



## Fiber Laser Marking Systems

# Greentsun® GSL6000

The GSL 6000 series are versatile fiber laser marking systems that feature the smallest fiber laser marking head on the market, designed for simple integration, reduced installation cost and increased range of installation opportunities.

The Greentsun 6000 series fiber lasers are the first to feature the Digital high speed marking head, making them easy to integrate, operate and service.

The Digital high speed marking head is one of a kind, small in both in size and weight, and IP54 rated for use in common environments. These fiber lasers, designed to deliver high-quality, permanent codes for a wide range of marking applications, are an ideal solution for parts-marking, food, beverage, consumer packaged goods, pharmaceutical and cosmetics manufacturers who have space limitations, are looking for simple integrations, or do frequent rapid changeovers.



### Uptime Advantage

- Achieve simple integration, reduced installation costs, and an increased freedom of positioning with an industry-first, compact, fiber laser marking head
- Simplify laser head adjustment and positioning with reduced laser head mounting bracketry
- Easily migrate to a laser marking solution, with the added benefit of reduced consumables
- Reduce the need for additional housing or equipment with a water and dust tight IP69 laser marking head, facilitating worry-free usage in washdown and harsh environments

### Industrial Design

- Control the laser through a range of familiar, easy-to-use user interfaces, reducing operator training needs and the risk of product rework and recalls
- Benefit from simple operation, message creation and reduced operator errors with the GRENTSUN Touch PLC or the Ezcad laser controller

### Built-in productivity

- Mark up to 2,000 characters per second Simple usability
- Get closer to the product with the smallest fiber laser marking head on the market
- Benefit from easier, faster and precise focal distance during line or product changeover with pilot beam-based focal alignment

### Simple usability

- Achieve easy set-up and fast product changeovers with the integrated pilot beam focus finder that can reflect the code and actual size of the marking field
  - Benefit from easy serviceability with the ability to quickly remove or replace the fiber laser unit either on the production line or within complex machinery
  - Focus more on production and less on user interaction and maintenance with an easy-to-use laser solution that is intuitive to the operator without the need for additional training
- GRENTSUN® GSL6000

# Grentsun® GSL6000

## Laser Marking System

### Marking fields (mm)

	Working Distance: (CFS-X)	Working Distance: (CFT-X)	x Dimension	y Dimension
Small (-S)	72.00	89.00	37.01	63.58
Medium (-M)	112.50	129.50	48.27	89.30
Large (-L)	171.00	188.00	64.46	126.30

### Marking formats

Standard fonts and individual fonts, such as high-speed or OCR  
Machine-readable codes: ID-MATRIX; ECC plain; BAR CODES/ -stacked omnidirectional/ -limited [CCA/B]/ expanded  
Graphics/ graphic components, logos, symbols, etc. (dxf, jpg, ai, etc.)  
Linear, circular, angular text marking; rotation, reflection, expansion, compression of marking contents  
Sequence and serial numbering; Automatic date, layer and time coding, real-time clock;  
Online coding of individual data (weight, contents, etc.)

### Laser source

Ytterbium (Yb) pulsed fiber laser  
Power classes 20, 30, 50 and 100 Watt  
Central emission wavelength: 1,040 - 1,090nm (1.04 - 1.09µm)

### Laser beam deflection

Digital high-speed galvanometer scan

### Laser beam orientation

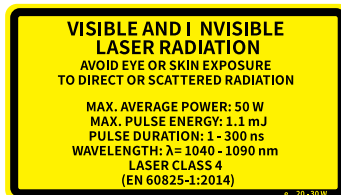
Straight-out (CFS-x) and 90-degree (CFT-x) options

### User interfaces

Ezcad software for PC;  
Grentsun touch screen PLC in 14 languages (option)

### TCS+

Browser-enabled software for intuitive creation of complex jobs on standard web browser compatible devices  
Support for 14 languages  
Full user access control and role definition  
Event log for history of user interactions  
Graphical guided line setup wizard  
Easy system and parameter configuration  
WYSIWYG editor



### Smart Graph Software

Graphic-orientated user interface for Windows®  
Text / data / graphics / parameter editor  
Configurable in 14 languages, e.g. Arabic, English, Farsi, French, German, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Thai, Traditional Chinese, Vietnamese  
Easy import functions for the most important file formats (dxf, jpg, ai, etc.)

### Communication

Ethernet (TCP/IP, 100Mbit LAN), EtherNetIP™, ProfiNet®, 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  
Customer-specific solutions

### Integration

Direct integration into complex production lines through the laser's scripting interface  
Integration via Ethernet and RS232 interface  
Highly precise side guided height adjustment via dovetail joint or 38mm tube

### Electrical requirements

110 - 230 V (autorange), 360 VA, 1 PH, 50/60 Hz

### Environmental protection

Supply unit: IP54, air cooled  
Laser head: IP54, IP65, air cooled

### Temperature/humidity range

5 - 50°C 10 - 90%, non-condensing

### Weight

Supply unit: IP54 15kg  
Marking unit: IP54 23kg; IP65 27kg

### Applicable certifications

CE, TÜV/NRTL, CCC, ISO

### Applications:



### Contact to get quotation

Call: +862782352098

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