

MODULAR LASER RANGEFINDER / DESIGNATOR (MLRD)

The diode pumped Modular Laser Rangefinder / Designator (MLRD) has been developed in order to provide medium energy laser designation, illumination and ranging capability for air and land platforms.

MLRD provides exceptional performance and reliability in a compact, low cost package and is suitable for use as an upgrade for older flash-lamp based or new build systems.

MODULAR DESIGN PRINCIPLES

A clear understanding of demanding customer requirements has driven the development of this laser which has been designed specifically to provide exceptional and consistent performance over a wide range of environmental and operational conditions. A modular approach has been taken to allow simple integration into various electro-optic systems requiring individual product configurations. This has resulted in three core module components:

- Laser transmitter
- Range receiver
- Power supply.

Modules can be configured and re-packaged to meet specific customer requirements.

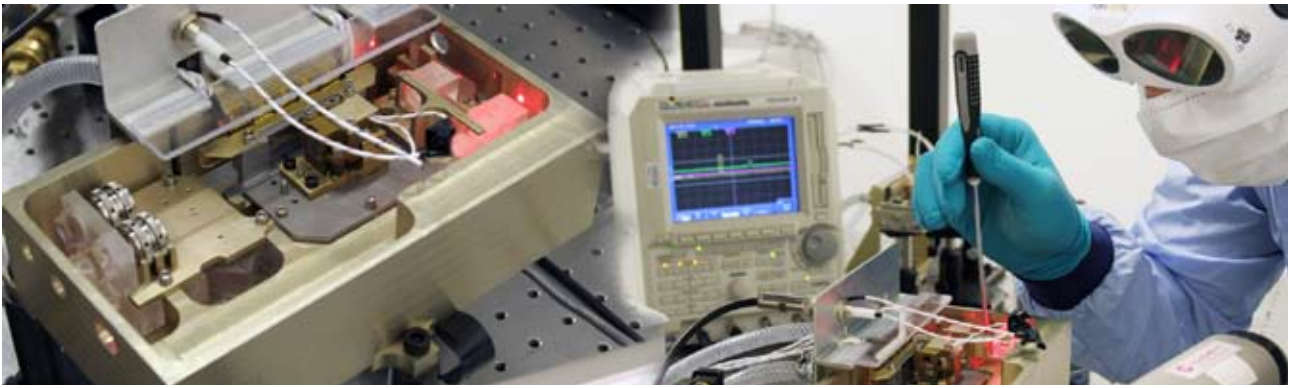
LATEST LASER TECHNOLOGY

Using the latest laser technology particularly in the areas of Diode Pumping, ND:YAG Slab, Optical Parametric Oscillators and heat exchangers, we deliver enhanced performance. Every shot is fired at maximum energy, consistent high beam quality and a substantially reduced heat-load.

KEY FEATURES

- Compact and lightweight laser transmitter / receiver
- Single-band or dual-band (switchable) utilising common optics
- Diode technology for increased efficiency, and long life performance
- Exceptional beam quality
- Reduced heat-load
- Continuous operation
- Modular design for simple re-configuration and packaging
- 30% fewer parts against comparable products
- Low life-cycle costs.

Modular Laser Rangefinder / Designator



MLRD - In development

TECHNICAL SPECIFICATIONS

Dimensions

Laser transmitter	190 x 85 x 205 mm
Laser receiver Optics	20 x 70 x 200 mm
Electronics	20 x 70 x 140 mm
Power supply	22 x 86 x 205 mm

Mass

Laser transmitter	< 4.5 kg
Laser receiver	< 0.5 kg
Power supply	< 1.5 kg

Beam Diameter

< 5 mm

Beam Divergence

Tactical @ 1.06 μm	< 1.6 mRad (raw beam)
Training @ 1.57 μm	< 4.2 mRad (raw beam)

Output Energy

> 160 mJ @ 1.06 μm
> 40 mJ @ 1.57 μm

Repetition Rate

Single Shot to 20 Hz (on both wavelengths)

Temperature

Full performance	-40 to +55 °C
Storage	-54 to +85 °C

Power Supply

270 V (DC) / 28 V / 115 V (400 Hz)

Input Power

< 200 W



Power Supply Unit



Laser receiver

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.



The MLRD capitalises on the substantial investment we have made in expertise and facilities

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