



Paras Defence & Space Technologies Limited

Premier Defence and Space Engineering Company

Company At A Glance



Wide Range of
Products




Innovation &
R&D Centric



World Class
Manufacturing
Setup



Strong Team of
500+

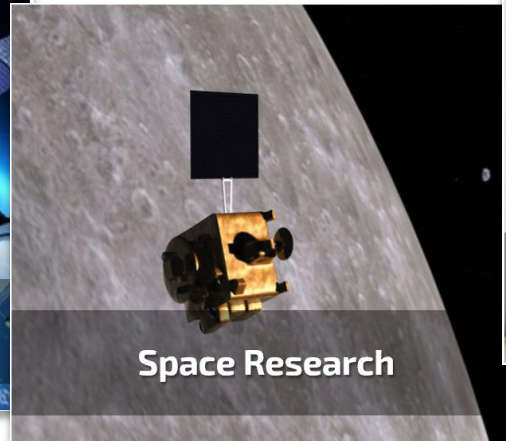
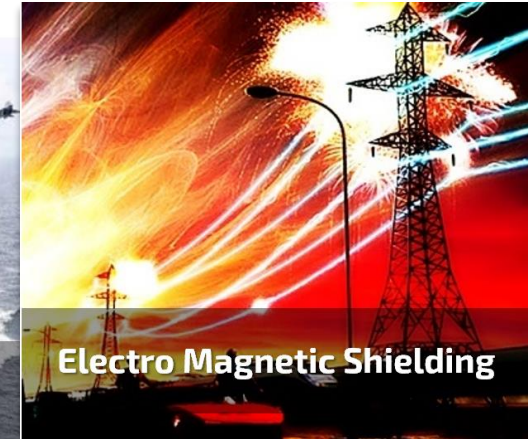


On Time Quality
Deliveries



Heritage of
Defence & Space
Programs

Application Areas



Huge Market

2nd

Largest
Armed Force

3rd

Largest
Military Spender

68%

Of Defence Budget for
Capital Acquisition

1.62L Cr.

Of Opportunity in Defence
Sector

Revolutionary Initiatives



Initiatives in Action

4

Positive
Indigenisation Lists

25%

Of Defence R&D for
Domestic Industry

93%

Increase in iDEX Budget to
foster young ideas

74%

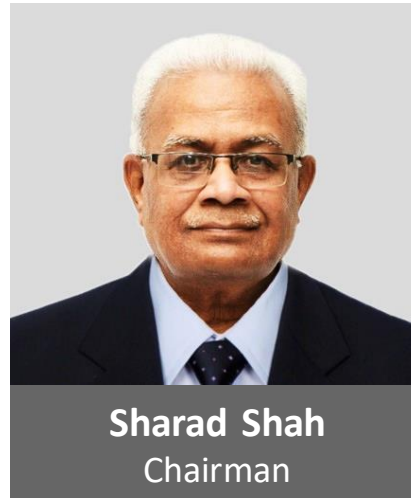
FDI through
Automatic Route

SPV

Model being explored
between Govt. & Industry

Leadership Team

Board of Directors



Directors



Anish Mehta
Director: Bus. Dev.



Harsh Bhansali
CFO



Amit Mahajan
Director: Tech. & R&D



Ami Shah
V.P.: HR



M. M. Handa
Independent Director
Ex-Director of BEL



Suresh Katyal
Independent Director
Ex-GM of BEL



Dr. Hina Gokhale
Independent Director
Ex-DG of DRDO

Vice Presidents



R. Rajagopal
Sr. Vice President

Industry Expert



N. Saravanan
Sr. Vice President

Industry Expert



K. Natarajan
Sr. Vice President

Industry Expert



Dr. Padmanabham
Sr. Vice President

Industry Expert



G. S. Ravichandar
Sr. Vice President

Ex-AGM of BEL



D. Ramakantha
General Manager

Ex-Sr. DGM of BEL



A. R. Bodhe

Industry Expert

India's Best Optics Team



Krishna Murthy

Ex-ISRO



C. P. Dewan

Ex-ISRO



K. R. Murali

Ex-ISRO



R. S. Bisht

Ex-ISRO



Bharat Yelkur
Sr. Vice President

Industry Expert



S. Somashaker

Ex-ISRO

Locations of Paras

01 Navi Mumbai

Optics Mfg, Opto-Mech Integration,
Electronics D&E, System Integration,
Directors & Corporate Departments

02 Ambernath

Heavy Engineering Mfg., Mechanical
System Integration, Test Facilities

03 Bengaluru

Optics Design, Advanced Electronics
System Design, Sales & Marketing,
Projects & Customer Interface, After
Sales Support

04 Ahmedabad

Optics Design, Optics Simulations,
Opto-Mechanical Assemblies etc.

05 New Delhi

Sales & Marketing, Customer
Interface, Post Sales Co-ordination

06 Hyderabad

Sales & Marketing, Customer
Interface, Post Sales Support

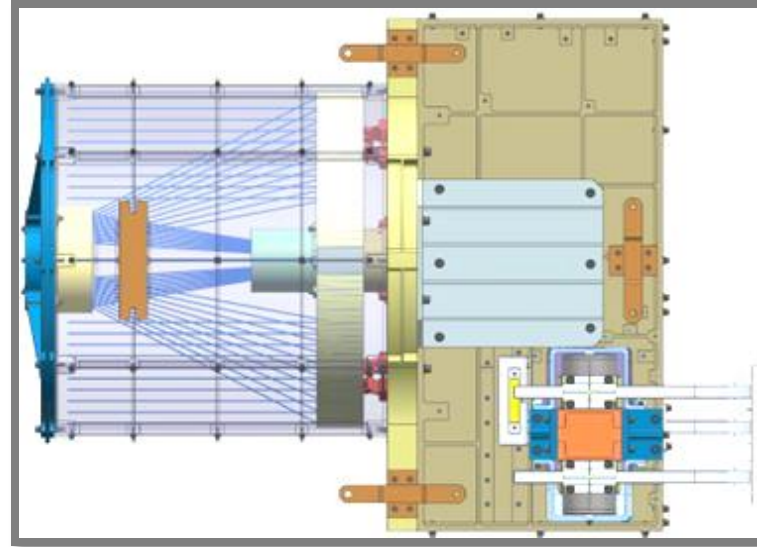
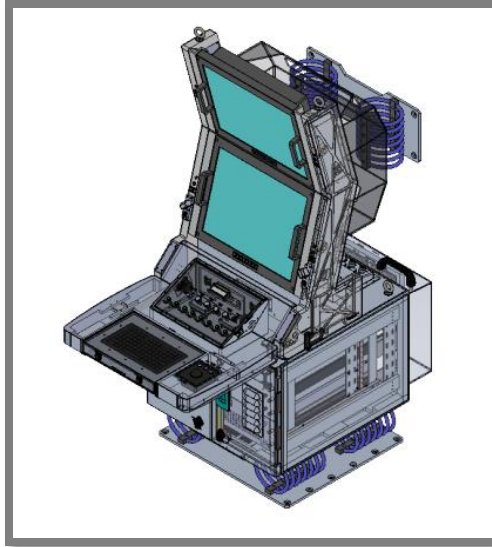
Un-Paralleled Capabilities



State-Of-The-Art Facilities



Exceptional Design & R&D Capabilities



Optronic System Design

Opto-Mechanical Designs

Optical Designs

Electronic System Designs

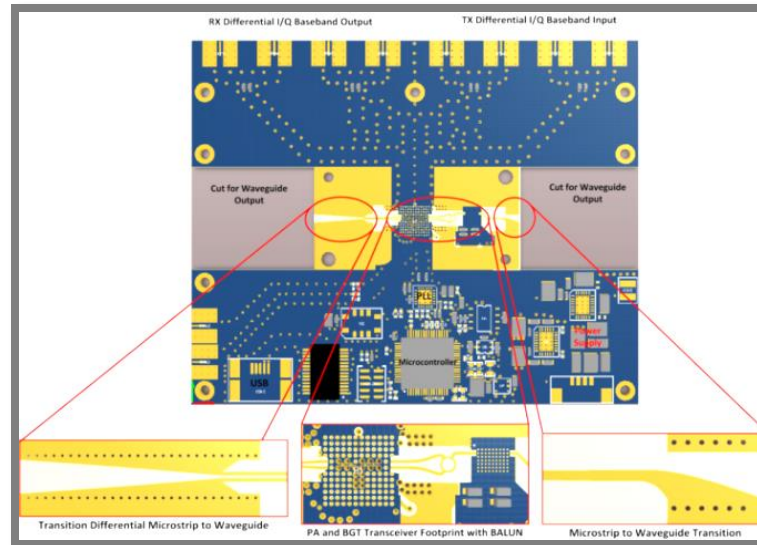
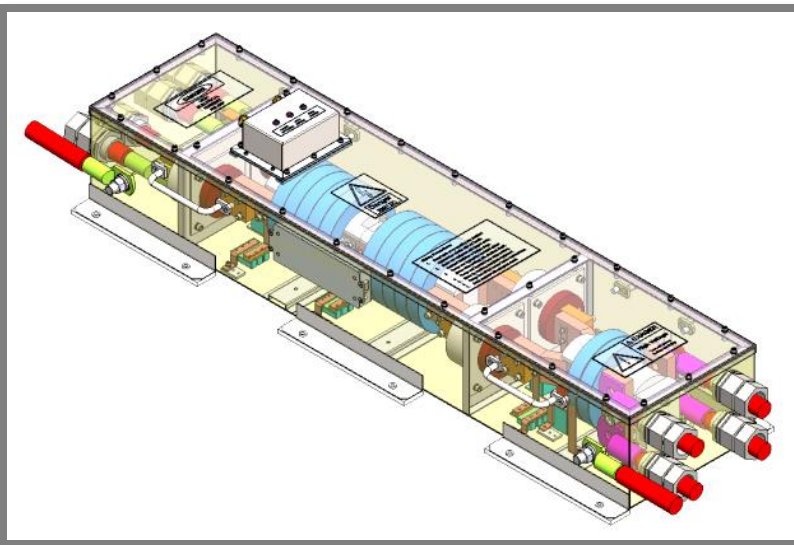
Embedded Electronic Designs

Software Development

ElectroMagnetic Protection Design

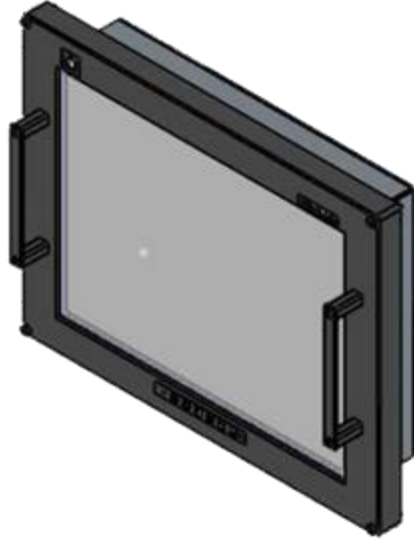
RF, Microwave, Antenna Designs

Mechanical Design & Analysis

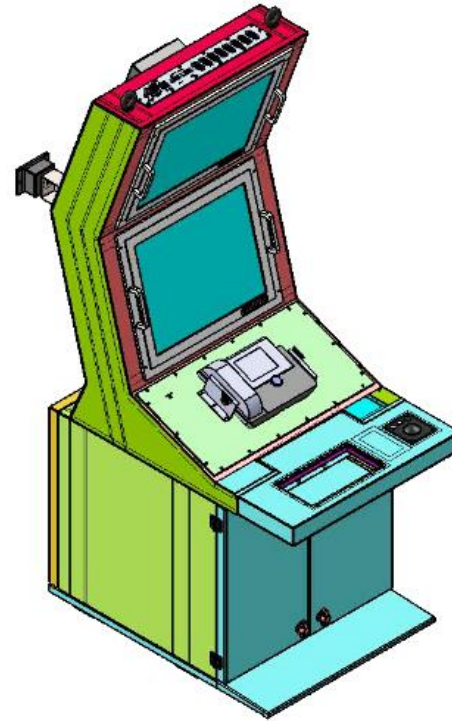




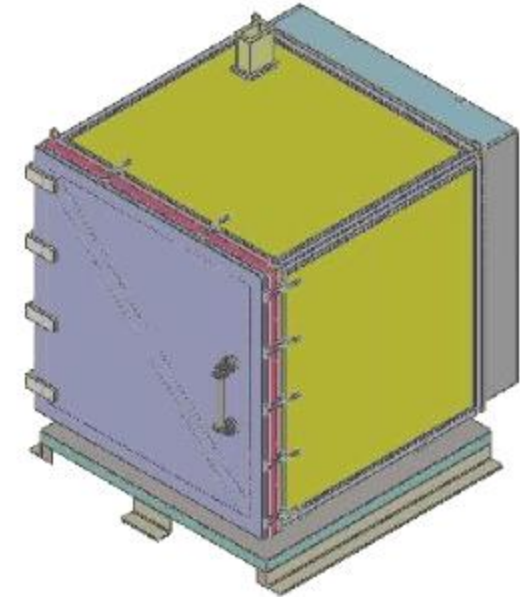
Latest Patents Awarded to Paras Defence



EMP Protected Rugged
Display



Shock/Vibration Proof
Heavy Duty Console



ElectroMagnetic Pulse
Protected Rack

Certificates & Recognitions



ISO 9001:2015
Certified



AS9100D
Certified by
DQS



ITAR Cleared



DSIR
Recognized
R&D Company



CRISIL Rated: A
-



Optics & Optronic Systems

Optronic Systems,
Optical Assemblies
Optical Components

Defence Engineering

Defence Electronics,
EMP Protection Solutions
Heavy Engineering

Submarine Optronic Periscope

Only Indian Private
Company in the whole
Asia-Pacific Region to build
a Turnkey Optronic
Periscope for Submarine
Application

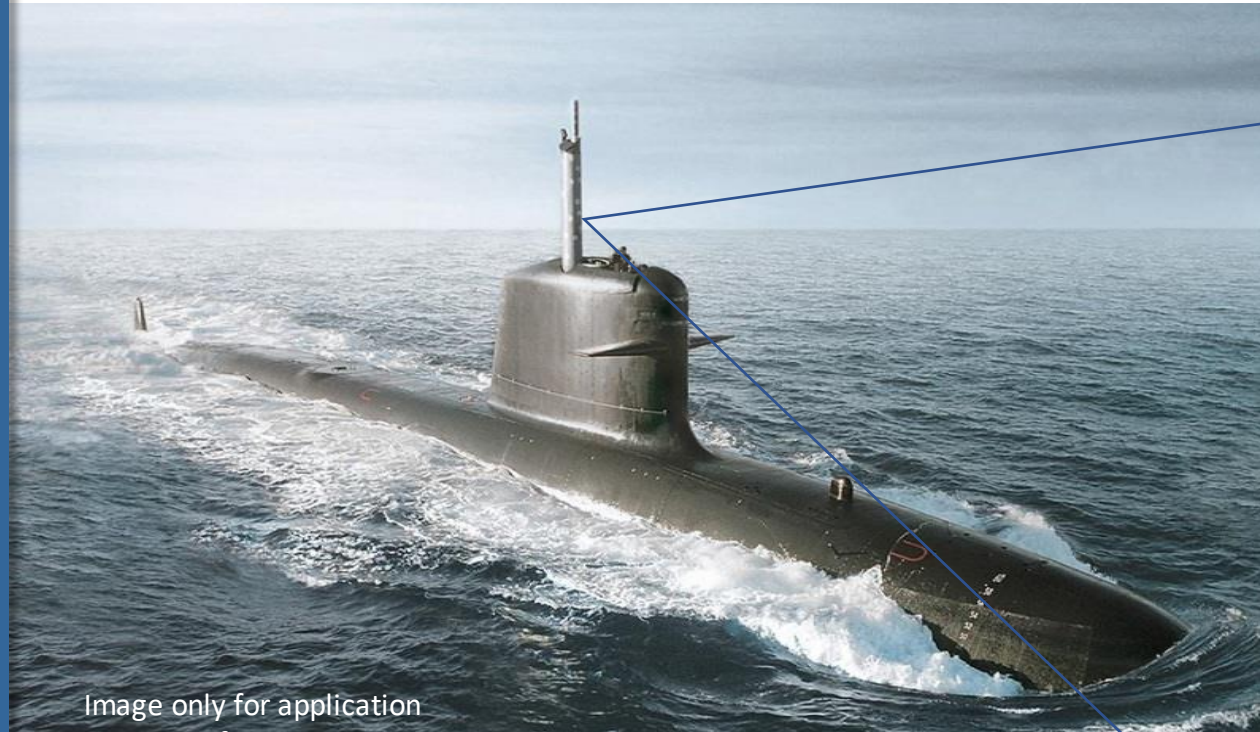
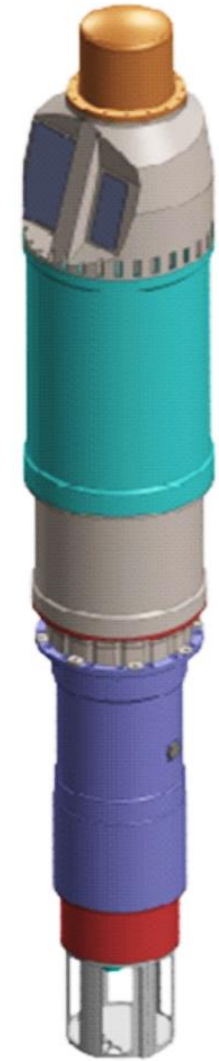


Image only for application

- Currently building 4 Nos. (5 more in pipeline)
- Projected requirement of 15+ for the next 3 years
- Refurbishment of 10+ Nos for old platforms for the next 2 Years
- Huge business potential for **New Platforms, Refurbished Systems, Repairs** and possibilities of **Exports**



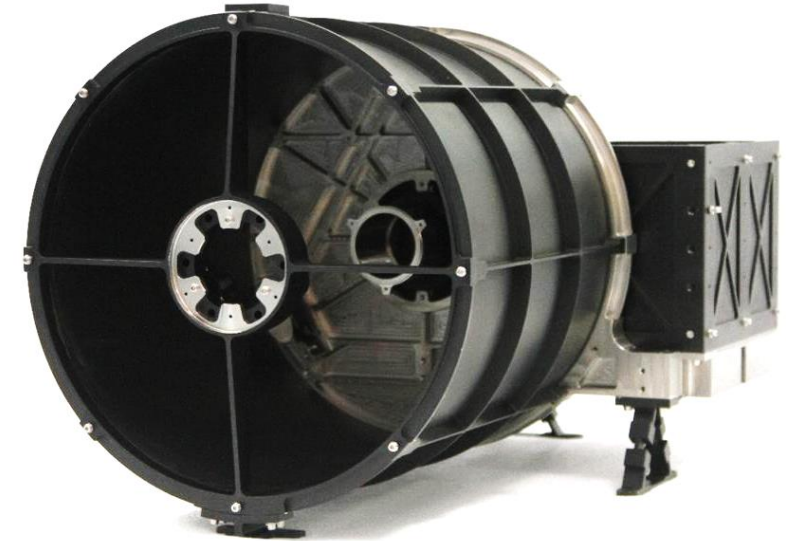
Hyper Spectral Imaging System

Only Indian Private Company to develop and deliver Hyper Spectral Imaging Opto-Mechanical System & Working on full Camera for Defence & Space



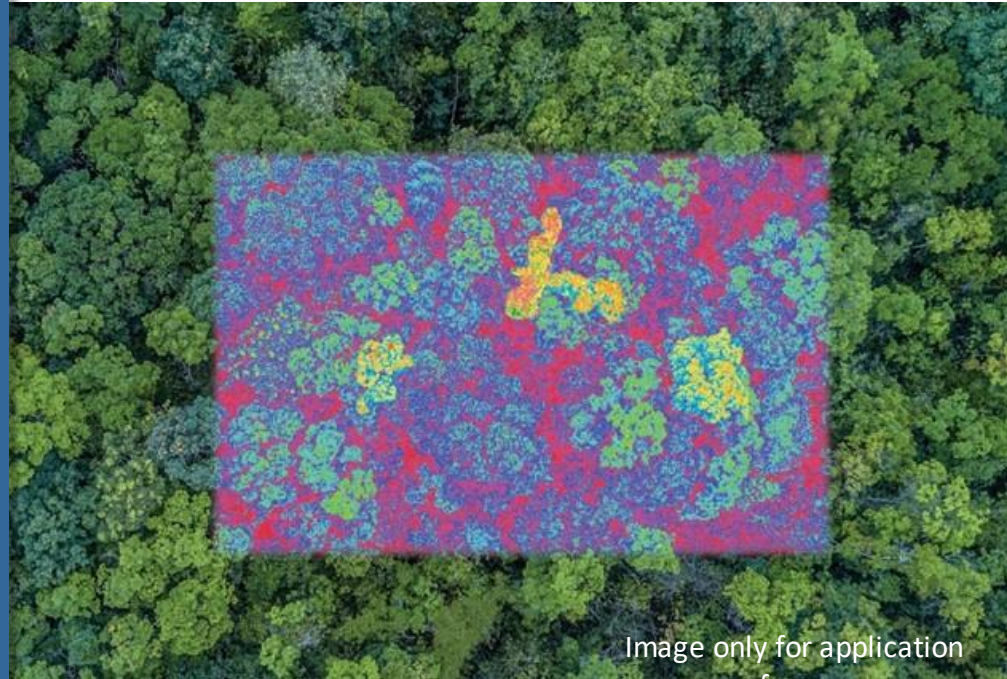
Image only for application

- Only Pvt. Indian Company to develop and deliver a **Hyperspectral Camera for Space (Mission to be flown before Mar' 24)**
- Collaborating with 2+ Non-ISRO Missions for their Hyperspectral Payload Development
- Suitable for Space Applications

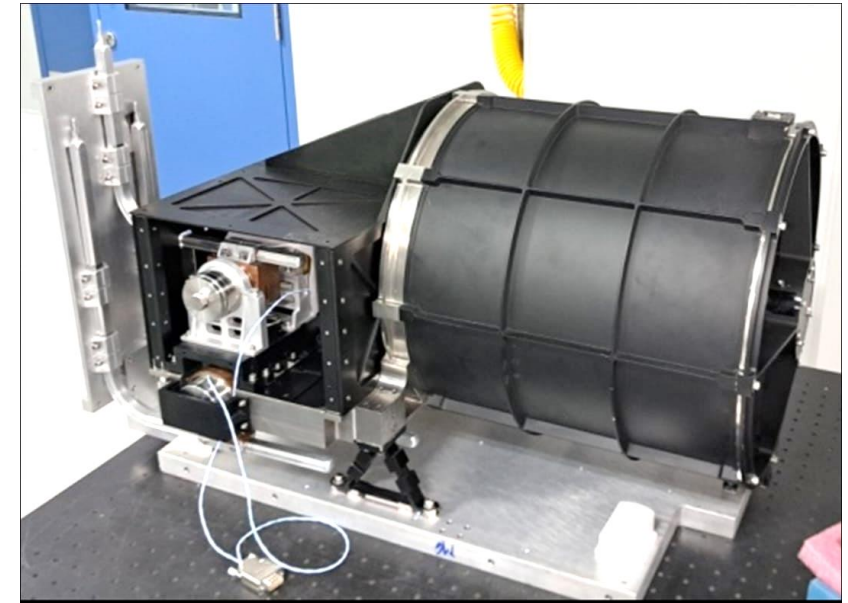
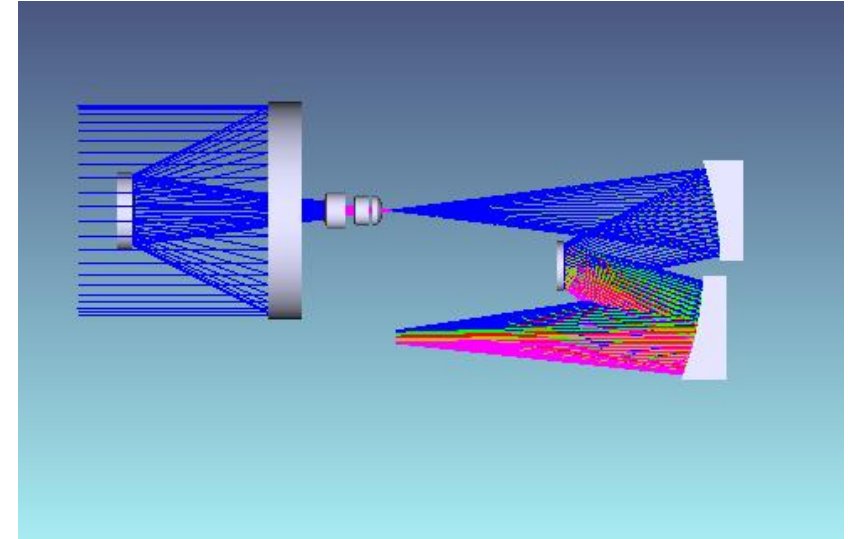


Hyper Spectral Imaging System

Only Indian Private Company with capabilities to Develop Hyperspectral Imaging System for Non-Space Applications



- Completely in-house designed and developed
- Hyperspectral Imaging is the future in imaging systems
- Potential requirements would be in excess of 10000+ units, for India alone
- Ground Applications such as Defence, Medical, Agricultural, Botanical, Food Safety etc.



Red Dot Reflex Sight

India's most advanced
point-and-shoot device



- Completely in-house designed and developed
- Advanced features like light weight Optics and Automated Zeroing
- Huge export requirement especially to the US
- Applications such as Defence, Security, Commercial etc.



JV with Controp
Precision
Technologies
Ltd., Israel

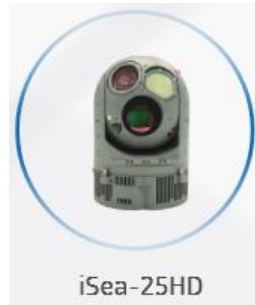
World's leading exclusive
EO/IR company



Forming a JV with world's leading exclusive EO/IR company to
manufacture world class EO/IR Systems in India (Under Make In
India), for various platform including Drones.

EO/IR Products by Controp

Will be manufactured
under Make India
with very high
indigenous content



iSea-25HD



iSea-30HD



iSea-50HD



iSky-50HD



iSky-30HD



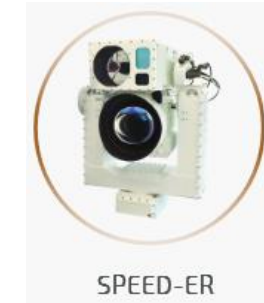
SIGHT-10E



SPEED-MR



SPEED-LR



SPEED-ER



TORNADO-ER



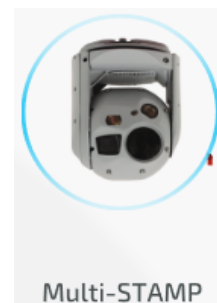
SIGHT-25E



SIGHT-25HD



M-STAMP



Multi-STAMP



T-STAMP-XR



T-STAMP-XED



T-STAMP-XD



SIGHT-50HD

Optics & Optronics Systems: Products & Solutions

India's No. 1 Company for Defence & Space Optics

IR LENSES

These are optical components for thermal imaging cameras or night vision devices



LARGE SIZE SPACE MIRRORS

These are large size mirrors used in space telescopes used for various applications



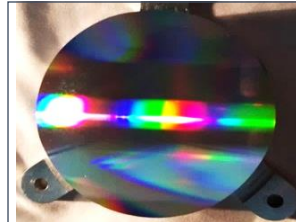
METAL MIRRORS

They are made from Al metals. They offer high reflective surface for long range imaging



DIFFRACTIVE GRATING

This is an essential optical element in hyper-spectral imagers used in space.



OPTICAL DOMES

These are optical elements used for missiles, which help the missiles to sight its targets efficiently



OPTO MECH. ASSEMBLIES

These are assemblies where precision optics are assembled with precision mechanicals



Optics & Optronic Systems Defence Engineering

Optronic Systems,
Optical Assemblies
Optical Components

Defence Electronics,
EMP Protection Solutions
Heavy Engineering

Saras MK-II

Executing Contract for
Complete Glass
Cockpit/Avionic Suite and
Auto Pilot of Saras MK-II
Program

- Partnered with the best in Business
- Huge requirement of 3 + 15 + 115 Nos in the next 5 to 7 Years
- Aim to increase indigenous content to suit Make In India
- Long Term business potential extending beyond Saras MK-II platform



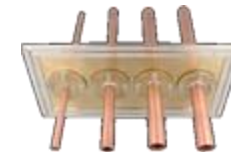
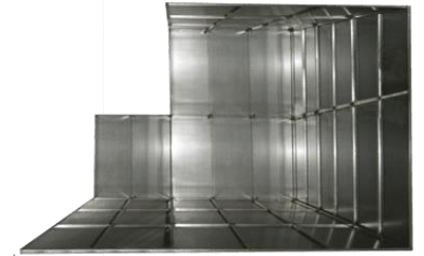
Representative image of Avionic Suite/Glass Cockpit

Electro-Magnetic Pulse Protection Solutions

Only Indian Company offering Turnkey Electro-Magnetic Pulse Protection Solutions



- Completely in-house designed and developed
- Only Indian Company, opening huge business potential
- EMP is the Future Warfare and hence the protection requirements will exponentially increase year-on-year basis.
- Applications such as Defence, Security, Banking, IT, Communications etc.



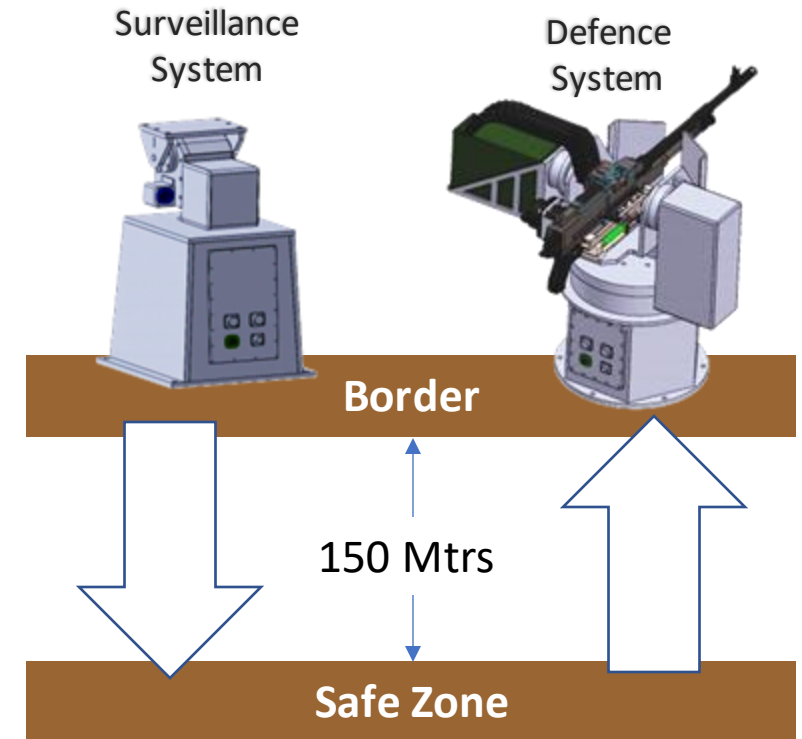
Remotely Controlled Border Defence System

High Precision Surveillance and Defence System for Borders and Critical Installations



Image only for application reference

- Only Company to have successfully developed a complete functional system.
- Projected requirement of 4000+ for the next 5 to 10 years
- Export business potential
- Suitable for Borders, Strategic Locations & Critical Installations



Command & Control System



Commanding Officer

Defence Engineering: Products & Solutions (Electronics)

CONTROL SYSTEMS

Mil-Grade Control Systems with Embedded Computing Algorithms



RUGGED COMPUTING SYSTEM

High Performance Embedded Computing Servers for Harsh Environments



RUGGED COTS SYSTEMS

Ruggedised Commercial Systems to meet harsh environmental standards



COMMAND & CONTROL CONSOLES

Turnkey Command & Control Consoles with Design to Installation at Site



RUGGED DISPLAYS

Mil Grade Displays qualified for MIL – 810, 167, 901, 461 & EMP Standards



PROXIMITY SENSORS

These are non-contact electro-mechanical device which gives precise proximity sensing



Defence Engineering: Products & Solutions (Mechanical)

FLOWFORMED TUBES

Seamless Cold Formed Tubes capable of withstanding high pressure suitable for Rocket/Missile



TITANIUM & SPECIAL METAL MFG.

High Precision Manufacturing of Titanium, AL-Bronze, Alloy Steel Etc.



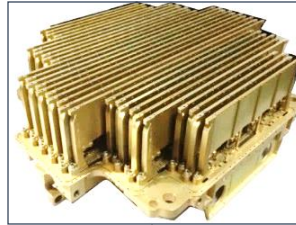
RACKS & CABINETS

Custom Designed Racks & Cabinets for Defence Applications with EMP Protection



COLD PLATES

AL-AL Vacuum Brazed Cold Plates for Active Array Radar Cooling Requirements



LARGE DYNAMIC PLATFORMS

Heavy Structures with Automation & High Movement & Positional Accuracies



FLOWFORMING MACHINES

These are indigenously designed and manufactured flow-forming machines



Defence Engineering: Products & Solutions (EMP)

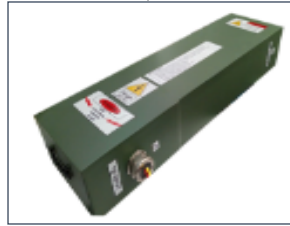
EMP PROTECTED AREAS

EMP Protected Workcenters, Data Centers, Control Rooms, Command Centers etc.



EMP FILTERS

EMP Filters for Power & Data complying to MIL-188-125 & MIL-Std-220C



AIRVENTS & WAVEGUIDES

Waveguides, Airvents, Windows & Penetration Panels to provide Total Protection



EMP RACKS & CABINETS

Compact Cabinets with High Performance EMP Protections with SE of over 100db



SHIELDED DOORS

These are doors which provide Electro-Magnetic Shielding of 100+db



ONSITE INSTALLATION

Comprehensive onsite installation by All Indian Team for strategic locations



Prestigious Customers



Wide Customer Base – Govt. Customers



Indian Ordnance Factories



Defence R&D Organisation



Bharat Electronics



ISRO



Goa Shipyard Limited



Mazagon Dock Limited



Hindustan Shipyard Limited



Garden Reach Shipbuilders & Engineers Ltd.



Cochin Shipyard Limited



BrahMos Aerospace Pvt. Ltd.



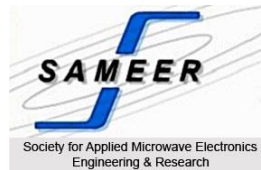
Bharat Dynamics Ltd.



Department of Atomic Energy



Electronics Corporation of India Ltd.



Society for Applied Microwave Electronics Engineering & Research



National Aerospace Laboratory



National Physical Laboratory of India



Indian Institute of Astrophysics



Hindustan Aeronautics Ltd.

Wide Customer Base – Pvt. Customers



Godrej & Boyce Mfg. Co. Ltd.



Tata Power



Larsen & Toubro



Kirloskar Brothers Ltd.



Tata Consultancy Services



Alpha Design Technologies Pvt. Ltd.



Astra Rafael Comsys Pvt. Ltd.



Solar Industries India Ltd.



Premier Explosives Ltd.



Tonbo Imaging

Wide Customer Base – International



Rafael Advanced Defense Systems Ltd.



Israel Aerospace Industries



Elbit Systems



Controp



Singapore Electronics



Tae Young Optics Co. Ltd.



Chaban Group

Our Main Subsidiaries



Our Subsidiaries

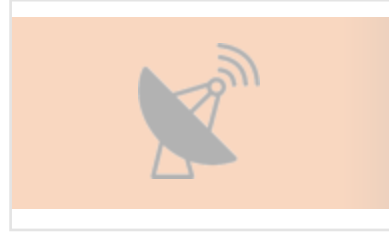


Paras Aerospace

Paras Aerospace is our most promising subsidiary which is involved in Drones, Drone Services and associated technologies. With some exclusive offerings, Paras Aerospace is on its way to become the most significant company in its sector.



Paras Defence
holding 60%



Paras Anti-Drone

Paras Anti-Drone Solutions is our subsidiary which is involved in Development of RF & Microwave Systems & Sub-Systems aimed at Counter UAV Solutions and more.



Paras Defence
holding 55%



Opel Technologies

Opel Technologies is a wholly owned subsidiary of Paras Defence involved in providing efficient sourcing from across the world.



Paras Defence
holding 100%

Drone Manufacturing



- Military/Tactical Drones
- Industrial Drones
- Agriculture Drones
- Next Generation Drones
- Drone Payloads

Drone Management



- Autonomous Surveillance
- Vision Enabled Drone Management
- Drone Safety – Drone Parachutes
- Drone MRO

Drone Services



- Agricultural Services
- Industrial Infrastructure Services
- GIS & Engineering Services
- Training

Paras AgriCopter

Features:

- a. Perfect Atomisation with 4-Nozzle Design
- b. Dual Antenna for High Accuracy Directional Information & Anti-Interference Capability
- c. Intelligent Autonomous Flight
- d. DGCA Certified Agri-Drone



Our Subsidiaries



Paras Aerospace

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Paras Anti-Drone

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Opel Technologies

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Introduction to CEO of Paras Anti-Drone



Ashutosh Baheti
CEO

Ashutosh Baheti is the CEO of Paras Anti-Drone and is an Entrepreneur, Technologist and Inventor working in areas of Hi-Tech Systems Development and Architecting. He has been a key member in innovation space with focus on RF, Microwave and Electromagnetics systems.

He has worked as Research Scholar at University of Manitoba. He has also worked with IMEP-LAHC, Grenoble, France. He did his Master of Science in Information and Communication Engineering with specialization in RF and Microwave systems from Technical University of Darmstadt.

He has written more than 40 patents in areas of Radar, Communication systems and 5G technologies. He has co-authored several publications and journals in very reputed institutions.

What is an Anti-Drone System?

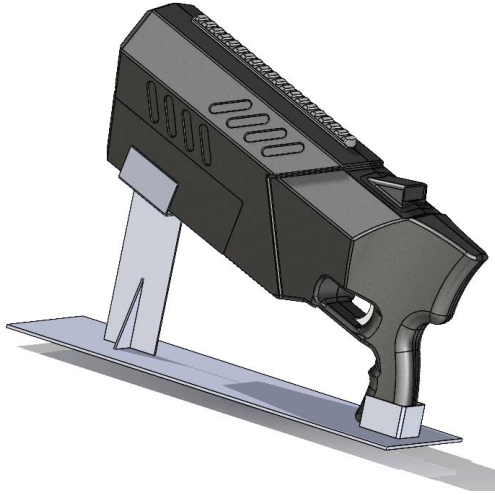
Complete Protection against
Hostile/Spurious Drones

Include Technologies to Sense,
Detect and Identify Hostile
Drones

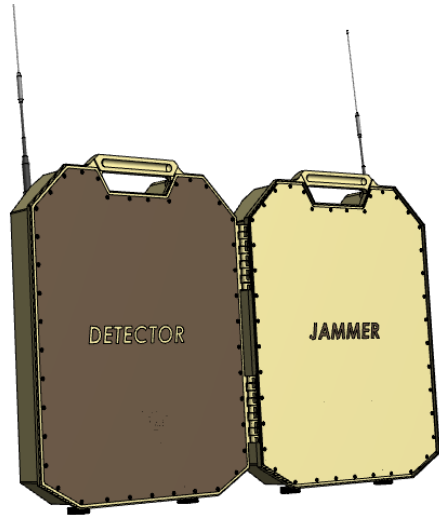
Implement Counter Measures by
Soft Kill: Jamming, Spoofing or
Hard Kill: HP Lasers or DEWs



Paras Anti-Drone: 3 Main Products



Drone Jammer Gun



Drone Detection & Jamming System



Portable & Low Cost
Anti-Drone System



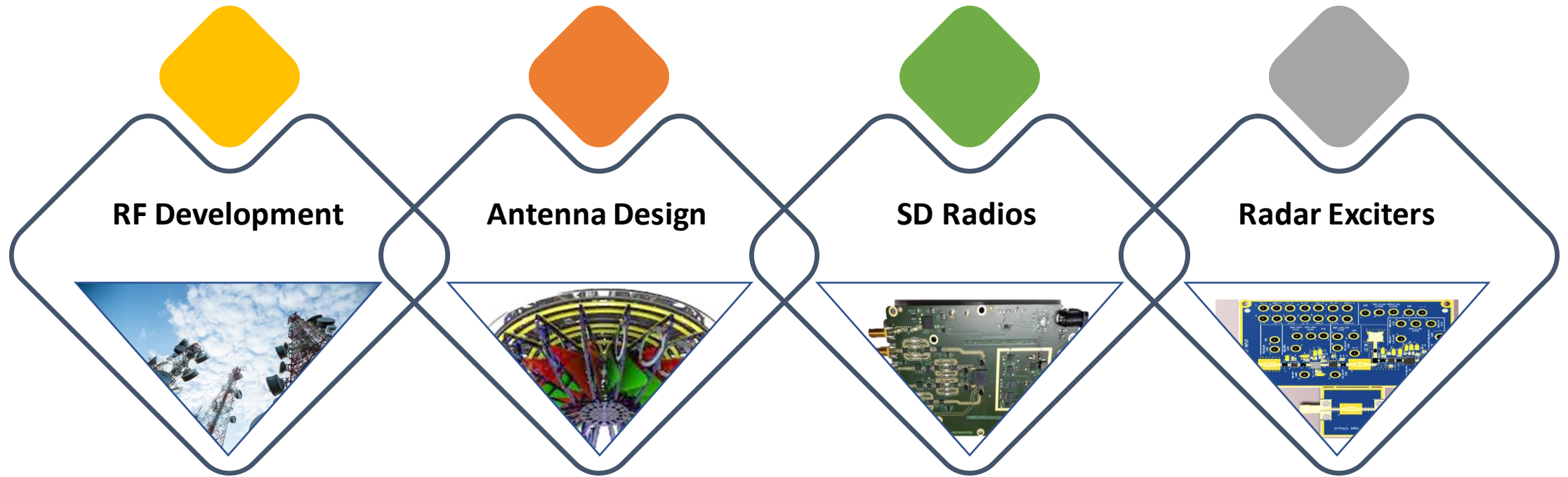
CERBAIR
ANTI-DRONE SOLUTION

Proud Moment for Paras Anti-Drone

Received contract from Europe's leading Anti-Drone Company

Development Contract where Paras Anti-Drone is **developing next generation jammers** with CerbAir

Development Areas of Paras Anti-Drone



Various Applications of an Anti-Drone Solution



Critical Infrastructure



Border Protection



Mass Events like Sports etc.



VIP Protection



Maritime Protection



Military & Security Protection

Aim of Paras Anti-Drone



Paras Anti-Drone aims at becoming the
No. 1 Anti-Drone Company in India by FY26-27



Opportunities for Paras With High Probability

Opportunity Areas

SPACE PROGRAMS



**QUANTUM
TECHNOLOGIES**

**AIRBORNE EO/IR
SYSTEMS**



Space Programs

Space Programs

Complete Optical Missions for Space

High Resolution Hyperspectral Camera for ISRO, Pvt. Companies & Export

Sub-Meter Resolution Optical Camera

Optical Payloads for Oceanography

Optical Payloads for Resource Management

Space Programs

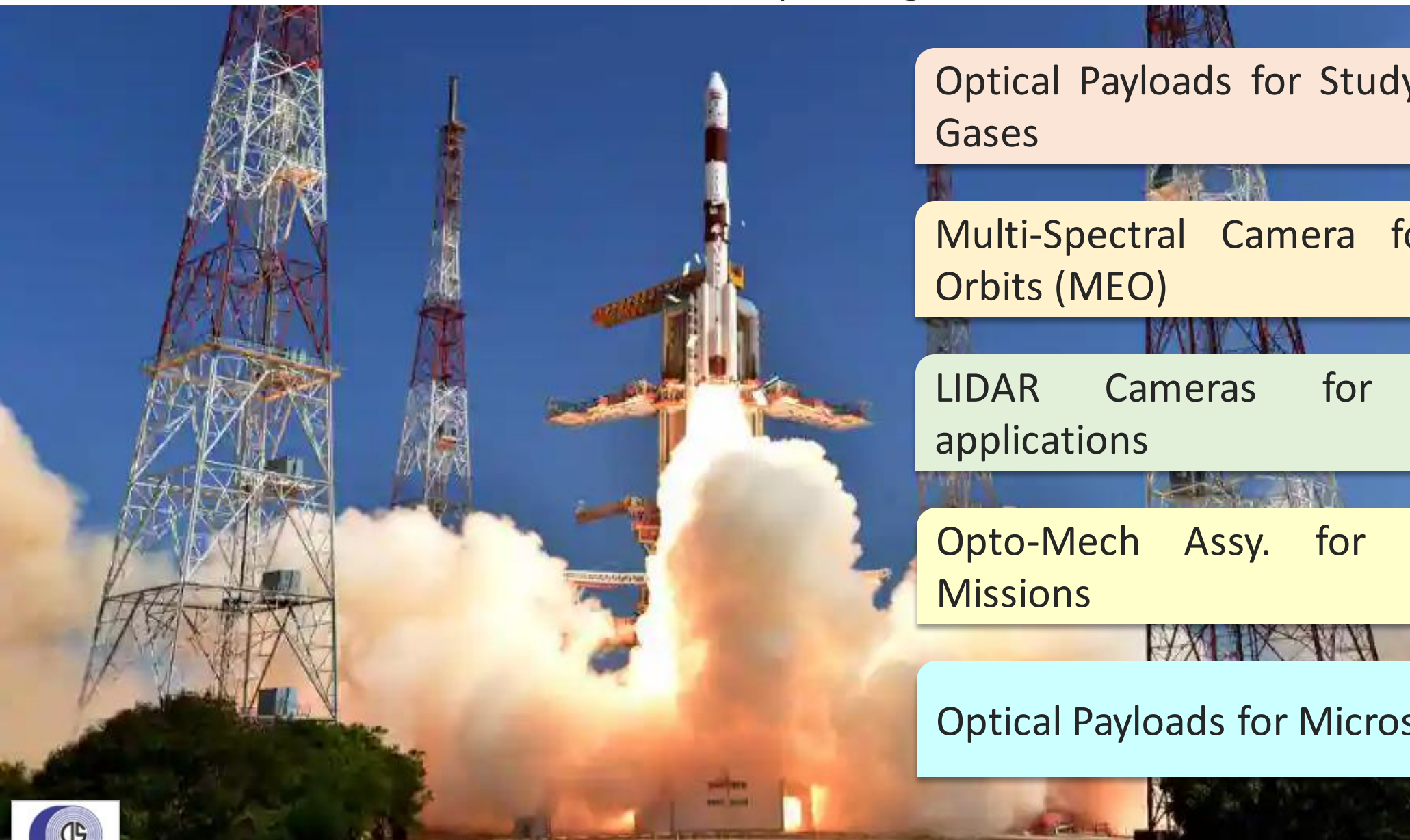
Optical Payloads for Study of Green House Gases

Multi-Spectral Camera for Middle Earth Orbits (MEO)

LIDAR Cameras for various space applications

Opto-Mech Assy. for Space Telescope Missions

Optical Payloads for Microsats



Space Programs

Optical Payloads for Space Defence

Ground to Space Telescopes for Space Debris Monitoring

Space to Space Surveillance Missions

Free Space Optical Communication from Gnd to Space and Space to Space

Optical Payloads for Interplanetary Missions



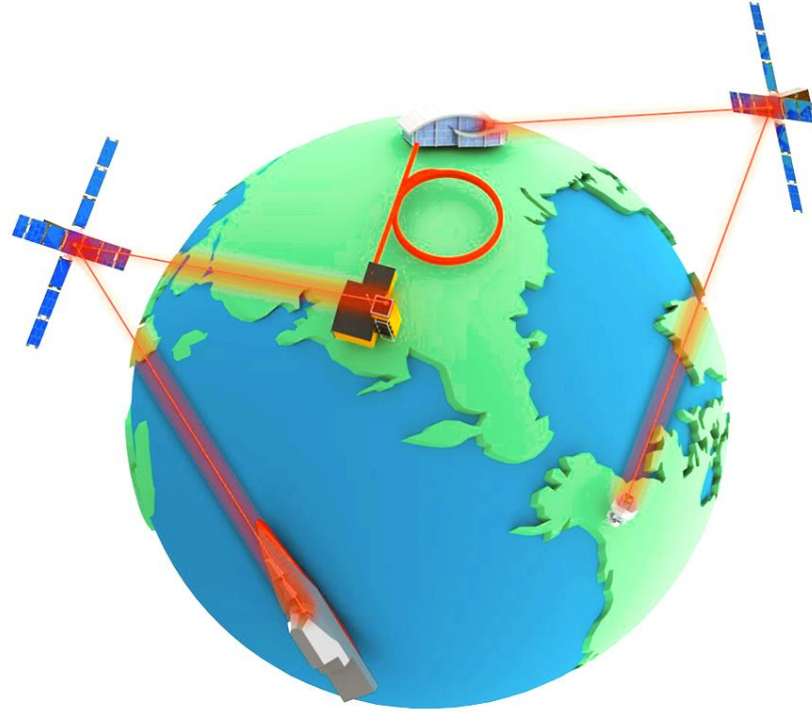
Quantum Technologies

Quantum Communication Technologies

With its technology expertise of Optics and Electronics, Paras looks at exploring Quantum Technologies such as Quantum Communication

Quantum Technologies

Representative Image Only



- Quantum Communication will have a huge business potential requiring secured and fast communication between two nodes.
- Huge Potential with Huge Value add by Paras promises to be a potential big leap for the company.



Airborne EO/IR Systems

Image only for application
reference

EO/IR Systems

Paras is collaborating with
its Customers to develop
an advanced EO/IR Systems
for Airborne Applications

- IRST – Infra-Red Search & Tracking System
- Optical Camera Systems for Combat Aircrafts
- Compact & Lightweight Cameras for High Altitude
Drones



Airborne EO/IR Systems (For Drone/UAV Applications)



**Multi-Spectral
Cameras**



**EO/IR
Cameras**



**AI
Cameras**

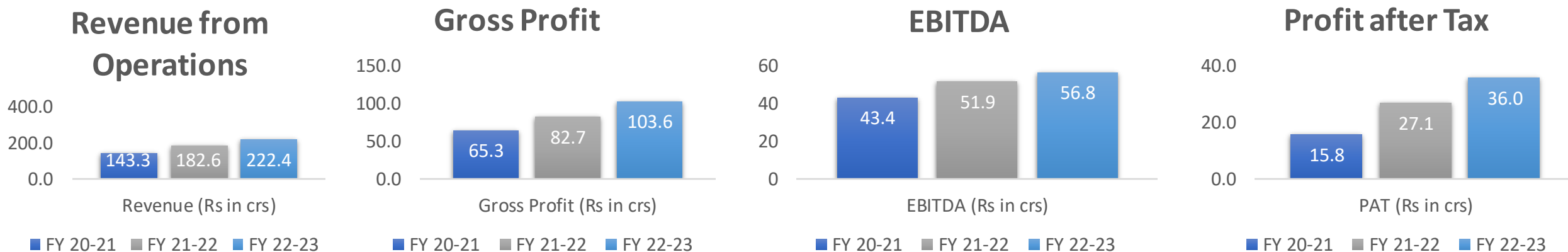


Lidars



Financial Overview

Consolidated Yearly Financial Performance



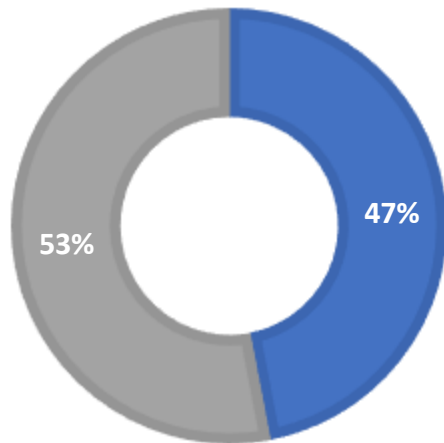
Guidance for FY24 & FY25:

We aim to grow our revenues by 30-40% and maintain or slightly better our profitability as compared to previous years.

Segment & Customer Bifurcation

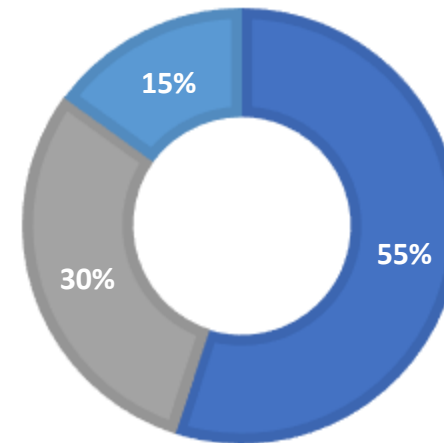
SEGMENT WISE REVENUE %

■ Optics and Optronic Systems ■ Defence Engineering



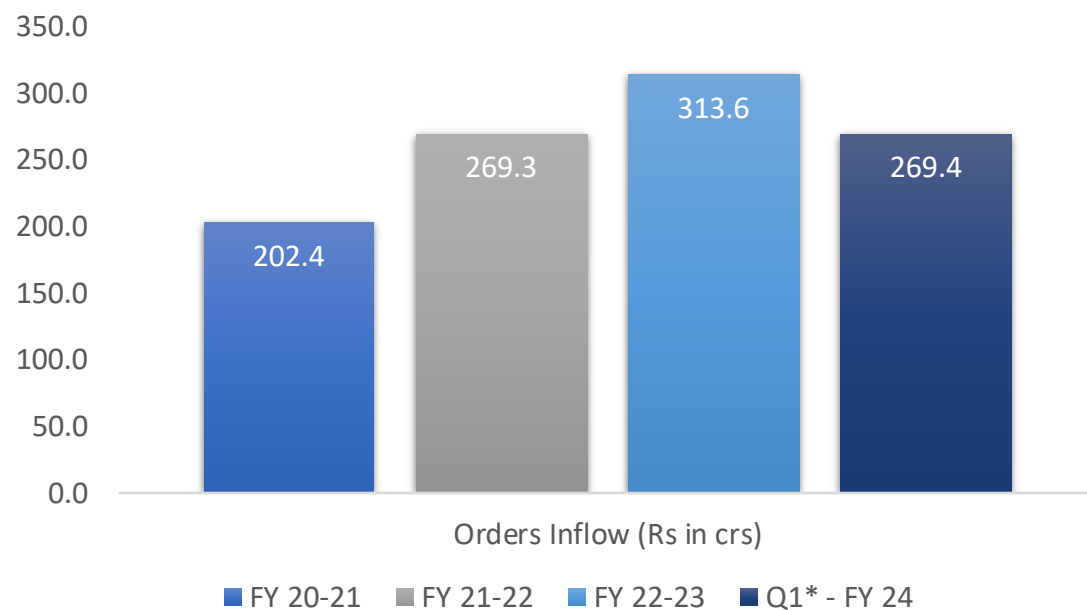
CUSTOMER WISE REVENUE %

■ Government ■ Public & Private ■ International

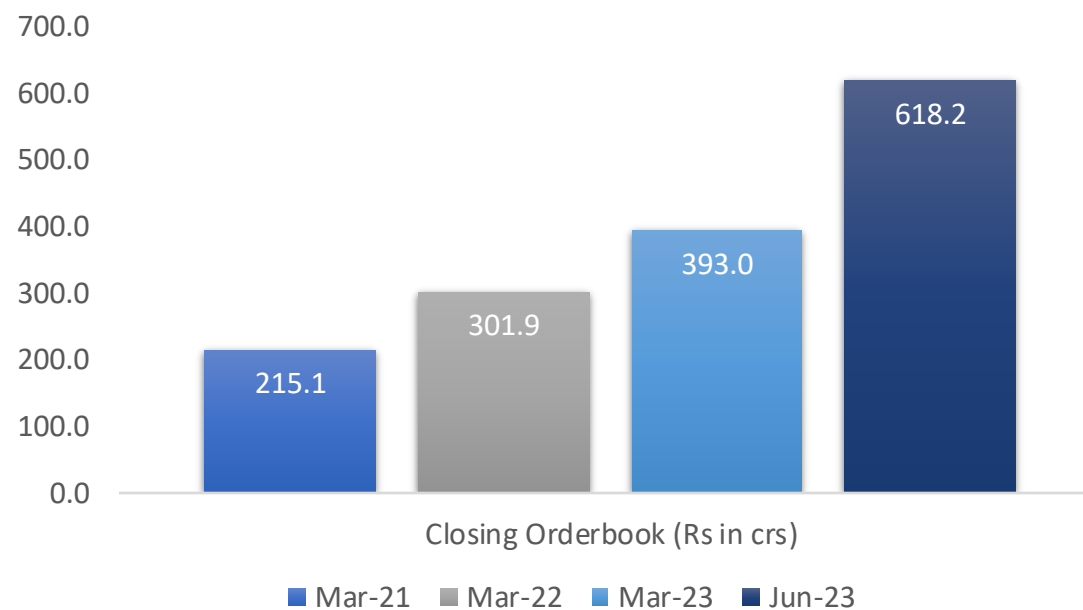


Consolidated Order Book Analysis

Orders Inflow



Closing Orderbook



Vision



Social Vision

Empowered by Women

Paras has a very high percentage of Women team members and hence rather than Women Empowerment, we are empowered by Women

Make A Difference

Paras Defence would like to positively make a difference to the social environment by offering employment.



Nuturing for Bright Future

Paras offers opportunities to young talent and is always ready to give the 'Best in the Industry' career exposure to such young talent, which is the Bright Future of our Country.

Make a Better Place

Paras Defence credits its success to its team and will strive to ensure conducive environment all its team members and social stakeholders.

Business Vision



BECOME GLOBAL LEADERS IN OPTICS & OPTO-MECHANICAL SYSTEMS IN THE NEXT 3 YEARS

BECOME GLOBALLY SIGNIFICANT EMP PROTECTION SOLUTIONS PROVIDER

BECOME ONE OF THE TOP 5 DRONE COMPANIES OF INDIA

BECOME NO. 1 ANTI-DRONE COMPANY OF INDIA



Thank You

www.parasdefence.com | business@parasdefence.com