dimensions measured overall for shortest version

