

REDARC
DEFENCE SYSTEMS

REDARC DEFENCE SYSTEMS.

CONFIDENCE FOR THE MISSION.

REDARC Group applies technology to empower commercial and recreational pursuits.

Our innovative hardware solutions enable our customers to connect, monitor, control, intervene, monetise, share and collaborate.

With REDARC, your existing mobile assets can deliver greater performance, safety, convenience and functionality.

REMOVE YOUR LIMITATIONS. EXPAND YOUR POSSIBILITIES. THAT'S THE POWER OF REDARC.





1979

Established
REDARC
Electronics

1996

Certification for
ISO 9001 Quality
Management System

2008

Certification for
ISO 14001 Environmental
Management System

2015

Acquired
Hummingbird
Electronics

First major
defence contract

2019

Launched REDARC
Defence Systems

2020

Founded REDARC
Corporation USA

Australian Made
licensee

ABOUT REDARC GROUP.

REDARC Group (REDARC) is a technology-based group of brands comprising REDARC Electronics, Hummingbird Electronics and REDARC Defence Systems.

With a focus on innovation, we design and manufacture advanced, integrated vehicular power solutions for defence, automotive, recreational, mobile living, transport and logistics, marine, medical, mining and industrial applications.

Our business model is based upon innovation, with an unrelenting focus on quality, performance and customer-centric after-sales service.

Our team-based philosophy encourages our staff to be the best they can, ensuring we maintain our leading edge in the research, design, development, manufacture and customer support of market-leading products across multiple sectors.

REDARC Group is fully integrated and shares in-house resources, including our advanced manufacturing and testing facilities in Lonsdale, South Australia.

The Group employs more than 250 people, 50 of which are dedicated to engineering design and innovation. Staff are based across Australia, New Zealand, North America and Europe.

REDARC Group takes its proven, patented products into international markets across the globe.

Our products provide power to any vehicle that uses a battery.

That's the power of REDARC!

THE POWER OF
REDARC

Hummingbird
Electronics

REDARC
DEFENCE SYSTEMS

AUSTRALIAN DEFENCE PARTNERS IN POWER SENSING AND CONTROL.

REDARC has decades of experience working with OEMs and clients across industry sectors to ensure we are the leaders in product innovation, to better service manufacturers and end users alike. REDARC provides electronic solutions that improve vehicle safety, productivity, flexibility and reliability.

OUR CAPABILITIES.

REDARC Group has been designing and manufacturing electronic products for all types of vehicles and applications for the last 40 years.

With our formidable engineering department, purpose-built design and manufacturing facility and a hand-picked production team, REDARC has the capability to conceptualise, design, test and manufacture products across the spectrum of vehicular electronic systems.

Our in-house engineering team can customise products to suit any specific requirements.

Our state-of-the-art surface mount technology room allows us to manufacture products in large quantities at the consistent high level of quality for which we have become renowned for.

All REDARC products are tested for electromagnetic compatibility (EMC).

Our testing equipment has been specifically designed to ensure that all of our products meet the standards required by clients who operate in the most demanding environments.

Every REDARC product is tested before it leaves the facility.

OUR SERVICE.

Our national sales and technical support staff – all qualified auto-electricians or electronics technicians – possess a working knowledge of all REDARC Group products and undergo continual training to offer the best solutions for your requirements.

We frequently engage in independent and collaborative consultation projects with a number of manufacturers. Each project is tailored to exceed client expectations.

OUR VALUES.

Innovation, customer satisfaction, teamwork, integrity, quality and environmental awareness.

WARRANTY.

The secret to success at REDARC Group is our philosophy: 'The Customer is King'. We are committed to achieving 100% customer satisfaction through continuous improvement. We believe in total customer satisfaction and practice this by offering our customers a two-year hassle-free replacement warranty.

REDARC PRODUCTS.

- Dual battery systems
- Battery management systems
- Voltage converters
- Electronic brake controllers
- Vehicle safety and control systems
- Portable solar systems
- Gauges
- Lithium batteries

HUMMINGBIRD PRODUCTS.

We specialise in RF and GPS technologies to create sensing, monitoring, and measuring devices. They're designed to influence driver/operator behaviour, deliver safety interventions, and provide information and warnings to the operator.

- Inclinometers and tilt switches
- Speedometers and speed switches
- Odometers and trip meters
- Driver behaviour monitors
- Audio visual alarms and alert systems
- Silent horns
- Cabin pressure monitors
- CANBus adapters

REDARC DEFENCE SYSTEMS.

Our blend of commercial off the-shelf, modified off-the-shelf and customised and build-to-print electronic solutions improve the capability, safety and flexibility of a variety of defence vehicles and applications. We supply battery monitoring and power management solutions to defence vehicles domestically and internationally. As an Australian-owned and operated design-to-manufacture business we are uniquely positioned to support your specific defence requirements, both now and in the future.

- PRIVATELY OWNED AUSTRALIAN COMPANY
- ADVANCED ELECTRONICS MANUFACTURER
- STATE-OF-THE-ART TESTING FACILITIES
- 250 STAFF BASED NATIONALLY AND INTERNATIONALLY
- 50 ENGINEERS AND TECHNICIANS
- 3 NATIONAL LOCATIONS
- VAST RANGE OF AUSTRALIAN MADE PRODUCTS
- UP TO 15% REVENUE INVESTED INTO R&D
- EXPORTS GLOBALLY
- INVESTMENT IN INDUSTRY 4.0

CRADLE TO GRAVE CAPABILITY.

DISCRIMINATORS.

- 20% growth YoY
- Over 40 years in business
- Well embedded quality focus, practices, standards and metrics
- Proven track record of 'Delivery in Full On Time' to Global OEMs
- 15% annual reinvestment in R&D
- Lean and continuous improvement embedded across the business

QUALITY ACCREDITATIONS.

- ISO 9001 Certified and ISO 14001 Certified
- UNECE Regulation 10 Conformity of Production

AWARDS.

- Endeavour Awards Manufacturer of the Year 2020
- Endeavour Awards Global Supply Chain Integration of the Year 2020
- Defence Teaming Centre Collaboration Award 2019
- AAAA Australian Manufacturer of the Year 2015, 2017, 2019
- Telstra Business Awards Australian Business of the Year 2014
- Westpac Top 20 Business of Tomorrow 2017
- SEMA Global Media Award 2017, 2018
- Deloitte Technology Fast 50, 2003, 2011, 2012, 2014

PRODUCTS.

POWER SENSING AND CONTROL

- DC Power Supply
- Health and Usage Monitoring Systems (HUMS)

DUAL BATTERY CHARGING

- Smart Battery Isolators
- In-vehicle Battery Chargers
- Custom power conversion solutions
– AC-DC, DC-AC, DC-DC

SAFETY

- Dual Axis Inclinometers
- Break-Safe Break-Away systems
- Low Coolant Alarms
- Hand Brake Alarms
- Daytime Running Lights (Key On Lights On)
- Alternating Headlight Flashers
- Surge Protectors
- Battery Recovery Systems

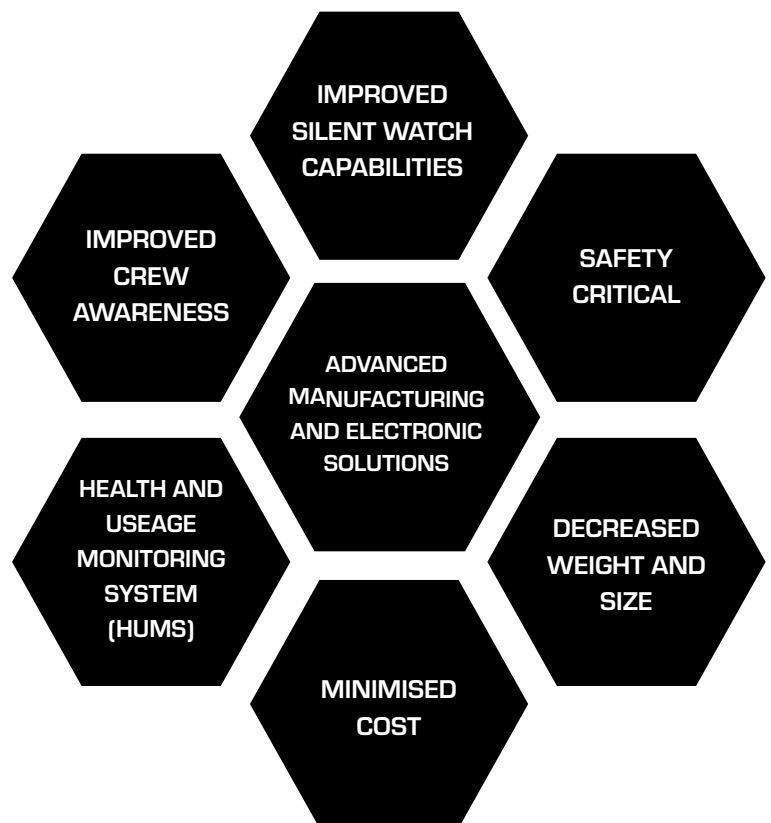


KEY PROJECTS.

- Army - Thermal Signature Enhancement Kit (RTSEK)
- Army - Multi Aspect Threat Emulation Systems (MATES)
- Land 106 - M113AS4
- Land 116 - Bushmaster
- Land 121 Ph.3A G-Wagon
- Land 121 Ph.3B HX Truck
- Land 121 Ph.4 Hawkei
- Land 400 Ph.2 CRV
- Land 19 Ph.7B Tranche 1
- AIR2025 Ph.6 JORN Mid Life Upgrade
- Hunter Class Frigate Program
- ATTACK Class Future Submarines Program

KEY EXPORTS.

- U.S General Services Administration (gsa.gov)
- Singapore
- Middle East
- United Kingdom
- Greece



“We were provided a solution [RTSEK] by industry and we’ve developed a really strong relationship with those contractors.”

Major Tony Mumford
SO2
Joint Fires at Army

FAILURE IS NOT AN OPTION.

WHY CHOOSE REDARC?

- Immediate supply of existing robust products in small to high volumes
- Auxiliary battery charging and monitoring (HUMS) solutions for defence vehicles
- Design of defence and automotive OEM-grade electronic equipment
- Advanced printed circuit board and electronic module manufacture in a modern, quality controlled lean manufacturing environment
- Build-to-print assembly of ruggedised electronics
- Thorough understanding of global, OEM and defence product compliance (EMC, immunity, vibration, environment, etc)
- On-site test facility for pre-compliance of many standards
- Column grid array (CGA) PCB assembly:
 - CGA solder columns are ten times more reliable than solder balls when attaching large size IC packages to PCBs operating in harsh environments
 - CGA solder columns are more flexible than solder balls, absorb CTE mismatch, and lengthen the life of the circuit by reducing solder joint fatigue due to temperature variations
 - CGA suited for aerospace, space, defence and medical applications
- Available in Australia

COLUMN GRID ARRAY ASSEMBLY.

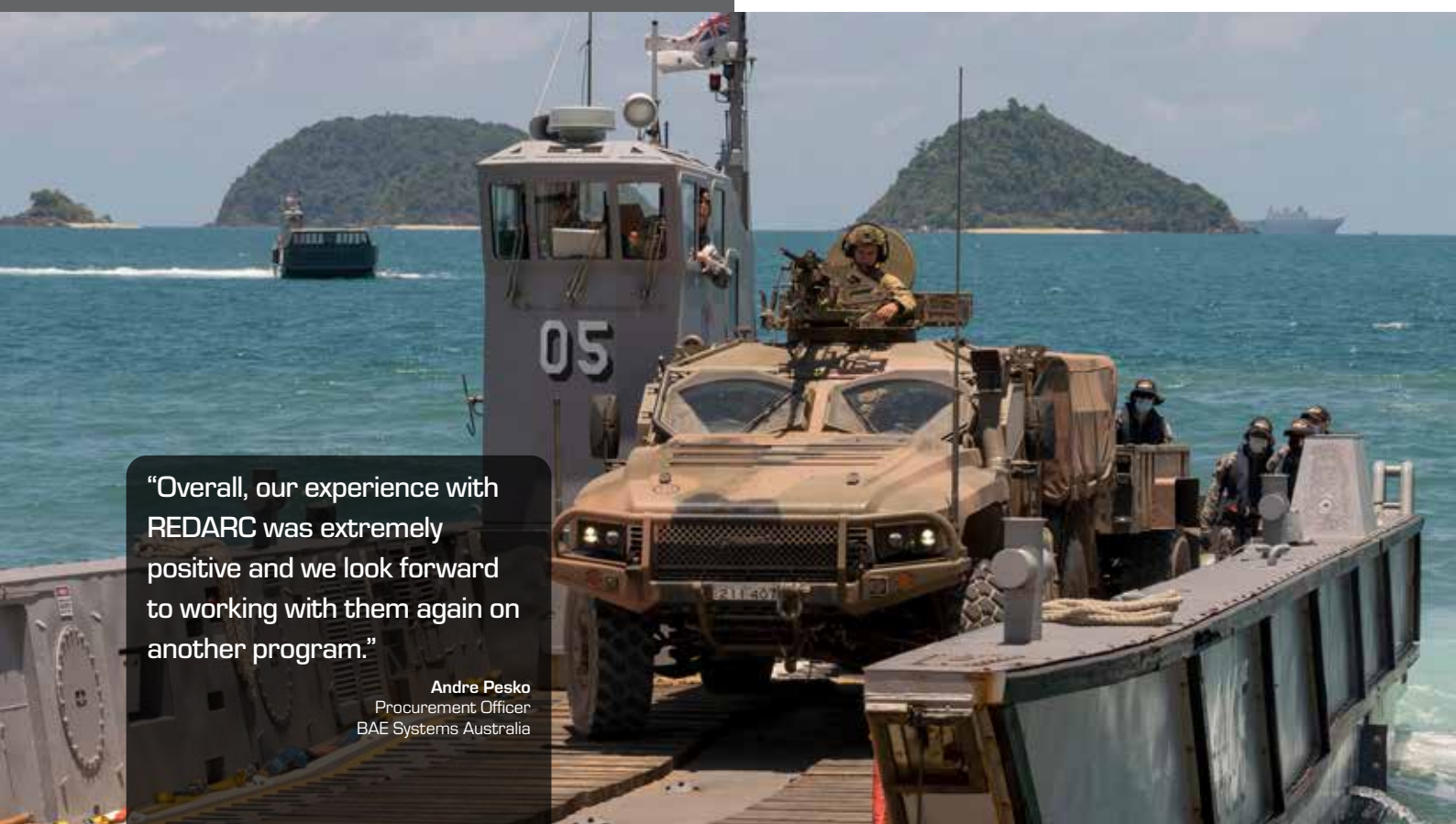
Column Grid Array (CGA) PCB assembly is a new capability made possible with the Vacuum Vapour Phase soldering oven (the Asscon VP7000). REDARC offer PCB assembly with a range of CGA packages that offer stronger, more reliable connections than BGA (Ball Grid Array) IC packages.

The CGA package results in a greater component-to-board standoff distance, which can absorb greater Coefficient of Thermal Expansion (CTE) mismatches between the board and component during wide temperature variations in the field.

These improved thermal characteristics substantially increase the thermal fatigue life of the package's solder joints, as CTE mismatch and thermal cycling of the product is a leading cause of failed solder joints.

The use of CGA packages is becoming increasingly popular as an alternative to BGA packages, where very high-density interconnections and higher board-level reliability is a requirement.

Key applications for CGA technology are in industries where reliability is paramount - and failure is not an option - industries such as defence, aerospace and medical.



“Overall, our experience with REDARC was extremely positive and we look forward to working with them again on another program.”

Andre Pesko
Procurement Officer
BAE Systems Australia



REDARC
DEFENCE SYSTEMS

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