



LASER OPTICS MODULE

SERVICES

- * Engineering Design & Development
- * Electronic Testing & Assembly
- * CNC Machining and Manufacturing
- * System Integration



PRODUCTS

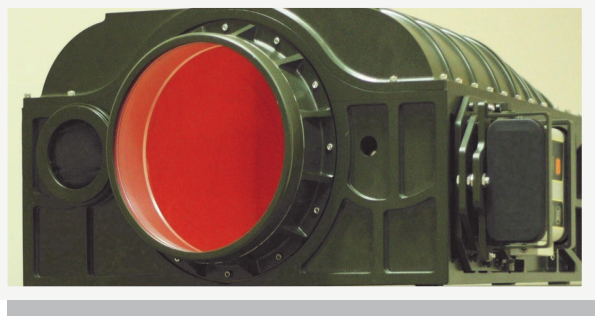
- * Electro-Optic Stabilized Platforms
- * Radar Sub Systems
- * Laser Applications
- * Gimbals
- * Pedestals
- * Motion Control Systems
- * Test Benches



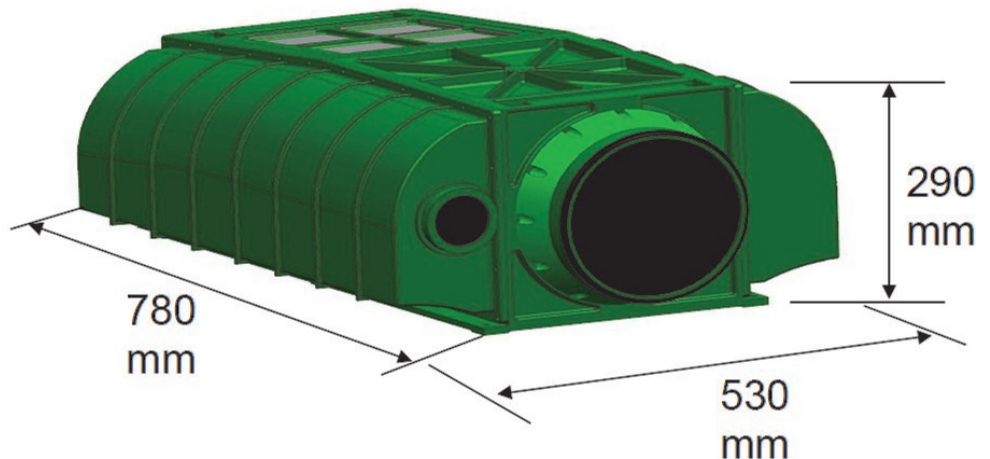
Versatility is Reality

Application Areas

- ◆ Surface laid mines
- ◆ Unexploded Ordnance (UXO) like
 - ◆ Artillery Shells
 - ◆ Mortars
 - ◆ Improvised Explosive Devices (IEDs)
 - ◆ UAVs/RPVs
 - ◆ Rockets
 - ◆ Ballistic Missiles



Directed Energy Weapons based on High Power Lasers are considered as the most effective futuristic systems for defense against variety of threats. Laser Optics Module (LOM) comprising of 1kW diode pumped Laser source, 20cm aperture Beam Directing Telescope, a visible green laser for aiming / pointing of high power laser system, CCD camera with zoom lens assembly and a laser range finder for assisting the focusing of laser beam on a distant target

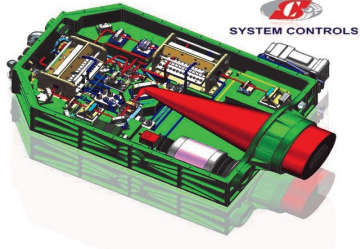


SYSTEM CONTROLS

TECHNOLOGY SOLUTIONS PRIVATE LIMITED



Technical Specifications



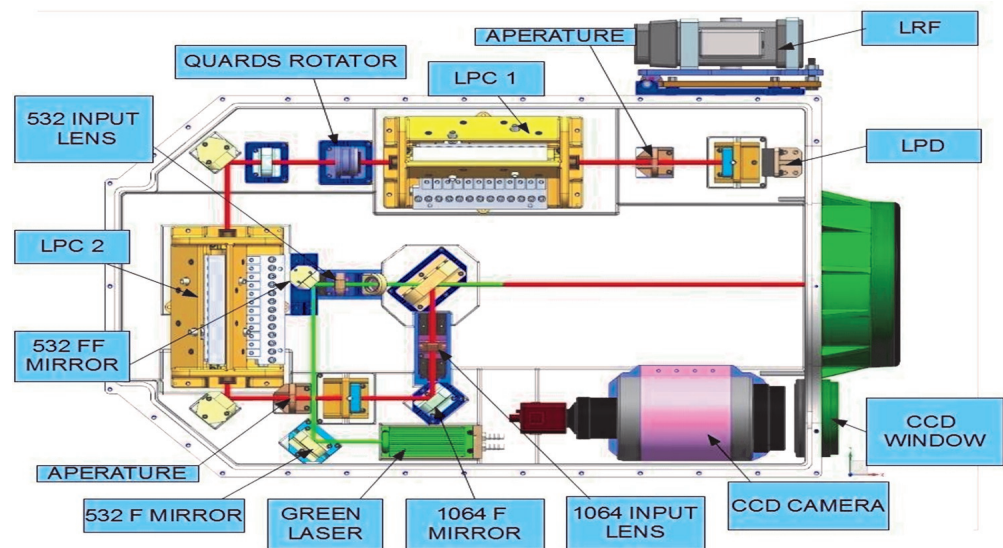
Operating Temperature	:	100°C to 108° C
Storage Temperature	:	-20° to 70°C
Glass Transition Temperature	:	More than 150° C
CTE	:	CTE closer to bonding elements
Bonding Material	:	Glass to Metal
Bonding Surface	:	Crystal to Metal
Flexible or Rigid Bond	:	Glass/Crystal to Metal
Type of Curing	:	Rigid
Curing Temperature	:	Room Temperature
Exposed to Chemical	:	Room Temperature
Resistant For Corrosion	:	No
Thermal Conductivity	:	Yes
Type of Bond (liquid or paste)	:	Semi Liquid
Shelf Life	:	1 year

Functional parameters of the module are:

Laser Output Power	:	1 kW
Laser Wavelength	:	1064nm
Beam Director Aperture	:	20 cm
Laser Focusing Range	:	30 – 250meter
Green Aiming Laser Power	:	300mW
Colour CCD Camera with Zoom Lens	:	
Laser Range Finder assisted focusing	:	

The Laser optics module (LOM) assembly consists of:

- ◆ Housing for Diode array stacks
- ◆ Precious 2 axis Mirror Mount with high alining accuracy in arc seconds
- ◆ Beam Director lens assembly
- ◆ Opto-Mechanical Housing to enclose all the optical assemblies that must be hermetically sealed



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