

# Rug-Rel Components & Systems Pvt. Ltd.

# COMPANY PROFILE



**India**  
313, 7th Block  
ORR, Nagarbhavi  
Bangalore, India

**UK**  
IWG PLC 200, Brook Drive  
Green Park Reading, RG2 6UB  
United Kingdom

**UAE**  
957, 9th floor, Burjuman  
Tower, Sheikh Khalifa Bin  
Zayed Street, Dubai, UAE

**KSA**  
Circon Building 16,  
Olaya Road, Riyadh 11524  
Kingdom of Saudi Arabia



# Agenda

- 1. Introduction & Progressive Moves**  
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- 2. Technology Pool**  
.....
- 3. Key Business Verticals**  
.....
- 4. Projects & Products Glimpse**  
.....
- 5. Rug-Rel Facilities**  
.....
- 6. Road Map-2030**

# Introduction & Progressive Moves

**2013**

**Hi-Rel established with a clear focus on Design & Integration**



**2016**

**Hi-Rel UK office established**



**2017**

**First State-of-the-Art Integration Facility established**



**2018**

**Hi-Rel renamed as Rug-Rel, a Private Limited company**



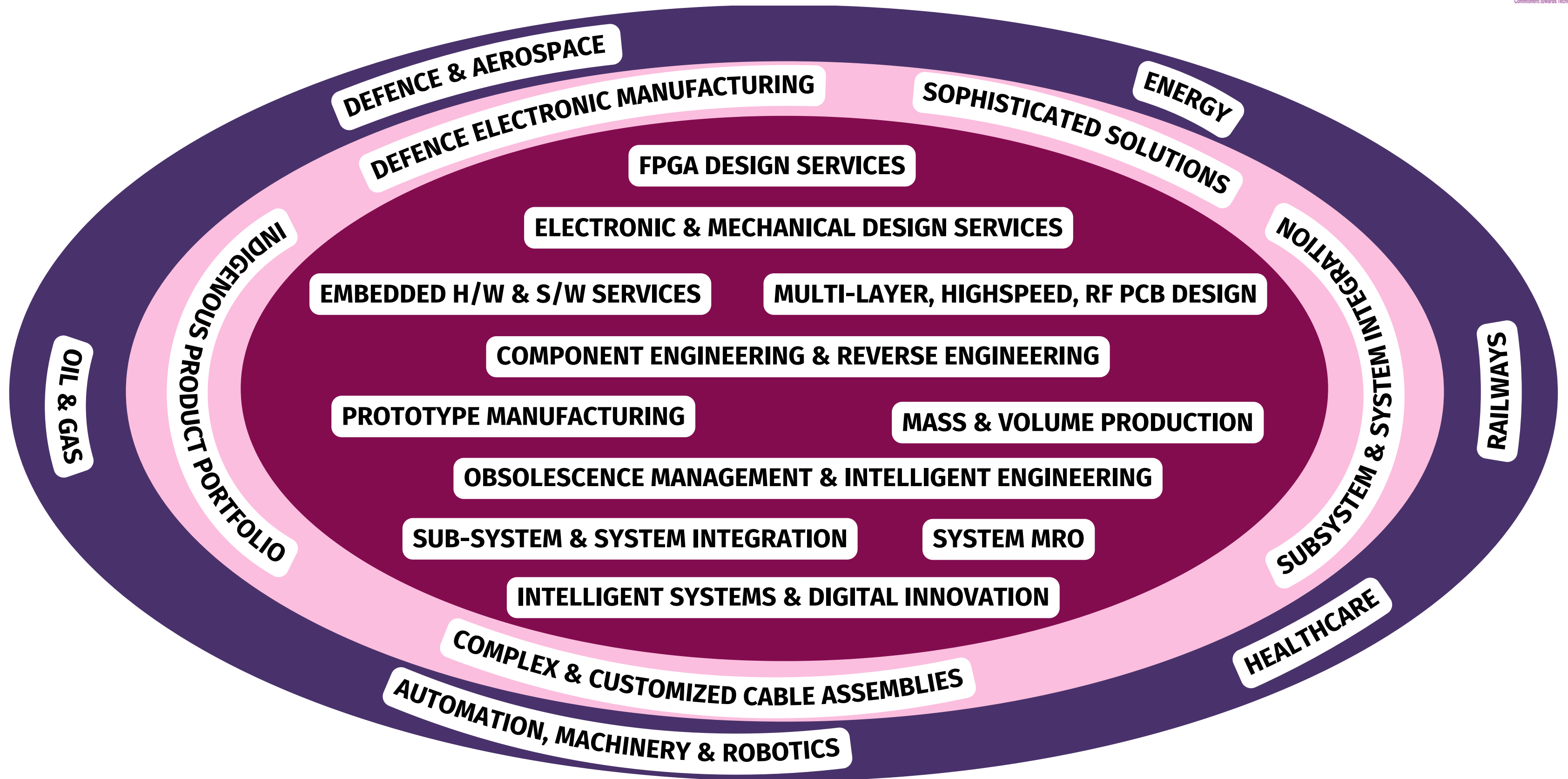
**Successfully delivered mission critical Projects & Closely working on the Industrial & Strategic Defence Programs of Domestic Market in India**



**Established strong customer base in India and serving the various customers from UK, France, Taiwan, Singapore, Russia, Spain, Turkey & MENA**



# Rug-Rel TECHNOLOGY POOL



**Competencies**



**Services**

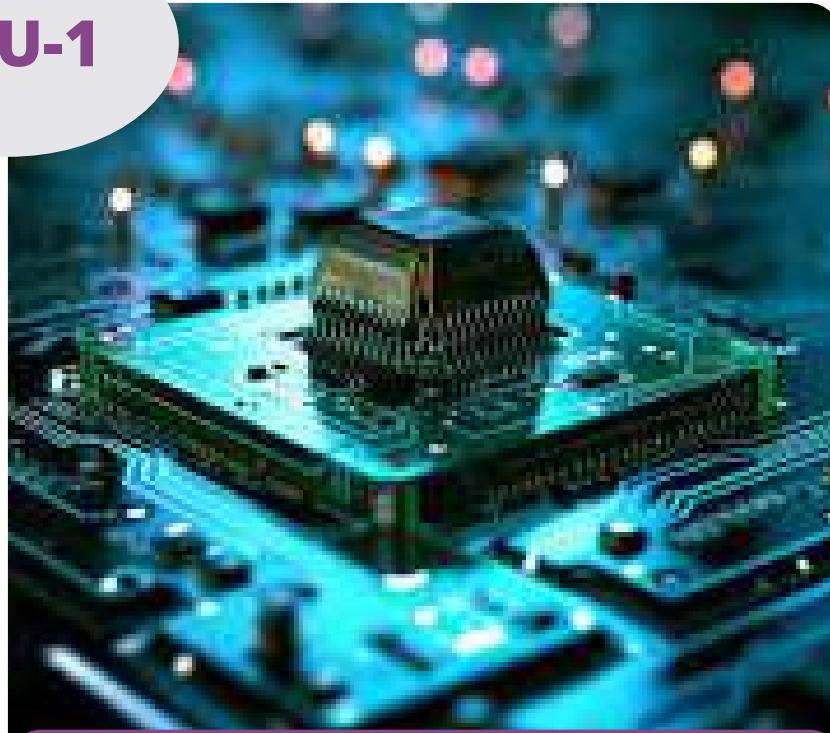


**Markets**

# Strategic Business Units



**SBU-1**



**Design &  
Proto Build**

**SBU-2**



**Power  
Electronics**

**SBU-3**



**Products**

# Key Business Verticals



Integrated Solutions



Embedded Solutions



Value Added Solutions



Power & Interconnectivity  
Solutions



Software Solutions



Integrated Solutions

Embedded Solutions

Value Added Solutions

Interconnectivity & power Solutions

Software Solutions



# INTEGRATED SOLUTIONS

Manufacturers of indigenous rugged and tested for all Mil-Standards offering customized and tailored designs of cabinets and consoles



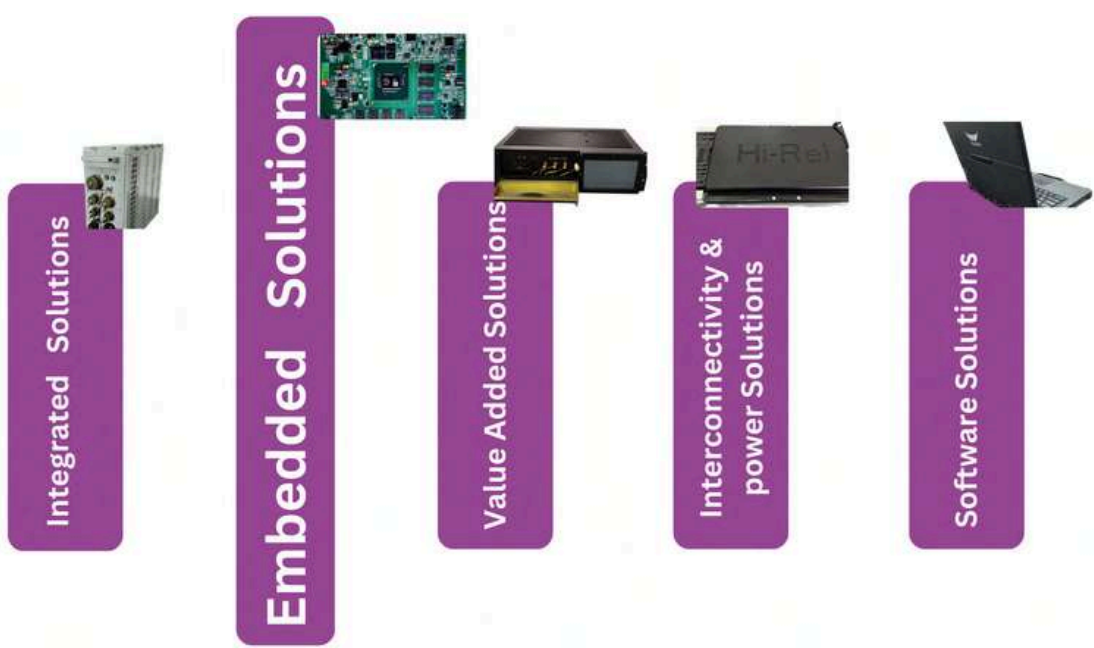
**Air Transport Rack (ATR Box)  
for the Space Applications**



**VME, VXS, VPX based customized  
test cabinet for Naval Applications**



**Multi-Monitor Display consoles for  
Defense Applications**



# EMBEDDED SOLUTIONS

End-to-end FPGA-based embedded computing solutions for AI, ML, and IoT, with seamless execution under one roof and a robust supply chain.



**Customized Backplanes (VME64X, VXS, VPX, cPCI, MTCA & ATCA Standards)**



**FPGA based Edge computing system**



**Realtime Fall Earth Resistance Monitoring**

Integrated Solutions

Embedded Solutions

Value Added Solutions

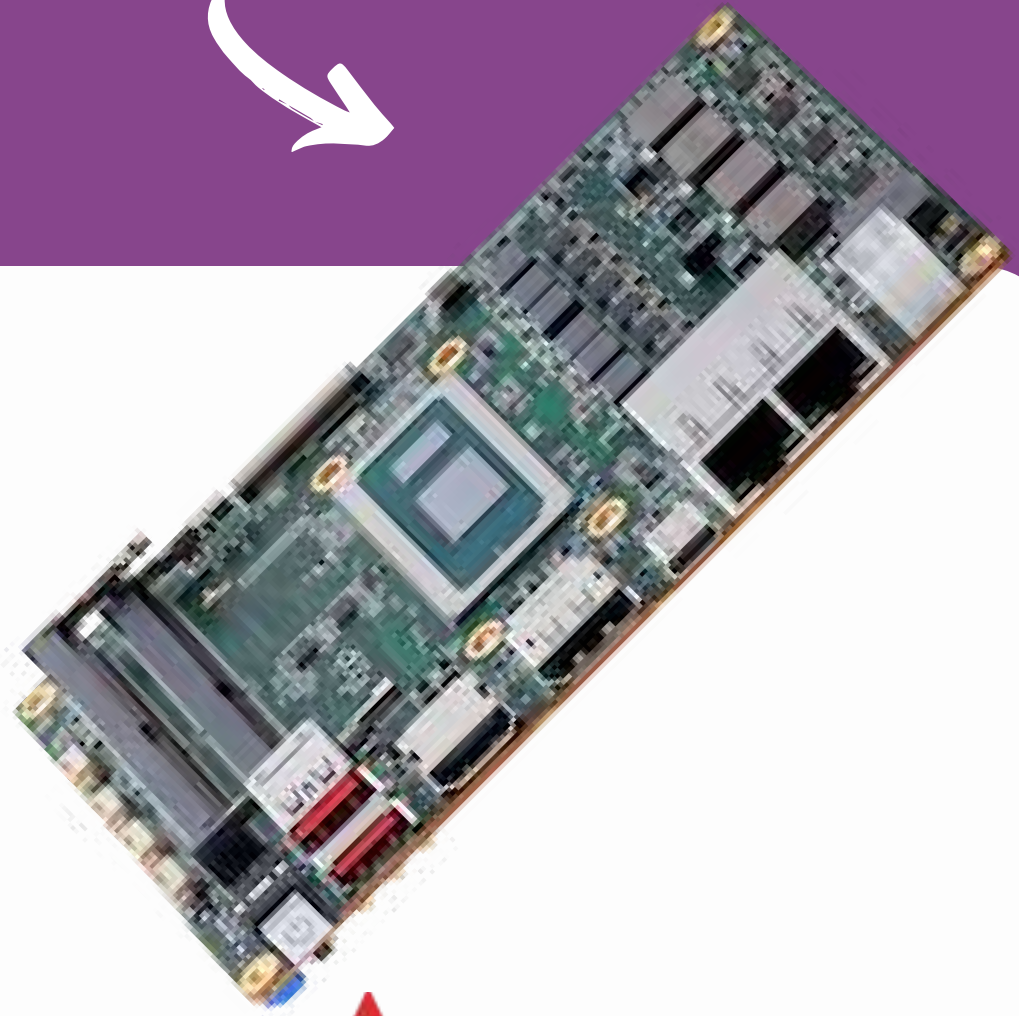
Interconnectivity & power Solutions

Software Solutions



# VALUE ADDED SOLUTIONS

End-to-end FPGA-based embedded computing solutions for AI, ML, and IoT, with seamless execution under one roof and a robust supply chain.



**Single Board Computers (SBCs)**



**General-purpose computing on graphics processing units (GPGPU)**



**Serial Front Panel Data Port (sFPDP)**

Integrated Solutions

Embedded Solutions

Value Added Solutions

Interconnectivity & Power Solutions

Software Solutions



# POWER & INTERCONNECTIVITY SOLUTIONS

Versatile power supplies for Defence, Military, and Avionics, meeting MIL-STD-704 and MIL-STD-1275, with custom solutions for VME, VPX, cPCI, and MIL-standard cable harnessing, including RFI/EMI/EMC shielding, crimping and soldering.



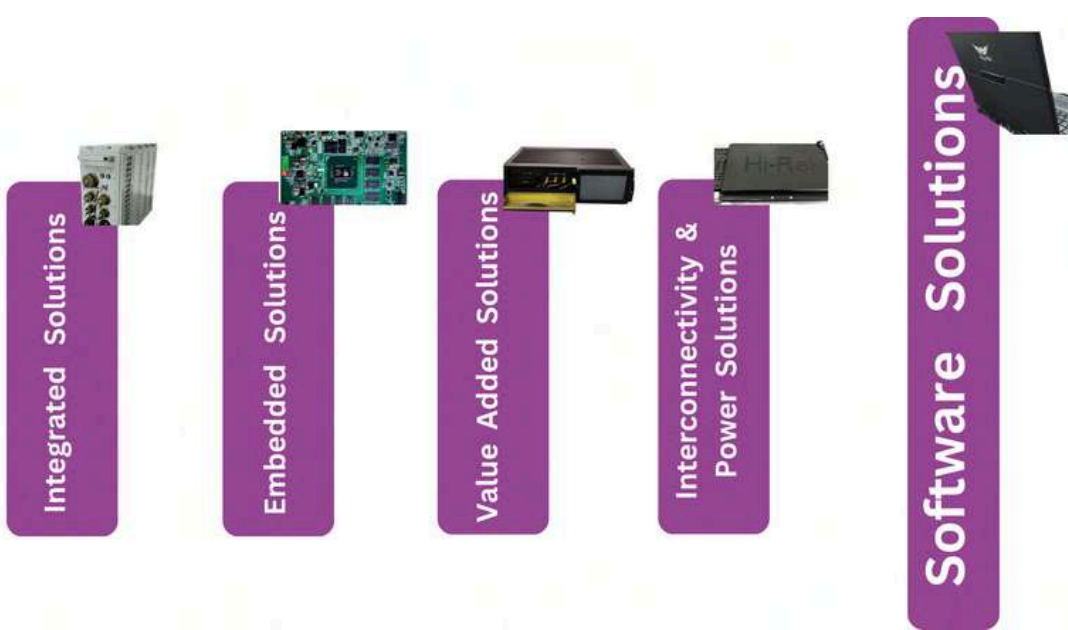
**Multi Input Multi Output Rugged Power Supply Units**



**Wire Harness**

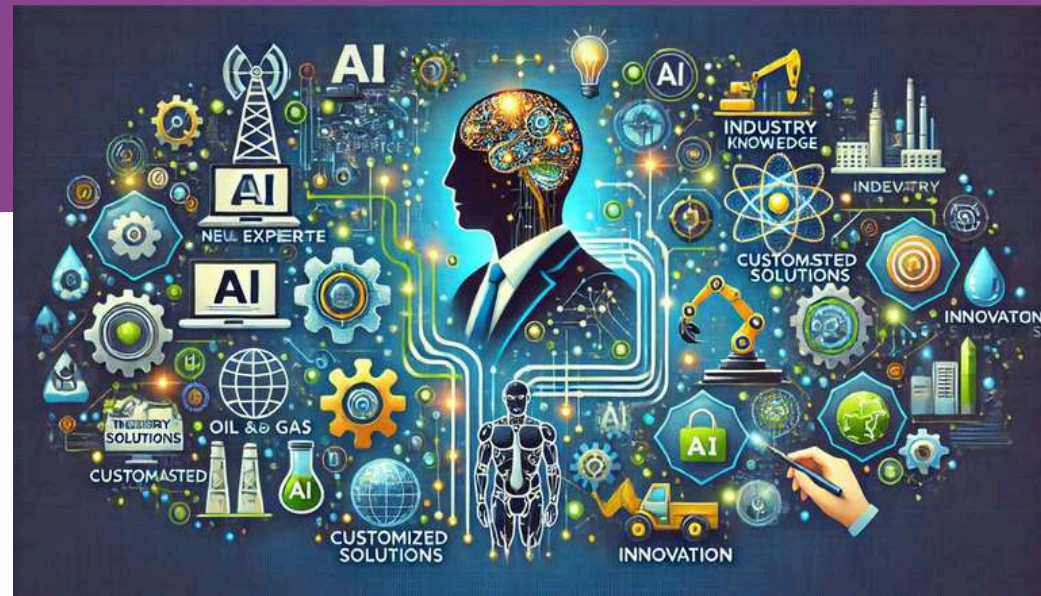


**Cable Assemblies**



# SOFTWARE SOLUTIONS

Our Rugged, AI-enabled solutions empower organizations with actionable insights for informed decisions, proactive measures and scenario simulations. As technology leaders, we leverage AI, Predictive Analytics, Big Data, IoT and Quantum Computing to drive innovation and transformative solutions.



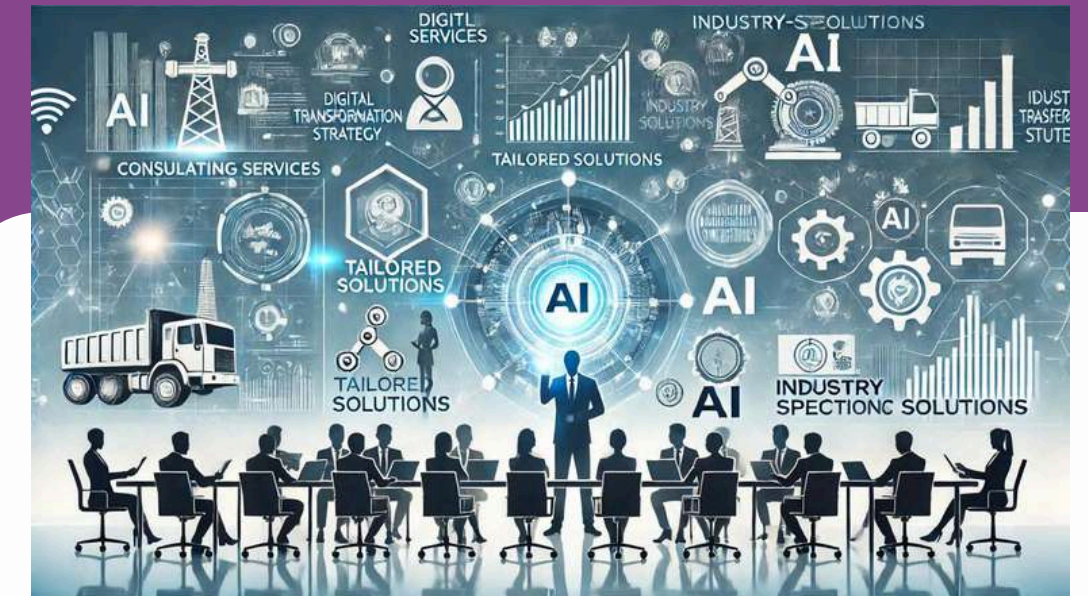
## Competencies

- Predictive Maintenance
- Predictive Analytics
- AI Video Monitoring
- Big Data Analytics



## AI Solutions

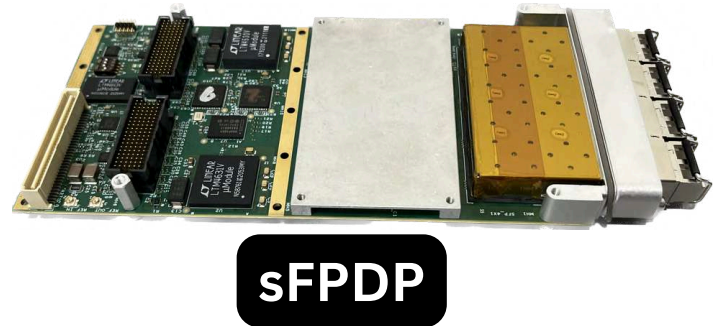
- Vehicle Monitoring Solutions
- AI-Powered Radiology Solutions
- Environmental Monitoring Solutions
- Road Tracking and Analysis Solutions



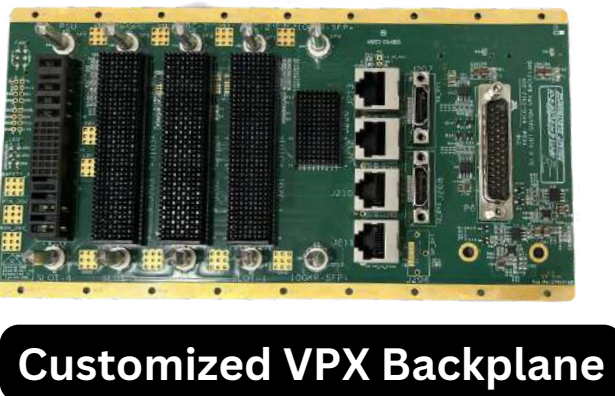
## Services Offered

- Custom-Tailored Solutions
- Strategic Consulting Services
- Industry-Specific Applications
- Data Integration & IoT Solutions

# ANTI-DRONE RADAR COMPUTER (VPX)

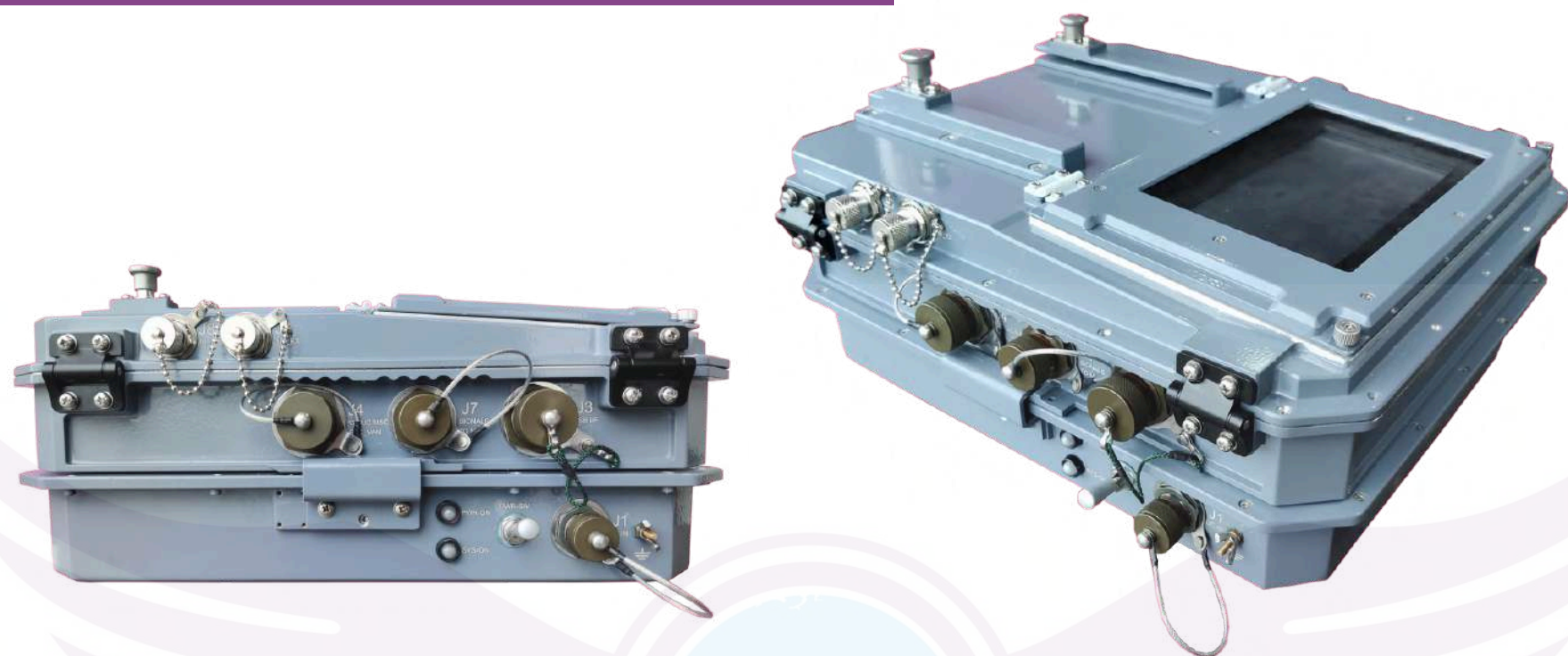


What's Inside?





## ANTENNA CONTROL COMMUNICATION



Communication systems, including satellite communication and antenna control technology, have been successfully designed and manufactured. Our specialization lies in mission-critical controller boxes and expertise in antenna movement control and signal processing.



- Designs tailored to meet customers' specific requirements
- Flight cases made from aluminium, PTFE, and polyethylene
- Rugged cases tested to meet all military standards
- Cases are lightweight, durable, and waterproof
- Mil 810G, JSS55555, IP66 QUALIFIED

## FLIGHT CASE AND THERMO ELECTRIC COOLER



**GUN CONTROL SYSTEM**

**PASSENGER INFOTAINMET SYSTEM**

- Real-time info and seamless connectivity in Trains
- Automated safety monitoring and smart alerts
- Energy-efficient and optimized scheduling
- Predictive maintenance for reliability

- Advanced targeting and precision accuracy
- EMI/EMC & IP qualified for Naval applications
- Reliable performance in extreme conditions
- Enhanced safety and operational efficiency



FPGA

Backplane

Power Supplies

Cable Assembly &  
Harness

Sub-System

Console

## RUGGED PRODUCT RANGE

*From Customization we derive the Standards*

Display

Server

Box - PC

Panel - PC

Tablet

Laptop



# FACILITIES



## SHEETMETAL AND MACHINING

- An ISO 9001:2008 certified facility with over a decade's experience in Engineering solutions
- Strong infrastructure with CNC, Laser cutting, bending and punching machines machining centres spread across an area of 12000 Sqft
- Expert in Sheet Metal Fabrication, Laser Cutting & CNC Bending
- Expert in manufacturing complex & precision mechanical components
- Executed critical-projects for Aerospace, Automation & Medical

## PCB ASSEMBLY

- PCB Assembly Services & Testing Services
- Quick Proto Building with standard certifications of the facility
- 9500 Sqft. ESD Protected Assembly Area
- Certified for various standards
- Team of highly qualified & trained engineers

## INTEGRATION, WIRE AND CABLE HARNESS

- Integration and cable assembly area spread across an area of 25000+ Sqft. complying with all the standards
- Assembly with the help of advanced tools from precision components to big systems
- Complex and critical cabling and wire harness for defence and industrial grades
- Experts in EMI/EMC, RFI and IP protected Design, Integration and Harness.



# Esteemed Alliance with BEL



**Technology Associate  
&  
Global Representative**

## Advanced Electronic Product Range

- Land Based Systems
  - Radars
  - Air Defence Systems
  - Tanks, Guns & Weapons Upgrade
- Naval Systems
  - Radars & Fire Control Systems
  - Sonars
- Airborne Systems
- C4I Systems
- Communication Systems
- Electro Optics & Laser Systems
- Energy Storage Systems





**THE GCC  
HOLDING COMPANY**



**India**

**2013**

**2016**

**U.K**



**U.A.E**

**2023**

**2024**

**K.S.A**

**Germany**

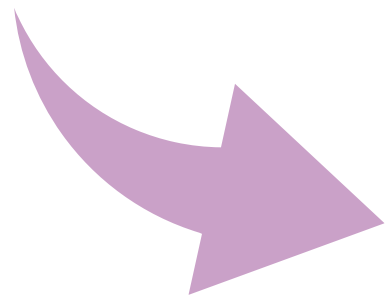
**2025**

**2026**

**Rest of Europe**

**USA & Canada**

**2027**



**Rug-Rel**

**2030**  
*Asia, Europe,  
Africa, Americas,  
Australia*  
**25 Countries  
with design &  
integration facilities**

**Global Vision**

*Customization is our Standard*



**THANK YOU**

**End.....Rather the Beginning!**