

# Computer to Plate

**intense**

next generation lasers

Thermal Computer to Plate Devices

Commercial Color

Flexography

2-Up to Large Format

**INSlam™ Imager S**

**INSlam™ Imager M**

**Hermes™ Imager**

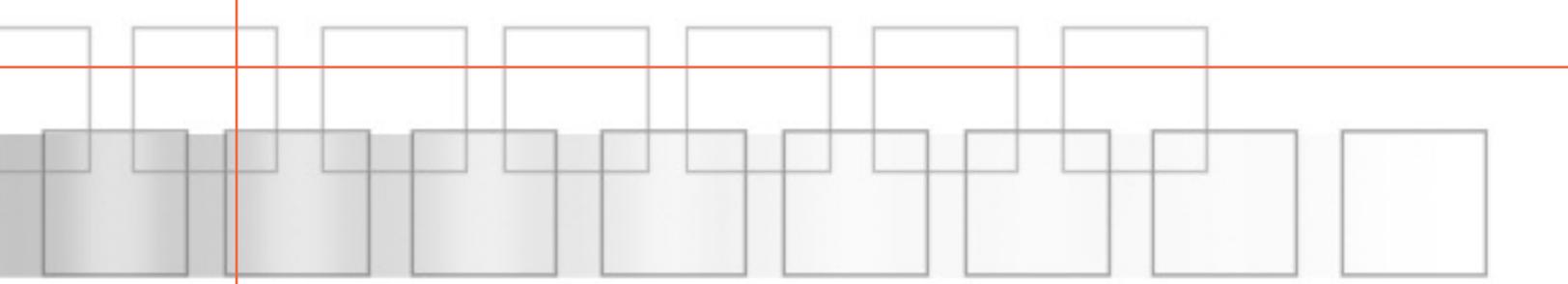
The latest advances in high power diode laser technology are driving the development of next generation Computer to Plate (CtP) printing systems.

**Intense** is revolutionizing the way laser diodes are solving the challenges in this extremely competitive market.

Through the design of advanced monolithic arrays and our patented **Quantum Well Intermixing (QWI)** technology, Intense is delivering high power laser

products with **superior brightness, longer lifetimes, and increased reliability.**

The **INSlam™** Imager family of individually addressable laser array modules, with both single mode and multimode variants, and the **Hermes™** Imager family of High Power Lasers (HPLs) are available exclusively from **Intense.**



## Meeting Tomorrow's Computer to Plate Printing Needs Today

Laser devices from **Intense Ltd.** provide Computer to Plate (CtP) print equipment manufacturers with the superior power and brightness needed to improve today's products and enable tomorrow's innovations. They have become the laser diodes of choice for a wide range of applications:

- Thermal Computer to Plate
- Commercial Color Devices
- Flexographic Devices
- Entry Level to High Capacity
- Small to Very Large Format

## Best-in-Class Laser Diodes

**Intense** designs and manufactures best-in-class laser diodes, from single emitters and bars to wide arrays. The company's **Hermes™ Imager** high power laser diodes are ideal for use in challenging CtP printing applications. The company also supplies **INSlam™ Imager** monolithic individually addressable arrays that offer the same unparalleled industry performance. All devices are compact, flexible units designed specifically for CtP applications, from low-cost systems processing small format plates (2up) to the latest large plate format machines.

## The **Hermes Imager** and **INSlam Imager** products feature:

- **Intense's** patented QWI design which offers high operating power, superior brightness, and increased lifetime and reliability
- Precise delivery of optical energy where it's needed, increasing unit efficiency and extending product life
- Reduced complexity, delivering significant cost savings
- Compact, robust, custom and standard packaging solutions that can include integrated optical, electronic, and thermal management
- Design simplicity of monolithic arrays, removing the need for complex and expensive fiber coupling or grating valve technology

These products are available in a range of standard packages and wavelengths. Alternatively, our experts can work closely with you to develop custom solutions that will meet the specific challenges of your application.

# INSlam™ Imager for CtP

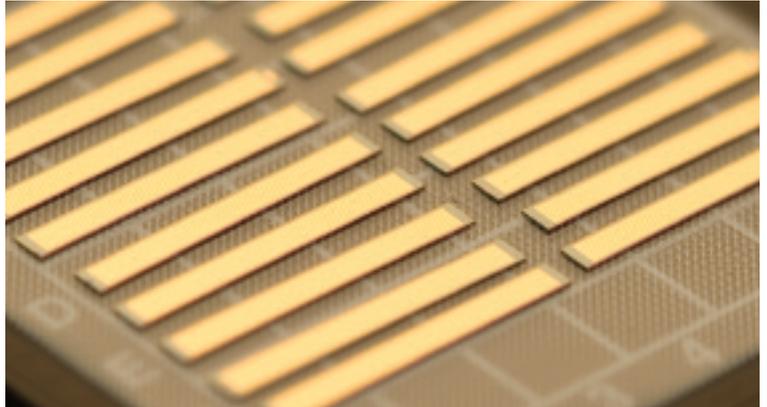
## Individually Addressable Laser Array Modules

The **Intense INSlam™** family of laser products is revolutionizing the delivery of laser energy, reducing complexity and delivering unrivalled cost savings and significant reliability increases for Computer to Plate (CtP) print equipment manufacturers.

**INSlam** offers end users inherent flexibility through a unique design process. Each module contains individually addressable single mode lasers arrays of up to 100 emitters on one monolithic chip. The high reliability emitter, coupled with a simplified writing head design, provides the performance needed for high productivity operations, tight deadlines, and reduced maintenance costs.

The devices can be custom configured to suit any application or system requirement. Whatever the configuration, Intense's patented QWI design process provides unparalleled performance and reliability.

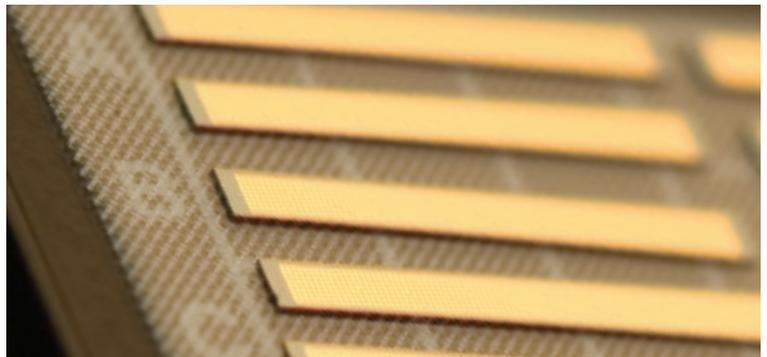
Each **INSlam** module includes the laser array and, if required, drive electronics, optical monitoring, and micro and/or macro optics. This means a single compact unit can replace a much larger, more complex traditional sub-system. Power per emitter can be as high as 1W with all emitters on, enabling faster printing and better system performance.



### **INSlam™ Imager S: Single Mode Lasers**

**INSlam Imager S Series** contains individually addressable single mode emitters that can be configured in powers ranging from 25mW to 160mW ex-module per element. It is available at 808 nm or 980 nm.

Specifications for the **INSlam Imager S Series** are available on request.



### **INSlam™ Imager M: Multimode Lasers**

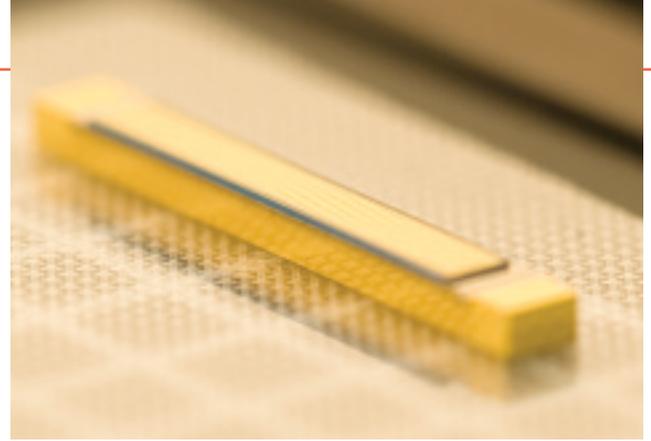
**INSlam Imager M Series** contains individually addressable multimode emitters that can be configured in powers as high as 1W per element ex-module with all emitters on. It is available at 8xx nm or 9xx nm.

Specifications for the **INSlam Imager M Series** are available on request.



## Hermes™ Imager for CtP

### High Power Laser Diodes



The **Hermes Imager** family of High Power Laser (HPL) diodes is designed for use in challenging CtP applications. The compact, modular packaging combines with industry leading power, efficiency, and brightness. This makes **Hermes** an ideal choice for demanding printing applications in which speed, cost, and quality are paramount.

### Brightness, Reliability, Efficiency

**Intense's** patented Quantum Well Intermixing (QWI) design process allows the HPL products to deliver superior power, unrivalled brightness, and high reliability. Extended lifetimes reduce cost of ownership, while improved beam quality and excellent electrical-to-light conversion efficiency optimize the use of wallplug energy. Reduced waste heat during operation decreases demands on the system.

The **Hermes Imager** family is available in multiple wavelengths, including 8xx nm and 9xx nm. Single emitters, conductively cooled packages, and micro channel cooled packages are available as standard products. Custom packaging can be developed, providing a turnkey solution designed specifically for application requirements. **Hermes** lasers operate reliably in continuous wave (CW), quasi-continuous wave (QCW), and pulsed modes.

Specifications for the **Hermes** products are available on request.

#### About **Intense Ltd.**

**Intense Ltd.**, headquartered in Glasgow, UK, is the world leader in single and multimode monolithic laser array solutions and high power laser diodes that provide uniquely high power and brightness. Using Quantum Well Intermixing (QWI) as its monolithic integration platform, the modular format provides a unique flexibility and lower cost that allows customers around the world to optimize the delivery of energy for a wide variety of demanding applications. Intense customers include leading companies in the digital printing, military and defense, and industrial markets. For more information, visit [www.intenseco.com](http://www.intenseco.com).

**intense**

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