

NEW HIGH SPEED  
SCAN HEADS



## Multi-Dot-Scan™ solutions for fast and precise laser marking of traceability codes

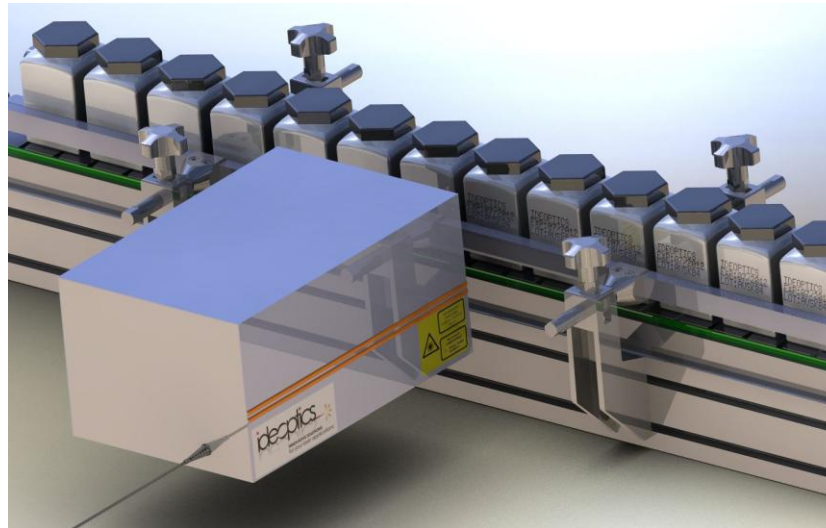
### *Technology acclaimed at the OPTO exhibition (Paris, 2011)*

Our patented Multi Dot Scan™ (MDS) technology has a very unique architecture that uses the combination of “non planar” based reflective optics mounted on Brushless motors that operate in stationary regime with high rotation speed.

It has been designed for all laser processes in which a matrix pattern of dots or holes need to be marked, engraved, drilled or welded at high speed, with precision and high repeatability (zero drift) (unlike the galvo scanheads).

With these technical advantages, we can develop innovative fast and cost-effective « dot matrix » laser marking solutions for all industries that need to get efficient, reliable, consumable-free and eco-friendly direct traceability marking on their products.

Because our scanning technology works well with high frequency pulsed solid-state lasers or CO2 lasers with an acousto-optic device, and because it can deflect high-power laser beams with a high laser damage threshold (higher than any galvo systems), our technology enables laser marking at a high speed on a very large range of materials, from plastic to metal.



### *Multi-Dot-Scan™ benefits for the laser marking of dot-matrix traceability codes (5x7 or 9 x11 fonts, 2D code)*

We compare our technology with the CO<sub>2</sub> 7 tubes laser systems and lasers systems working with galvo heads.

The benefits of Ideoptics scanning technology for laser marking are:

- ❑ a unique range of scanning speed (marking on 1 to 30 products every second) (far more faster than any laser systems working with galvo heads)
- ❑ a high flexibility regarding the type of laser sources than can be used, enabling the marking on a large range of materials at high speed (our scanheads have a high laser damage threshold and do not need any cooling devices, unlike galvo heads)
- ❑ a high precision and better marking quality than laser systems working with galvo heads
- ❑ a low maintenance cost
- ❑ a competitive price
- ❑ a customized development solution



Registered office:

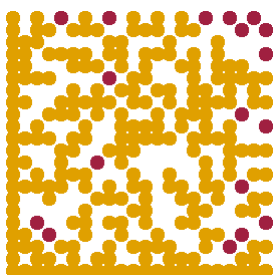
4, rue Ampère  
22300 Lannion, France

Operating site:

6, rue de Kérampont  
22300 Lannion, France  
Tél: + 33(0)2 96 46 92 80  
Fax: + 33 (0)2 96 46 92 82

info@ideoptics.com

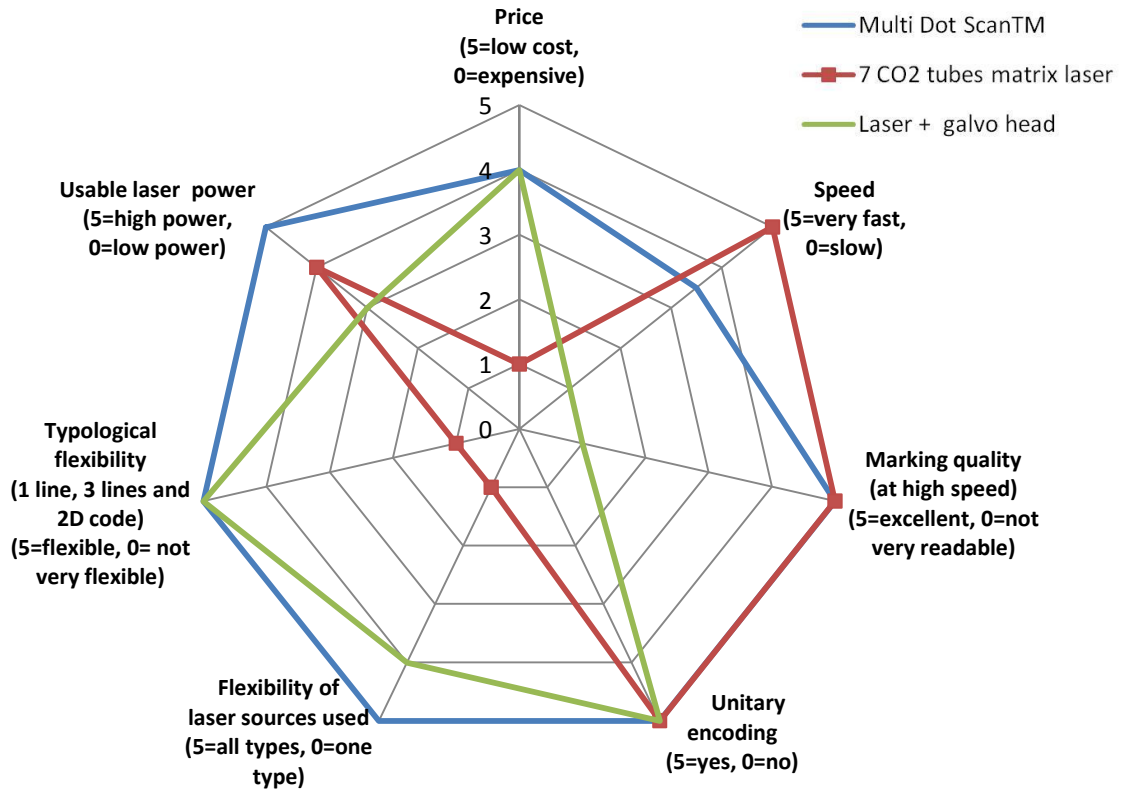
[www.ideoptics.com](http://www.ideoptics.com)



**NEW HIGH SPEED  
SCAN HEADS**

# Multi-Dot-Scan™ solutions for fast and precise laser marking of traceability codes

## The benefits of Ideoptics technology at a glance



## Multi-Dot-Scan™ : more than a scanhead technology, also a true real time encoding and embedded control platform

Software and Graphical User Interface are designed according to the application and customer specific needs (marking parameters).  
The figure hereunder illustrates the use of a Multi-Dot-Scan™ head in a laser marking process.

### MDS Scanning Technology overview (ex. encoding and marking of encoded characters)

