



## HIGH ENERGY LASER RANGEFINDER/DESIGNATOR (HLRD)

The HLRD provides designation, illumination and ranging capability for airborne platforms.

It provides exceptional performance and high Mean Time Between Failure (MTBF) in an extremely compact package.

### DESIGN PRINCIPLES

This laser has been designed for high energy, high altitude operations and for inclusion within high performance targeting systems. If required a separate receiver can be supplied. The laser consists of two modules:

- Laser transmitter (with integrated power supply)
- Range receiver.

Modules can be configured and packaged to suit specific requirements.

### LATEST LASER TECHNOLOGY

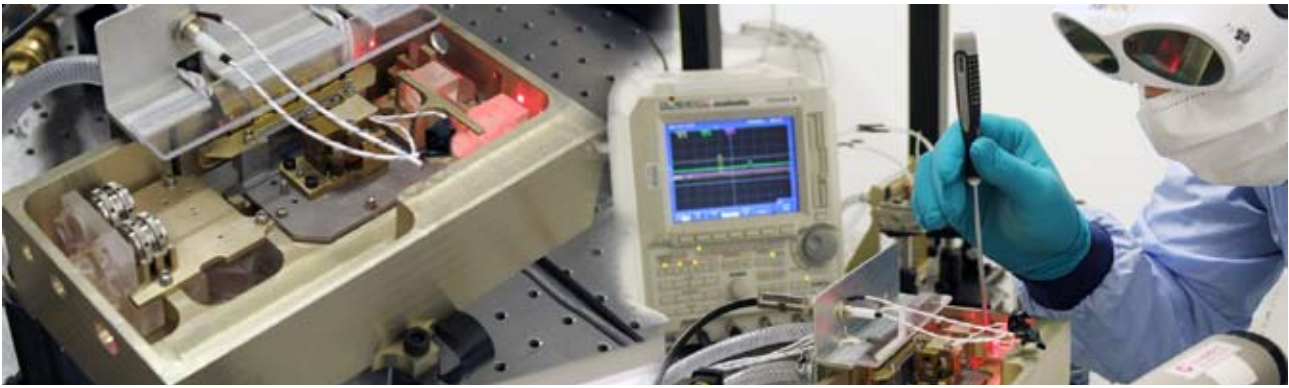
Using the latest laser diode pumping technology, we deliver enhanced performance over older flash-lamp based systems. Diode pumping creates a laser product with every shot fired at maximum energy, with consistently high beam quality, reliability and a substantially reduced heat-load.

### KEY BENEFITS

- Compact laser transmitter and receiver
- Dual-Band (switchable) utilising common optics
- High MTBF
- Diode technology for increased reliability and low cost of ownership
- High beam quality
- Reduced heat-load.



Receiver Unit



### TECHNICAL SPECIFICATIONS

#### Dimensions

Laser transmitter	325 x 201 x 119 mm
Laser receiver	105 x 77 x 23 mm

#### Mass

Laser transmitter	< 7.5 kg
Laser receiver	< 0.5 kg

#### Aperture

10 mm

#### Beam Divergence

Tactical @ 1.06 $\mu\text{m}$	< 1 mRad
Training @ 1.57 $\mu\text{m}$	< 3 mRad

#### Output Energy

< 300 mJ @ 1.06 $\mu\text{m}$
< 90 mJ @ 1.57 $\mu\text{m}$

#### Repetition Rate

20 Hz (on both wavelengths)

#### Average Power

< 325 W

#### Range Accuracy

3 metres

#### Temperature

Full performance	-40 to +50 °C
Storage	-54 to +71 °C

#### Power Supply

270 V (DC)

### LASER CENTRE OF EXCELLENCE

Officially opened in May 2004, the design of the laser centre of excellence has been based on extensive research into manufacturing best practice within the defence and commercial sectors.

### EXPERIENCE

Our Company has a reputation for providing customers with the best in high performance and cost-effective technology for laser requirements. More than 4,500 laser have been produced and supported for over 25 countries - with integration complete on some 40 platforms across air, land and sea.

We are currently under contract to develop the next generation of laser technology within the F-35 Joint Strike Fighter electro-optic targeting system.



High Energy Laser Rangefinder / Designator in build