

Richardson Electronics Third Quarter Fiscal Year 2023 Investor Presentation

April 05, 2023

NASDAQ: REL



Forward Looking Statement

This overview includes certain “forward-looking” statements as defined by the Securities and Exchange Commission. Statements regarding the Company’s business which are not historical facts represent “forward-looking” statements that involve risks and uncertainties. For a discussion of such risks and uncertainties, which could cause actual results to differ from those contained in the forward-looking statements, see Item 1A, “Risk Factors” in the Company’s Annual Report on Form 10-K. The Company assumes no responsibility to update the “forward-looking” statements in this overview as a result of new information, future events, or otherwise.



ENGINEERED SOLUTIONS



Richardson Electronics (NASDAQ: RELL) designs and manufactures more than 60% of the products it sells for power, microwave, and imaging solutions to industries worldwide.

Technical expertise and “engineered solutions” based on our core engineering and manufacturing capabilities

Value added solutions through design-in support, system integration, prototype design and manufacturing, testing, logistics, and aftermarket technical service and repair

Global infrastructure and support to serve customers wherever they are located

Key Facts & Figures

FY2023 YTD Sales:
\$203.8 million
 (up 25.1% YoY)

FY2023 YTD Net Income:
\$1.27 per diluted share
 (up 78.9% YoY)

FY2022 Sales:
\$224.6 million
 (up 26.9% YoY)

FY2022 Net Income:
\$1.31 per diluted share
 (vs. \$0.13 in FY2021)

Strong Balance Sheet:
**Q3 FY2023 cash and
 cash equivalents of
 \$24.6 million and
 no debt**

Certified Experts
ISO 9001:2015
ISO 13485: 2016
Certified

480+ Employees
**Over half in sales,
 engineering and product
 management**

Global Customers
Over 20,000 worldwide
**OEM and end-user
 customers**

Headquarters:
LaFox, Illinois

RELL is Global
60+ locations worldwide
**with legal entities in
 24 countries**



Our Business Units



Power & Microwave Technology (PMT)

- YTD Revenue: \$132.8 million
- Power grid and microwave tubes (EDG)
- Power management for 5G (PMG; started in 2014)
- In-house manufacturing and partnering with leading technology suppliers
- Global engineering and design support
- Key supplier to semiconductor industry



Green Energy Solutions (GES)

- YTD Revenue: \$32.3 million
- Designs and manufactures key products for the fast-growing energy storage market and power management applications
- Leverages existing global infrastructure and expertise
- Products for numerous green energy applications such as wind, solar, hydrogen, EVs, and synthetic diamonds



Healthcare

- YTD Revenue: \$8.6 million
- CT and MRI replacement tubes
- Diagnostic imaging replacement parts
- CT service training and technical support
- P3 Service Contracts for managing maintenance and repair costs
- State of the art manufacturing facility



Canvys

- YTD Revenue: \$30.2 million
- Custom display solutions for healthcare, industrial, retail and transportation applications
- All-in-one computer display solutions
- Engineering design and support

A Legacy of Engineered Solutions

A Future of Innovation

Power Grid Tubes



CW Magnetrons



**Ignitrons &
Thyratrons**



**Microwave
Generators**



Pulse Magnetrons



Ultracapacitors



**CT Replacement
Tubes**



**Refurbished CT
Systems**



**Custom OEM
Displays**

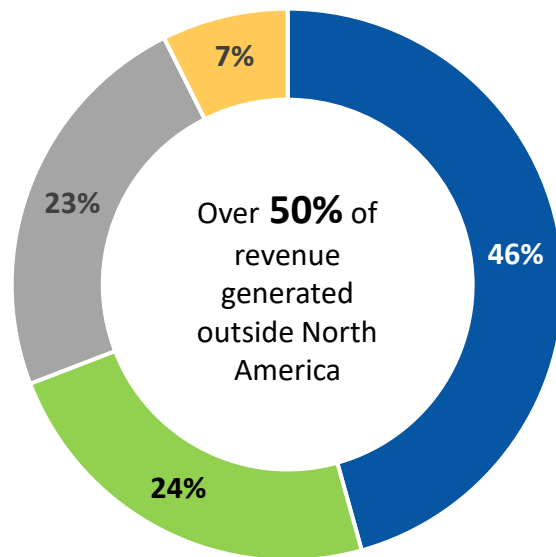


**All-In-One
Computer Solutions**



Local Service Supported Through Extensive Network of Over 60 Global Locations

FY2023 YTD Sales by Geography



■ North America ■ Asia/Pacific ■ Europe ■ Latin America

Sophisticated Global Infrastructure

- More than 60 sales offices & stocking locations
- Global field engineering support including over 75 RF, Microwave and CT engineers for leading technology suppliers
- Service and repair supported by local presence
- IT Infrastructure supports global visibility into real time inventory, quote and orders
- Information shared across organization to identify opportunities and facilitate design wins

Global Logistics and Supply Chain Capabilities

- Importer of record in 24 countries with international distribution hubs in North America, Asia, and Europe
- Shipment to any location worldwide in one to three business days
- Transactions in local language, and local currency
- Maximum flexibility including small quantity orders
- ECCN items flagged for export control

Strategy Supported by Strong Core Business, New Products and New Markets

Management has created a strategic plan focused on driving growth and creating sustainable value for shareholders



Growth supported by strong core business, 75+ years of engineering capabilities, and global platform



Strategy focused on leveraging core engineering capabilities to expand product lines into large, fast growing global markets



Global footprint supports customers and maintains strong strategic partnerships with leading manufacturers

New markets and applications support significant expansion to the Company's growth opportunities

Growth Opportunities and Focus:

Richardson's Strategy Aligned with Compelling Market Dynamics



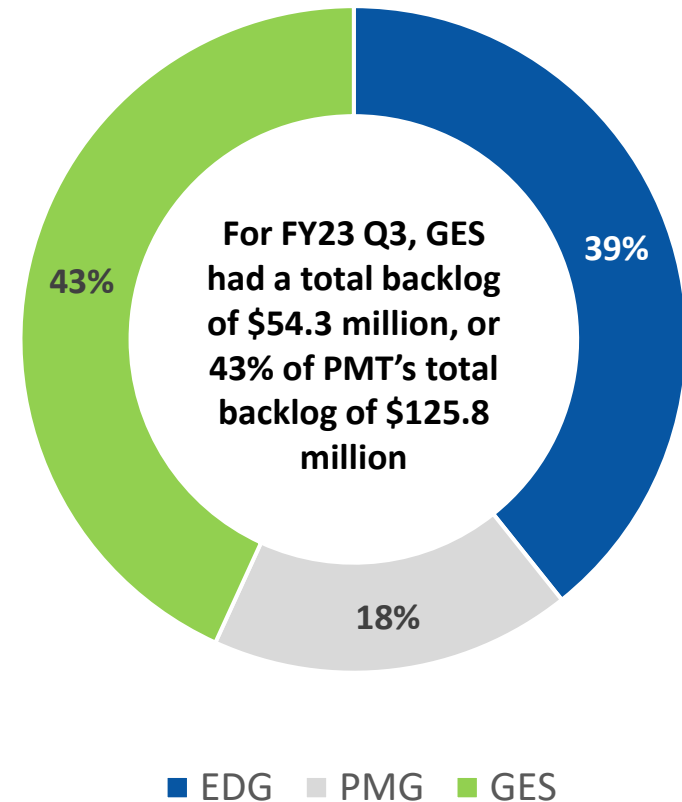
Market	Market Driver / Update	Richardson Opportunity
 Semiconductor	<ul style="list-style-type: none">• Semiconductor capex cycle expected to remain strong over the long term• LAM Research, a RELL semiconductor customer, expects demand to return to growth in 2024	<ul style="list-style-type: none">• Products support the global semiconductor wafer fab equipment market• RELL well positioned for high mix/low volume production and engineering design and support
 Power Grid Tubes	<ul style="list-style-type: none">• New applications are supporting growth in microwave tubes and magnetrons• Examples include emerging markets such as synthetic diamonds, hydrogen, and building materials	<ul style="list-style-type: none">• RELL is one of the few remaining tube manufacturers and engineering companies• For example, RELL's 6KW magnetrons are being used for producing synthetic diamonds; replacement cycle every two years
 Power Management/ Alternative Energy	<ul style="list-style-type: none">• Growing opportunities to transition legacy lead acid battery applications to longer-lasting, more environmentally friendly, technologies• Demand for energy storage capability	<ul style="list-style-type: none">• Wind turbine market with ultracapacitor battery modules• Lithium-iron phosphate battery modules for electric train engines• Wireless base station, and critical facility markets
 Healthcare	<ul style="list-style-type: none">• Very few replacement options for CT tubes• OEMs charge high prices for tubes and parts if hospital is not covered by expensive OEM service contract	<ul style="list-style-type: none">• Helping customers improve efficiency and deliver better clinical outcomes while lowering the cost of healthcare delivery• \$10 billion estimated global opportunity for aftermarket for diagnostic imaging parts and service

Green Energy Solutions (GES) Business Unit Supports Massive Growth Opportunity

GES Overview

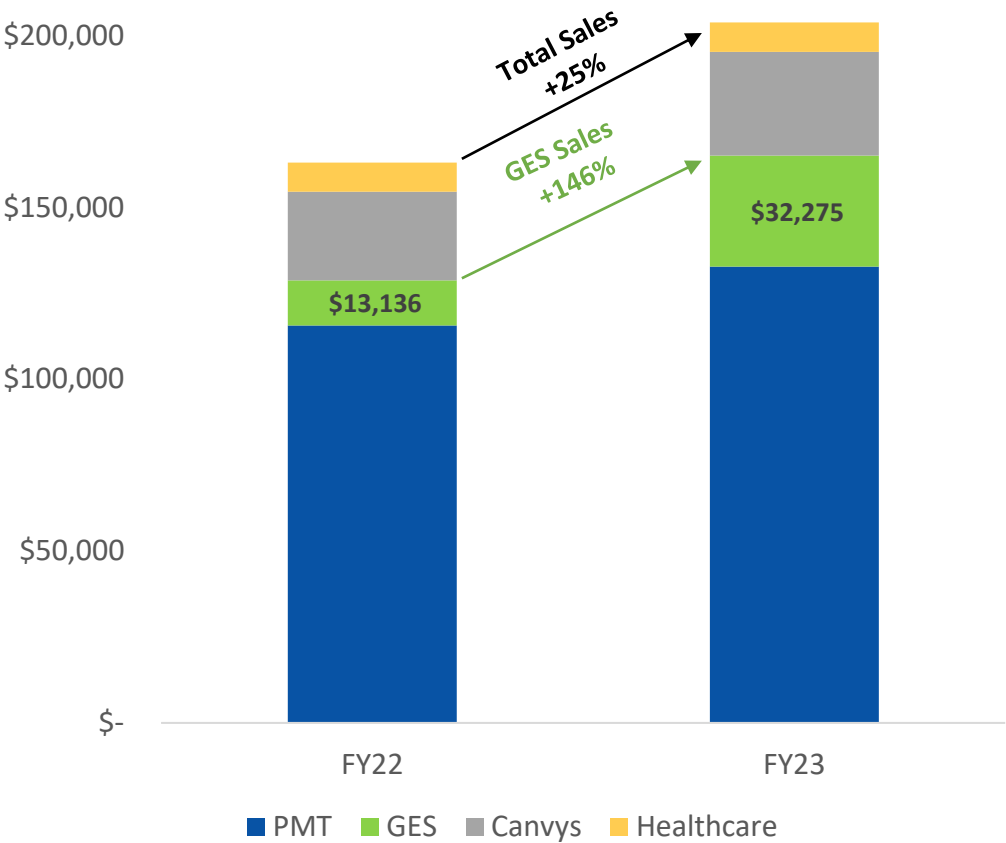
- Sales transferred from PMT:
 - Alternative energy, energy storage, EV, power generators
 - YJ1600—diamond manufacturing
 - Fusion research, sustainable goods manufacturing, hydrogen production
- Expected growth rate of 15-20% per year
- Blue-chip customer base:
 - Nextera Energy
 - Progress Rail (Caterpillar)
 - Union Pacific Railroad
 - T-Mobile
 - Northwestern Medical
 - Siemens

Strong Total PMT Backlog



Long-term Strategy Focused on Capturing Disruptive Market Opportunities

Components of Nine-Month Sales Growth (000s)



FY23 YTD Sales
Driven by Rapid
GES Growth



New End Markets
Helping to Offset
Legacy Semiconductor
Cyclicality



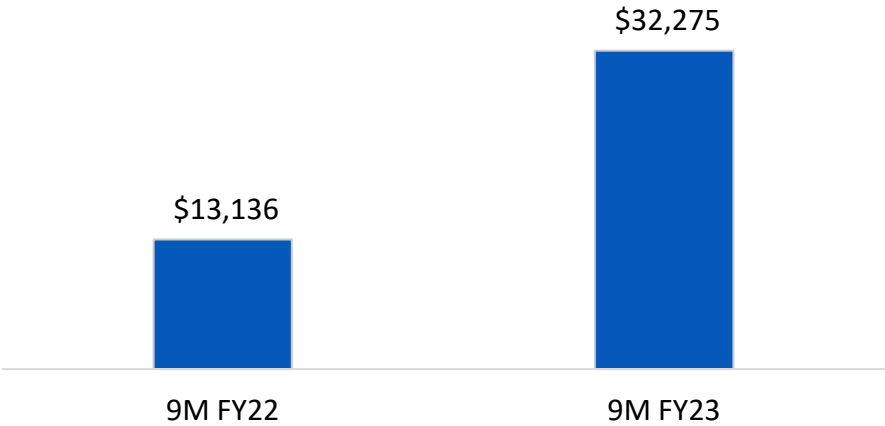
Higher Gross Profit
Dollars Supports
Operating Margin
Expansion

GES Highlights

- Growth in ULTRA 3000 and other related product sales into the wind turbine industry
- New EV applications, power management, and energy storage
- Increase demand for YJ1600 as synthetic diamond manufacturers continue to experience high demand
- Growing partnership with Progress Rail, a Caterpillar Company, for production of lithium iron phosphate batteries for use in electric locomotives
- Continued focus on product development

GES Sales (\$ in 000s)

YTD Sales Up 145.7% YoY



ULTRA3000® Growth Opportunity



Years of experience utilizing and distributing ultracapacitor technologies

- Created specifically for replacement market within wind turbine generators (WTG)
- Patented product with more than 20 protected embodiments



Significant benefits to customers

- Estimated lifetime of 15+ years
- Direct replacement for acid/lead batteries and no hazardous chemicals
- Enhances reliability of PEM



Massive opportunity

- Each turbine blade has power requirements
- Global TAM for GE WTG's alone is \$370 million
- Currently working on PEM systems for other WTG

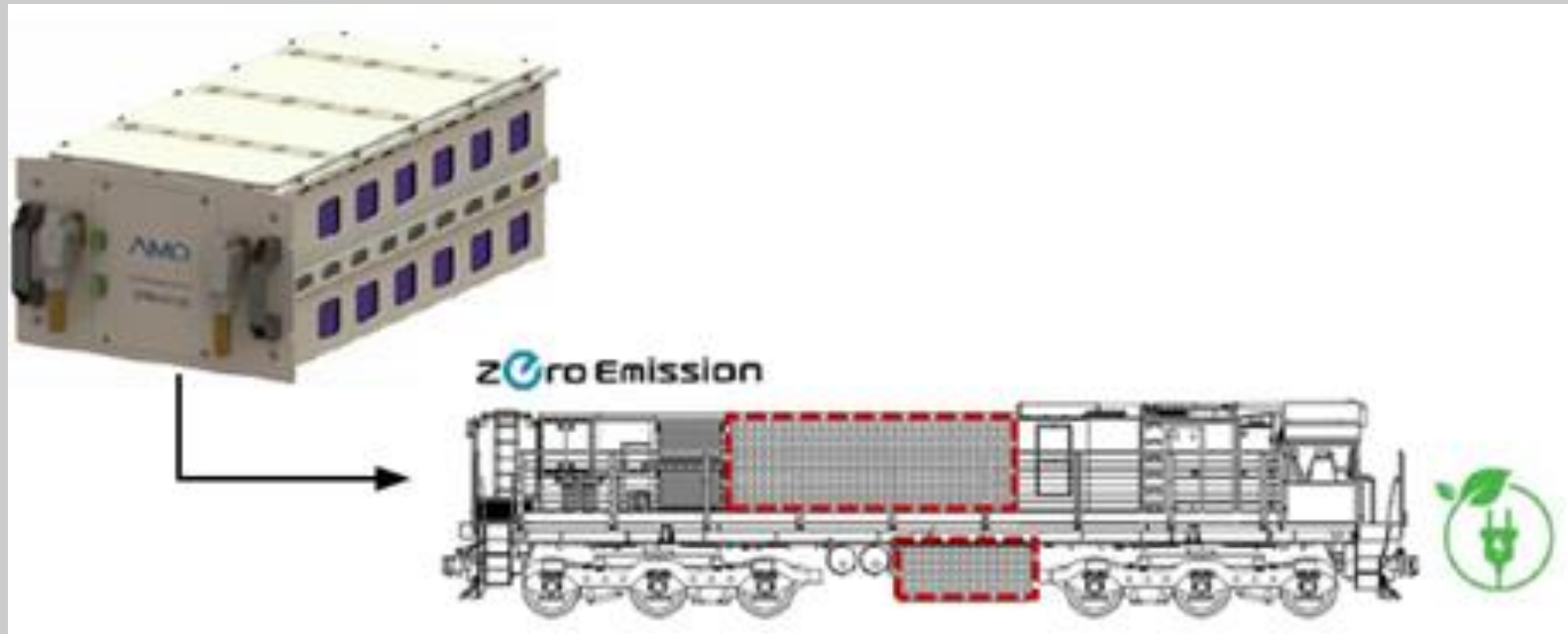
Rapid adoption

- Product from conception to > \$10 million in shipments and backorders in < 14 months



Auxiliary power is needed to control the pitch and rotation of wind turbine blades. Richardson Electronics ULTRA3000® Pitch Energy Module (PEM) is an ultracapacitor-based plug-and-play replacement for batteries within wind turbine pitch systems.

New Product Launch: Lithium Iron Phosphate Battery Modules For EV-Electric Locomotives



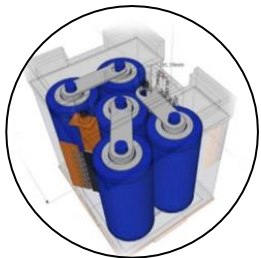
Designed, manufactured
and supported in
LaFox, IL

“Green” Benefits:
Replaces diesel electric engine
Fuel saving and reducing emissions
Silent and less maintenance

Design wins with
Progress Rail/Caterpillar

Multi-million dollar
shipments expected in
2023

BSE Gen-Start Growth Opportunity



Leveraging ultracapacitor expertise to create replacement modules for lead acid batteries in generators

- Patent-pending technology
- Product launched in CY22



Initial application focused on wireless base stations

- In 2019 there were 395,562 cell sites, approximately 59,000 or 15% have existing generators
- Major wireless carriers expect to add 25,000-30,000 base stations in North America between 2021-2025
- Target customers such as AT&T, T-Mobile, Verizon



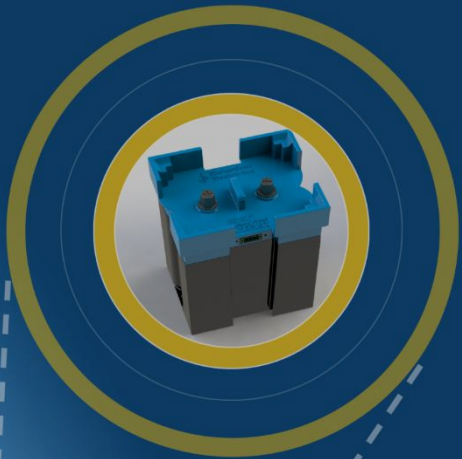
Critical facilities support additional applications

- U.S. Hospitals total 6,090
- U.S. Fire Stations/Municipalities total 58,150
- May use more than one per site



Large initial opportunities

- SAM - Wireless Base Stations \$42 million
- SAM - Critical Facilities \$23 million
- Long-term TAM ~\$250 million



Power & Microwave Technology (PMT) Opportunity



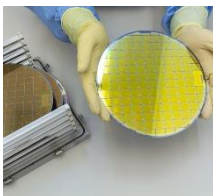
The leading distributor of power grid and microwave tubes and related consumable parts

- **Electron Device Group (EDG)** which includes legacy tube business and semiconductor wafer fab
- **Power and Microwave Group (PMG)** which includes discrete semiconductor components
- Global provider of Engineered Solutions focusing on industrial tube manufacturing, microwave generators, power supplies and customer specific parts and assemblies
- Highly specialized in demand creation for new technologies
- We partner with manufacturers of leading edge and disruptive technologies. These technologies drive the latest innovations for our customers.

Bringing key technologies and solutions to the world for power, microwave niche applications



Power Conversion



Semiconductor



Defense



Communications



Marine



Avionics



Scientific & Medical



Industrial

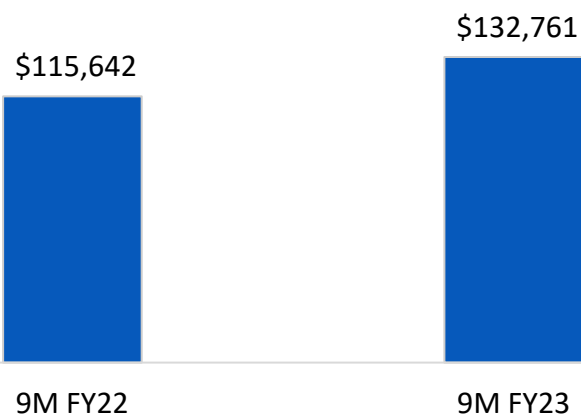
PMT Update

PMT Highlights

- High growth in demand for Electron Device Group (EDG)
- Semiconductor wafer fab equipment benefitting from market growth; chip shortages create new wafer fabrication installations
- Power & Microwave Group (PMG) continues to have excellent sales growth related to the RF/wireless infrastructure business
- Added new technology partners, expanding our ability to supply, support, and create new opportunities

PMT Sales (\$ in 000s)

YTD Sales Up 14.8% YoY



Richardson Healthcare provides OEM quality replacement parts and training to support in-house clinical engineering and third-party equipment maintenance companies.



Richardson Healthcare's CT Tube Programs provide exact form and function replacements for popular OEM CT scanners helping reduce healthcare costs by offering an alternative to higher cost OEM parts.



The Company has invested over \$35 million in its Healthcare SBU, creating a best-in-class, value-added CT Tube and CT refurbishment platform.



Richardson Healthcare first launched the ALTA750D in May 2018, followed by the ALTA750G in 2022, and expects to launch a Siemens repaired CT Tube Program in 2023.

\$10 billion estimated global opportunity for aftermarket diagnostic imaging parts and service

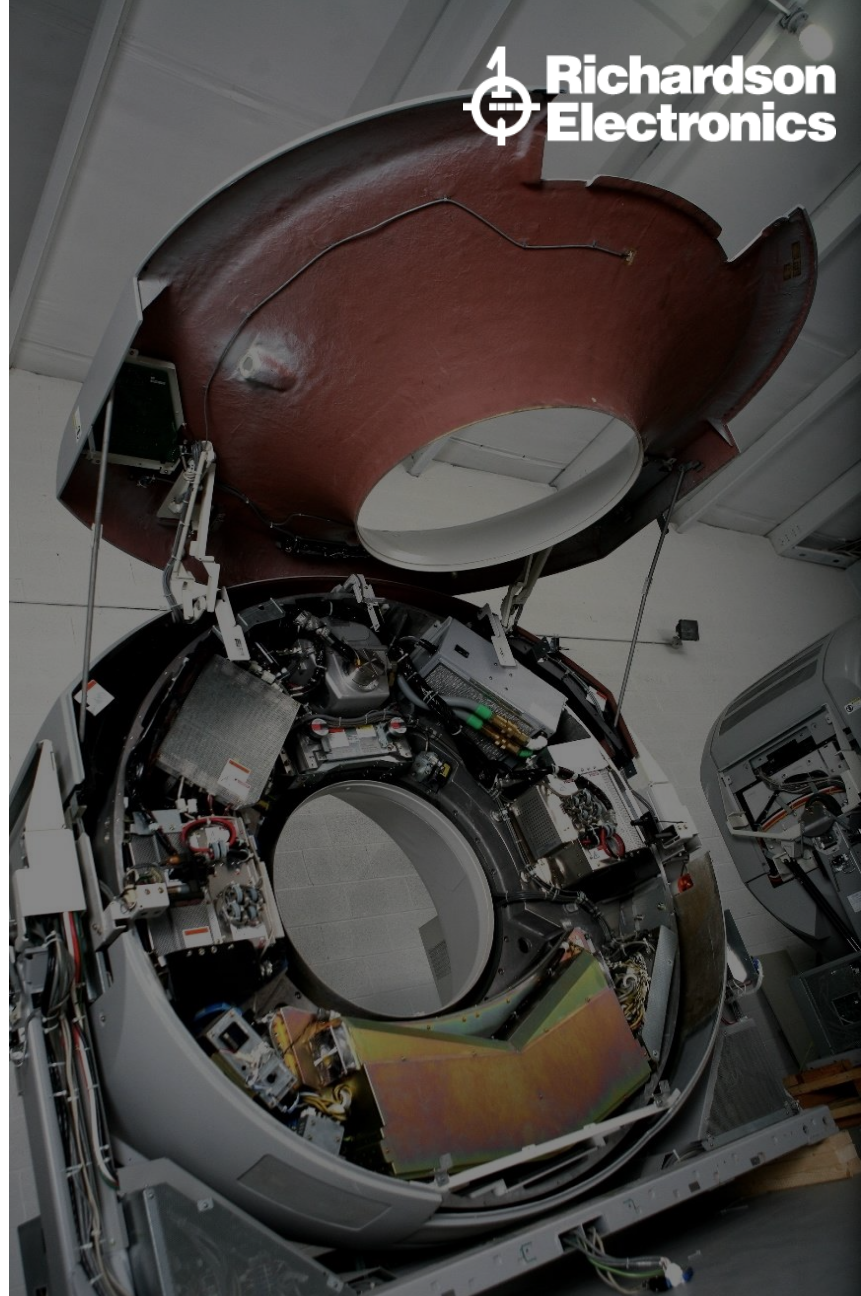
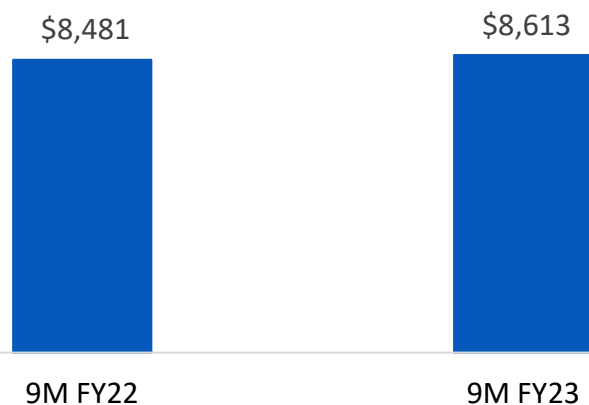
Healthcare Update

Healthcare Highlights

- Improved factory utilization and lower scrap costs improved gross margins significantly in the third quarter to 39.8% versus 25.1% in the third quarter of the prior year.
- Tube reloading in Brazil and in the Americas creates new opportunities for Richardson Healthcare.
- The Straton Z tubes released into full production.
- The Siemens MX series will launch in CY 2023.

Healthcare Sales (\$ in 000s)

YTD Sales Up 1.6% YoY



Canvys is a global value-added integrator and manufacturer that specializes in creating comprehensive visual technology solutions for OEMs.



Canvys is focused on providing small run, smart displays for specialized applications - often for demanding environments.



Canvys brings together a deep understanding of visual technologies, wide-ranging capabilities and a worldwide network to create complete solutions for OEM customers.



Expertise manufacturing display sizes from 5" to 82", with custom enclosures, touchscreen integration, and all-in-one computer solutions.

2,000+ global blue-chip customers rely on Canvys to supply leading display solutions for their unique needs



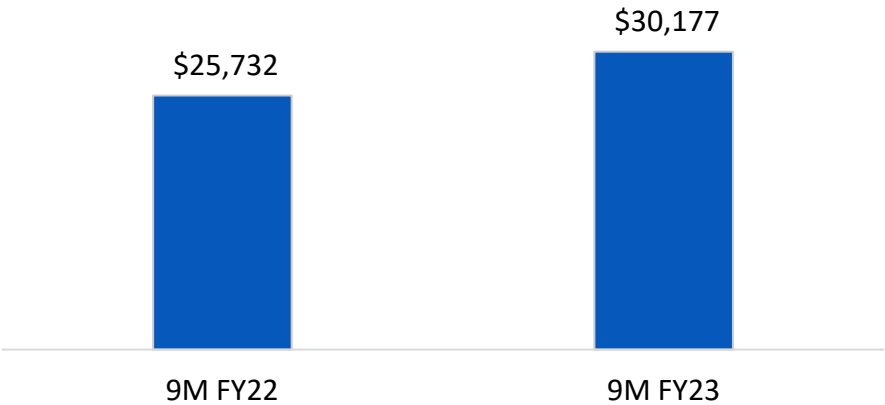
Canvys Update

Canvys Highlights

- Demand for blue-chip medical and industrial OEM systems driving growth
- The 19.0% year-over-year increase in third quarter sales was due to strong customer demand in North America
- Freight costs coming down will help drive margin improvement
- Healthy backlog, which will support strong sales throughout the remainder of fiscal 2023 and into fiscal 2024

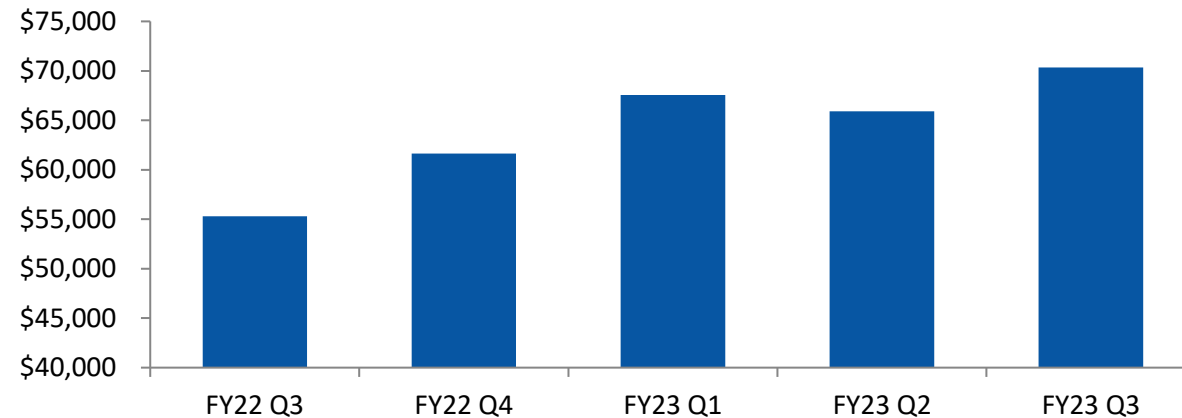
Canvys Sales (\$ in 000s)

YTD Sales Up 17.3% YoY



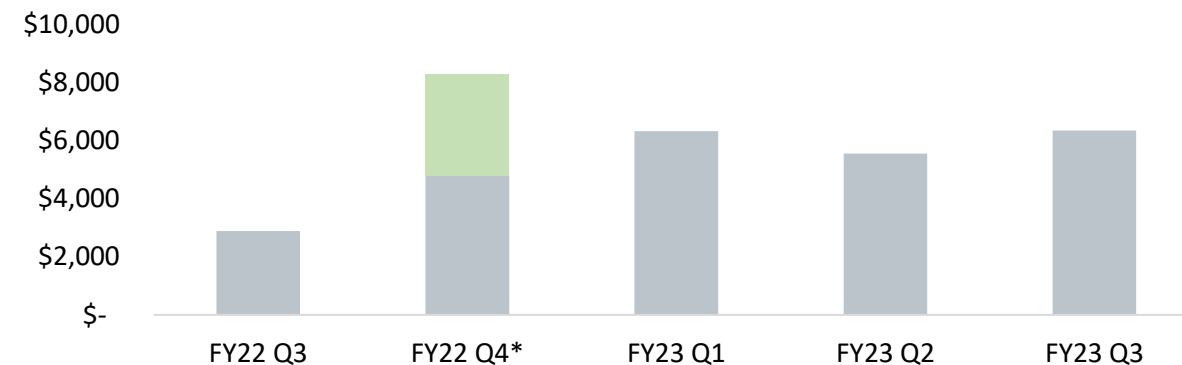
Financial Results

Total Sales
(\$ in thousands)



- Net sales for Q3 FY23 increased to \$70.4 million, up 27.2% compared to net sales of \$55.3 million in the prior year's Q3 due to higher net sales in PMT, GES, and Canvys, partially offset by slightly lower sales in Healthcare

GAAP Net Income
(\$ in thousands)



- Net income improved 119.6% on a YoY basis as a result of higher sales, improvement in gross margin, and controlled operating expenses
- Operating income was \$7.6 million, or 10.8% of net sales for Q3 FY23 as compared to \$3.6 million or 6.6% of net sales in Q3 FY22

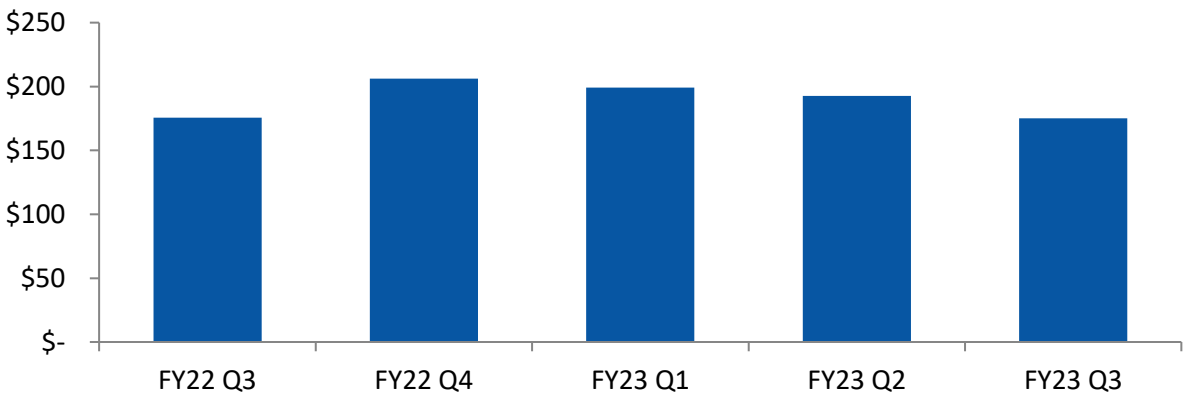
* In FY22 Q4, RELL received an income tax benefit of \$3.5 million from a \$4.0 million partial reversal of the tax valuation allowance

FY2023 Q3 Balance Sheet and Cash Flow

- Strong balance sheet with no debt, and \$24.6 million in cash and cash equivalents
- Allocated \$0.8 million of capital in Q3 FY23 to support the company's regular cash dividend
- The company continues to invest in working capital to support its growth initiatives across its four business units
- Most of the inventory increase was to support the growth in GES and other key growth initiatives
- Capital expenditures were \$2.2 million in Q3 FY23 primarily related to investments in the Company's manufacturing business, facilities, and Healthcare business

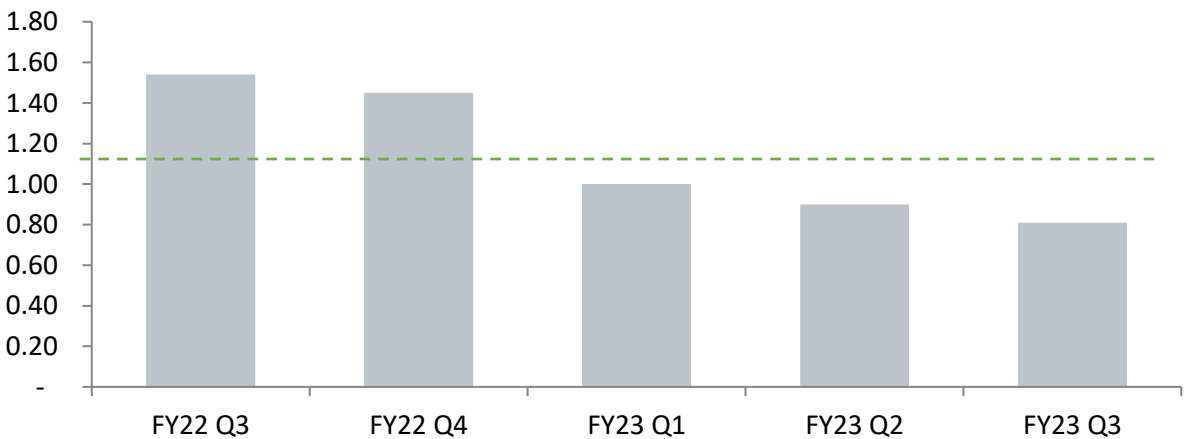
(\$s in 000s)	February 25, 2023	May 28, 2022
Cash and Cash Equivalents and Investments	\$24,645	\$35,495
Accounts Receivable	\$42,151	\$29,878
Inventories, net	\$101,409	\$80,390
Total Assets	\$199,203	\$179,819
Total Debt	\$0	\$0
Total Liabilities	\$44,263	\$43,972
Shareholders' Equity	\$154,940	\$135,847

Total Company Backlog
(\$ in millions)



- Total backlog at the end of Q3 FY23 was \$175.1 million versus 175.6 million at the end of Q3 FY22
- GES backlog increased to \$54.3 million in Q3 FY23 versus \$29.0 million in Q3 FY22
- Backlog in PMT declined due to the cyclical nature of the semiconductor market.

Total Company Book-to-Bill



- Current book-to-bill primarily impacted by timing of new GES orders and current semiconductor market demand



A Legacy of Engineered Solutions.
A Future of Innovation.

Appendix

Detailed Company Overview

Strategic Business Unit Overview: GES

- Newest strategic business unit formed because of our exceptional growth in demand for green energy applications (sales previously including in PMT segment)
- Green solutions is key to our long-term growth strategy
- Rapidly expanding line of energy storage products for various green energy applications, and we plan to announce several new products in the second half of FY23
- Capitalizing on emerging markets trends through the combination of key technology partners and our engineered solutions capabilities, while leveraging our existing global infrastructure

Applications & Markets

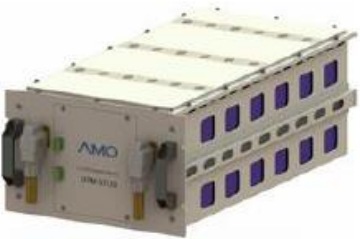
- Electric Vehicles
- Hydrogen
- Solar
- Sustainable building materials
- Synthetic diamond
- Wind

Select Customers

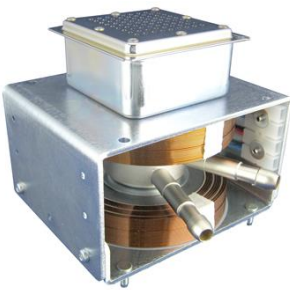


Product and Services Highlights

Lithium Module and Superstructure for EV Locomotives



YJ1600



ULTRA3000®



Power and Microwave Technologies (“PMT”)

Strategic Business Unit Overview: PMT

- The leading distributor of power grid and microwave tubes and related consumable parts (EDG Group)
- Power and Microwave Group (PMG) brings key semiconductor and passive technologies for power and microwave niche applications
- Partnering with manufacturers of leading edge and disruptive technologies to drive the latest innovations for customers
- Organic growth focused on product line expansion, leveraging 20,000+ global customer relationships, and manufacturing growing resources and capabilities
- Additional growth opportunities supported by partnerships and potential acquisitions

Applications

- Broadcast transmission
- CO2 laser cutting
- Diagnostic imaging
- Dielectric/induction heating
- High energy transfer
- High voltage switching
- Plasma
- Power conversion
- Radar
- Radiation oncology
- Microwave

Markets

- 5G
- Aviation
- Broadcast
- Communications
- Industrial
- Marine
- Medical
- Military
- Semiconductor

Product and Services Highlights

EDG Products



RF & Microwave Products



Power Management Products



Strategic Business Unit Overview: Healthcare

- Richardson Healthcare helps lower the cost of healthcare delivery with high value parts, upgrades and training solutions for hospitals and third-party service providers
- Healthcare manufactures, repairs, refurbishes and distributes high value replacement parts and equipment for the healthcare market
- Customers include hospitals, medical centers, asset management companies, independent service organizations and multi-vendor service providers

Supported Brands

- Canon (Toshiba)
- Siemens
- Hologic
- Richardson Healthcare
- GE
- Philips

Select Customers



Product and Services Highlights

CT Tubes



Parts



Refurbished CT Systems



Training and Service



Strategic Business Unit Overview: Canvys

- Canvys develops custom display and All-In-One computer solutions for Original Equipment Manufacturers (OEMs). We evaluate each customer's unique needs and craft the right solution
- Key capabilities supported by local collaborative approach with customers, compliance with medical device regulation, and global logistics capabilities
- ISO certification provides products that comply with the most demanding quality standards throughout the entire delivery process
- Manufacturing fully customized displays that pair revolutionary technologies with solutions for individual customer needs

Applications

- Air Traffic Control
- Broadcast
- Dental Care Units
- Endoscopy Systems
- Food Industry
- Manufacturing
- Marine
- Medical Monitoring
- Ophthalmology
- Transportation
- Vending Machines / Kiosks

Select Customers



Product Highlights

5" to 82" Custom Displays



All-in-One Computer Solutions

