iMETA-t



# FIBER LASER MARKING SYSTEM

FOR LINE INTEGRATION





Technology this good has never been so affordable



## INTRODUCTION

#### WHO ARE LOTUS LASER SYSTEMS?

Lotus Laser Systems offer innovative, highly capable laser marking and cutting solutions at a purchase price and cost of ownership that is commonly lower than similar products from alternative providers.

The people behind the brand have decades of experience with laser technology.

Designed, configured and tested in the UK Lotus Laser Systems are built around the fundamentals of meeting or exceeding customer expectations for:



Our somewhat unique and super-efficient company structure combined with lean working practices provide us with the ability to align our products to the ever changing needs of our customers and the many markets that we serve much faster than most of our competitors, in particular the larger companies.

Lotus Laser Systems range from turn-key workstations to industrial line integrated units and contain component modules from industry leading technology specialists around the globe including Germany, USA, UK, Japan and China.

All machines come with the highest quality laser source from  $10.6\mu m$  to 1064nm and enjoy extensive features with long warranty periods that are typically far beyond our industry standards

Using the FAR priorities to match those of our product design we invest significant resources to select and train a network of global partners that can supply you with local sales and support services

#### Technology this good has never been so affordable

#### WHAT IS IMETA-t?

iMeta-t is a very energy efficient, feature enriched fiber laser marking and engraving system that is designed for integration to production lines and/or other forms of process handling.

Most commonly for such installations iMeta-t is dedicated to a single marking application where the product and mark size/position/effect remains constant and only the marking data changes.

For example, this system is ideal for marking and coding of products, packaging, security labels and identification tags to name but a few of the most common applications.

iMeta-t is specifically designed to incorporate a 1µm Fiber laser source, which is supplied to us by IPG Photonics, Germany and is perfectly well suited to deliver reliable 24/7 'lights-out' operation.

This is a Class 4 open system. Please note that regulations apply for use of Class 4 laser devices, therefore, specific safety measures and working practices must be in place whenever using this configuration of Meta.

iMeta-t can be fitted with a series of interchangeable lenses as well as a controllable z-axis, our entire range of performance enhancing devices and for the ultimate in product handling iMeta-t works seamlessly with your existing product handling devices including robotics.

Where space is even more of a consideration we have a more compact version named iMeta-c, which has a seperate brochure.





## **SOFTWARE**

#### **ELECTRONICS**

The control electronics within every Lotus Meta are custom manufactured to work in perfect harmony with our control software LLmark

As standard with every Meta supplied, the system electronics are ready to connect to an extensive range of peripheral devices such as a rotary axis, automated handling, dual scan head and CCD (camera recognition) to name but a few of the many upgrade options.

Therefore, should the demands of your business increase then the capabilities of Meta can grow accordingly and, unlike many competing machines to Meta, because we design such add-ons to integrate fast and simply they are relatively low in cost too.

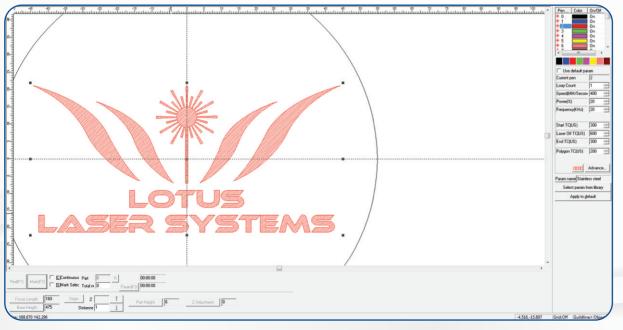


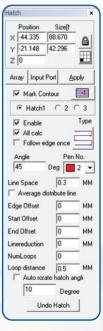
#### LLMARK SOFTWARE

In the decades that we have been working with lasers we know of no other software that can deliver the ease of use and functionality of LLmark.

LLmark is the tool with which the user can enhance and optimise the output quality and performance time of the marking process.

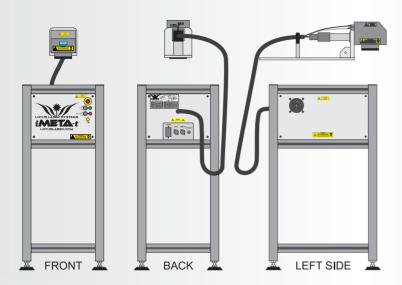
Graphical and intuitive to use many of the tools within LLmark are similar to those that you may have already experienced in other Windows o/s software packages. Most newcomers to the software are working comfortably with it within less than 1 hour of training, however, it still has the power to deliver solutions for more complex applications such as automated variable data input, external device actuation and graphical image manipulation.

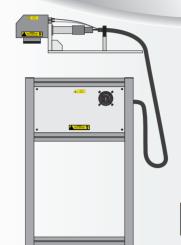






## **TECHNICAL**





RIGHT SIDE







Weight & Dimensions	
Width	430mm
Depth	570mm
Height	933mm
Weight	50kg
Foot (x4) adjustability	Height plus 0-40mm
Laser source options	
1064nm Fiber	
IPG (Germany) 10w 1mJ pulsed 20-200kHz	
IPG (Germany) 20w 1mJ pulsed 20-200kHz	
IPG (Germany) 30w 1mj pulsed 30-200kHz	
IPG (Germany) 50w 1rg-ଧୁକ୍ରାଧ୍ୟ କୁମ୍ମ ୟହା kଫ୍ୟୁମ୍ବାର	
Power Requirements	
All systems single phase	Consumption depending on laser source
230 VAC	50/60 Hz
115 VAC	50/60Hz
Cooling	
All Fiber laser systems	Integrated air cooling
Computer	
Operating System	Windows XP/7
Connection	USB max 3m
Performance	
Scan head signal	Digital
Standard head max velocity	1000mm/sec
High Speed head max velocity	3000mm/sec
Super speed head max velocity	7000mm/sec

Safety & Security		
Laser class	4	
Emergency stop	Standard	
Keyswitch power on/off	Standard	
CE	Compliant	
RoHS	Compliant	
Miscellaneous		
Umbilical cable tidy length	2.6m max	
Positionable exhaust hose	Optional	
Z-axis programmable by	Optional	
software		
LLmark control software	1 copy	
Lens mark area - 1 supplied as standard		
110mm	255mm	
180mm	285mm	
220mm	310mm	
Warranty (T&C apply)		
Main system	2 years	
Fiber laser source	2 years	
Labour	Variable by territory	
Warranty extensions	Optional	
Service contracts	Optional	
Environmental Requirements		
Ambient temp. (min/max)	15c to 30c	
Fume extraction rate	Apps dependant, seek advice	
Intolerant of: direct sunlight, vibration, high humidity,		
dampness, unstable power supply.		



Designed, Assembled, Configured and Tested in the UK

