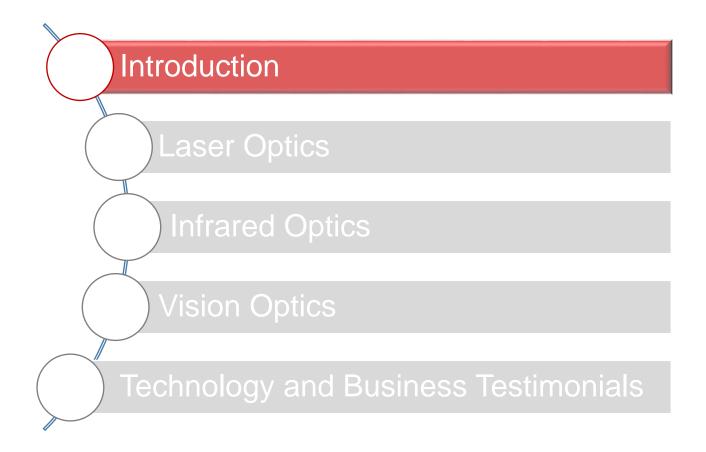
WAVELENGTH OPTO-ELECTRONIC

Wavelength Opto-Electronic (S) Pte. Ltd



Corporate Presentation 2022





Company Introduction

- Established in August 2002
- ISO9001 certified since 2004
- 550 total staff
- 10,000 m² production footprint
- 1,500 m² cleanroom for class 100k
- 1,000 m² cleanroom for class 10k

Vision

To be the major player in the global electrooptical industry

Mission

A global company providing fully integrated, high quality and best value electrooptical solutions

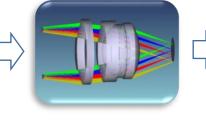
Values

Innovation Teamwork Excellence Customer Focus



Full Solution from Materials to Systems









Optical Material

Optical Design

Optics Manufacturing

Coating





System Integration



System Prototype



QA/QC

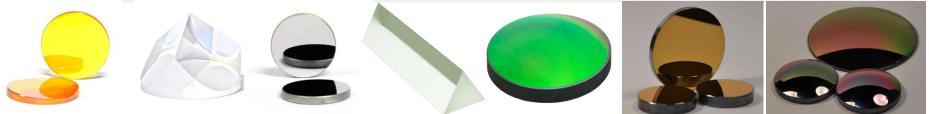


Module Assembly

WAVELENGTH OPTO-ELECTRONIC

Manufacturing Capability

Glass Material	Optical glass , Fused Silica
Crystal Material	ZnSe, ZnS , Ge, GaAs, CaF2, BaF2, MgF2,Si,Sapphire etc.
Metal Material	Cu, Mo, Al
Plastic Material	PMMA ,Acrylic
Diameter Range	0.8mm-400mm
Type of Lens Shapes	Plano, Spheric, Dome, Mirror, Aspheric, Cylindrical, Axicon, Prism, Freeform, Diffraction etc.
Type of Coatings	AR, HR, PR, BC, BS,, Filter For IR optics, AR, HR, PR, Filter, DLC etc
Coating wavelength	193nm – 16um
Best Tolerance	Diameter:+0/-0.02 , Center thickness:±0.02mm , Surface: 10/5, Flatness L/10 , PV0.2(aspheric),Decentering can be <=40''
Customization	Optical Design / Mechanical Design / Opto-Electronic Solution
Quality Management System	ISO9001







WAVELENGTH

OPTO-ELECTRONIC

Lens Polisher 60 units



OptoTech Aspheric Generator 3 units



Edging Generator 6 units



Nanoform 5-axis Diamond Turning 10 units(1 in SG)



SPS Machine 4 units(2 in SG)



Coating Machine 21 units(1 in SG) 1 IBS coater



Full Range of QA/QC Facility



Interferometer

Spectrometer

Focal Meter

Lens MTF Measurement



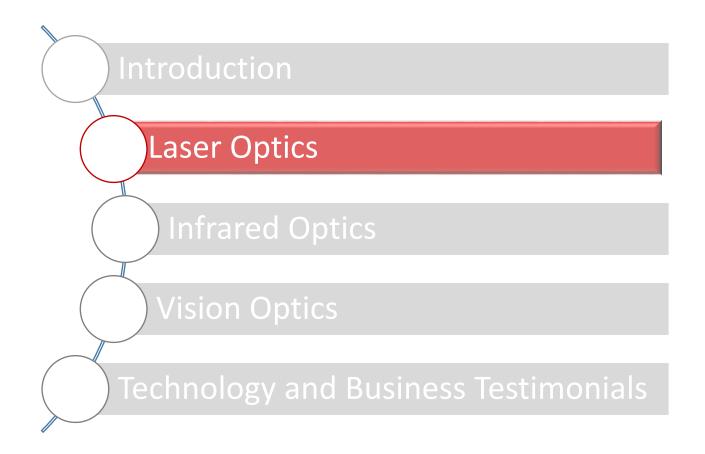
AFM

Temperature tester

CMM

Profiler

Center Deviation Tester





Key Elements of Laser Optics









Beam Shaper

F-theta Scan Lens

Telecentric Scan Lens

Beam Expander



Thin Film Polarizer



Laser Attenuator

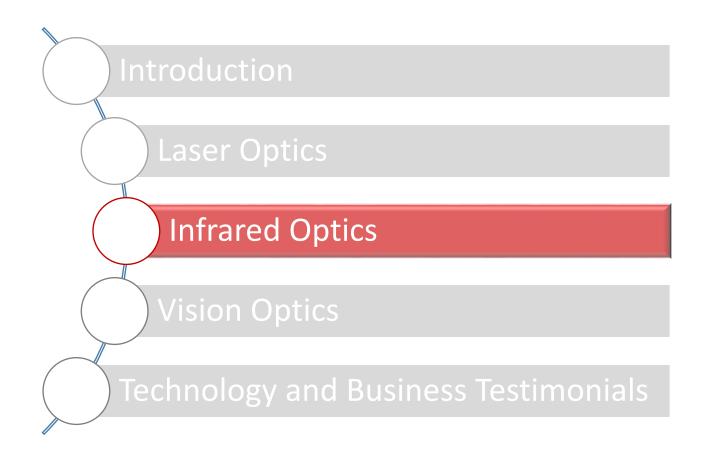




Lens



Beam Combiner





Key Elements of Infrared Optics













SWIR 0.9 - 2.3um

MWIR 3 - 5um LWIR Lens 8 - 14um

IR Cooled Lens

s Double FOV Lens

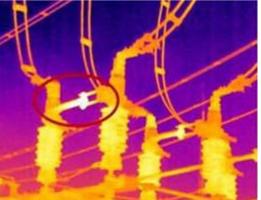
Motorized

- Ge / GaSir / ZnSe / ZnS / Si Lens
- CaF2 / BaF2 / Ge window / Dome
- Aspheric Lens/Diffractive Optics
- DLC Coating
- Band Pass Filter and Long Pass Filter
- Broadband Quarter / Half Wave Plate





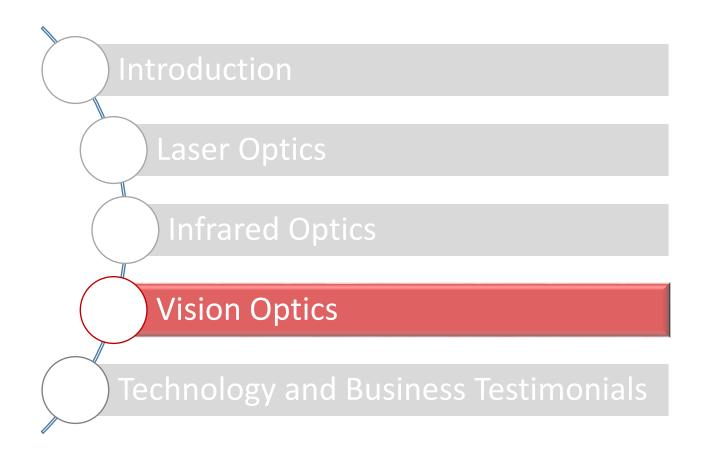








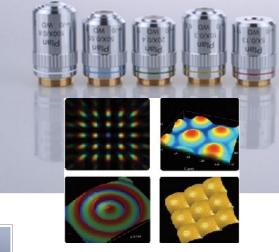






Key Elements of Vision Optics

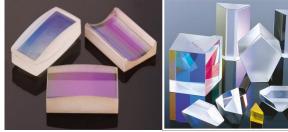
- Cylindrical lens
- Prisms
- Objective Lens
- Tube lens
- Doublet/Triplet
- Filters



Diffractive Optical Element (DOE)

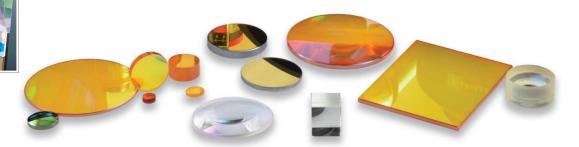






Cylinder Lens







Key Elements of Vision Optics

• Ability to design/customize as per customer request

