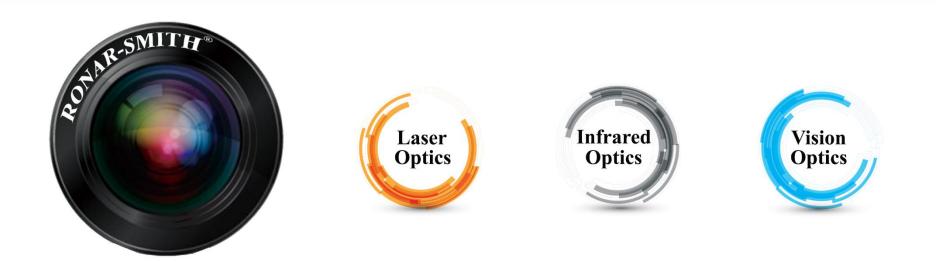
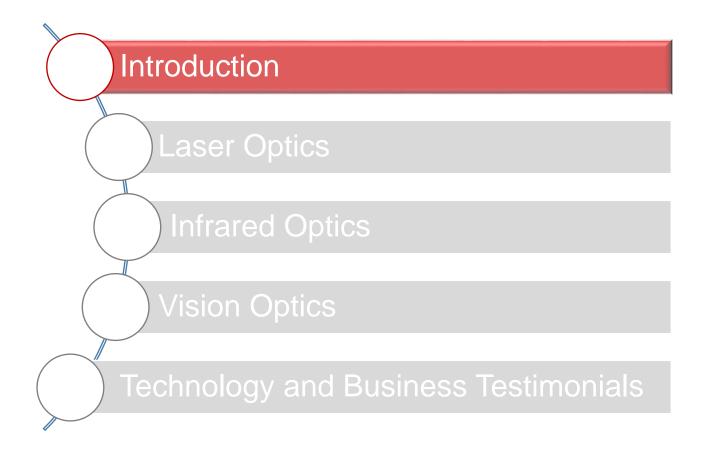
### WAVELENGTH OPTO-ELECTRONIC

### Wavelength Opto-Electronic (S) Pte. Ltd



### **Corporate Presentation 2022**





## **Company Introduction**

- Established in August 2002
- ISO9001 certified since 2004
- 550 total staff
- 10,000 m<sup>2</sup> production footprint
- 1,500 m<sup>2</sup> cleanroom for class 100k
- 1,000 m<sup>2</sup> 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

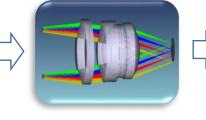
#### Values

Innovation Teamwork Excellence Customer Focus



## **Full Solution from Materials to Systems**









**Optical Material** 

**Optical Design** 

**Optics Manufacturing** 

Coating





**System Integration** 



System Prototype



QA/QC

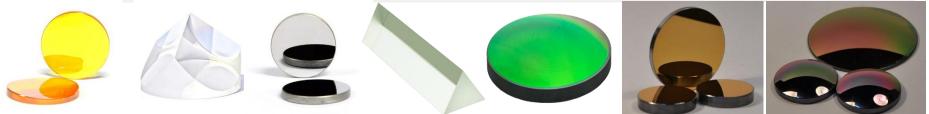


Module Assembly

### 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** 



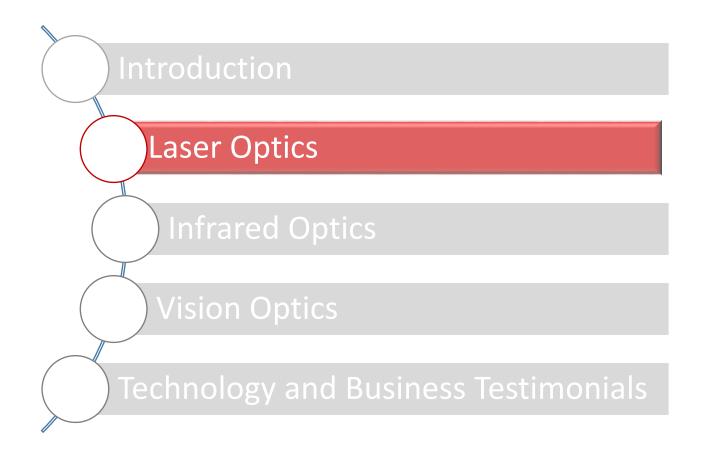
AFM

**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** 

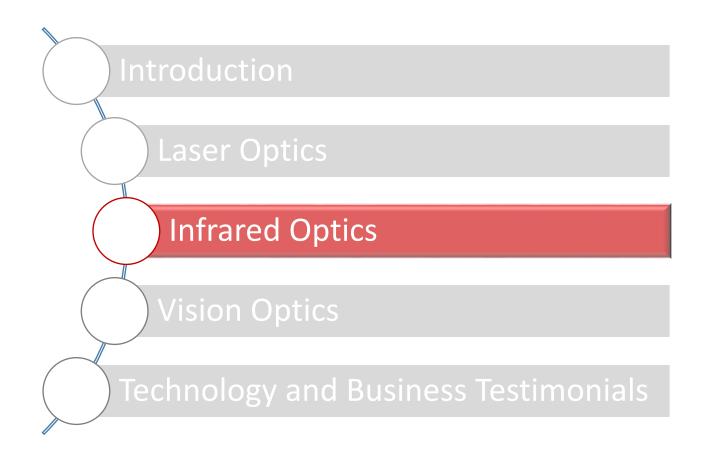




Lens



**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

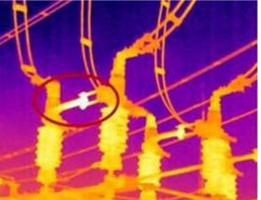
Motorized

- 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





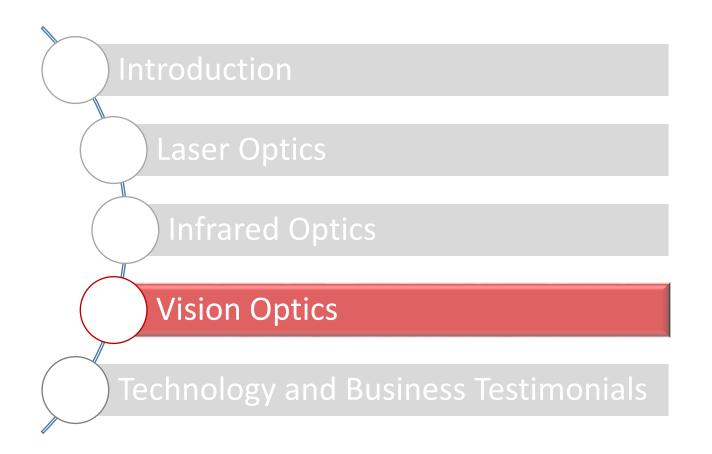








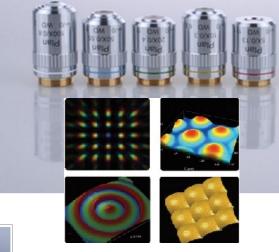






## **Key Elements of Vision Optics**

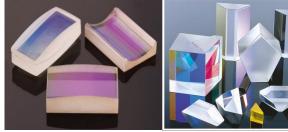
- Cylindrical lens
- Prisms
- Objective Lens
- Tube lens
- Doublet/Triplet
- Filters



**Diffractive Optical Element (DOE)** 

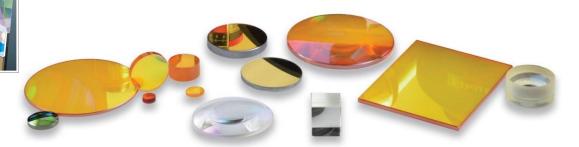






**Cylinder Lens** 







### **Key Elements of Vision Optics**

• Ability to design/customize as per customer request

