



Wind Power



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Richardson Electronics has partnered with top-tier suppliers to bring you high-quality power components that you can trust for your wind power solutions. We focus on providing power electronics to Wind Power inverters for grid based systems. As a global operation, our company has grown to include a team of experts with diverse backgrounds that can guide you with your wind power solution. Serving our customers is a value infused in the company culture, and we stand behind every component we deliver.

What We Do Best



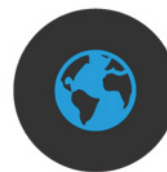
Identify & Design-in New,
Disruptive Technologies



Industry Leader in
Power & Microwave
Technologies



Provide Technical
Expertise & Engineered
Solutions



Provide Exceptional
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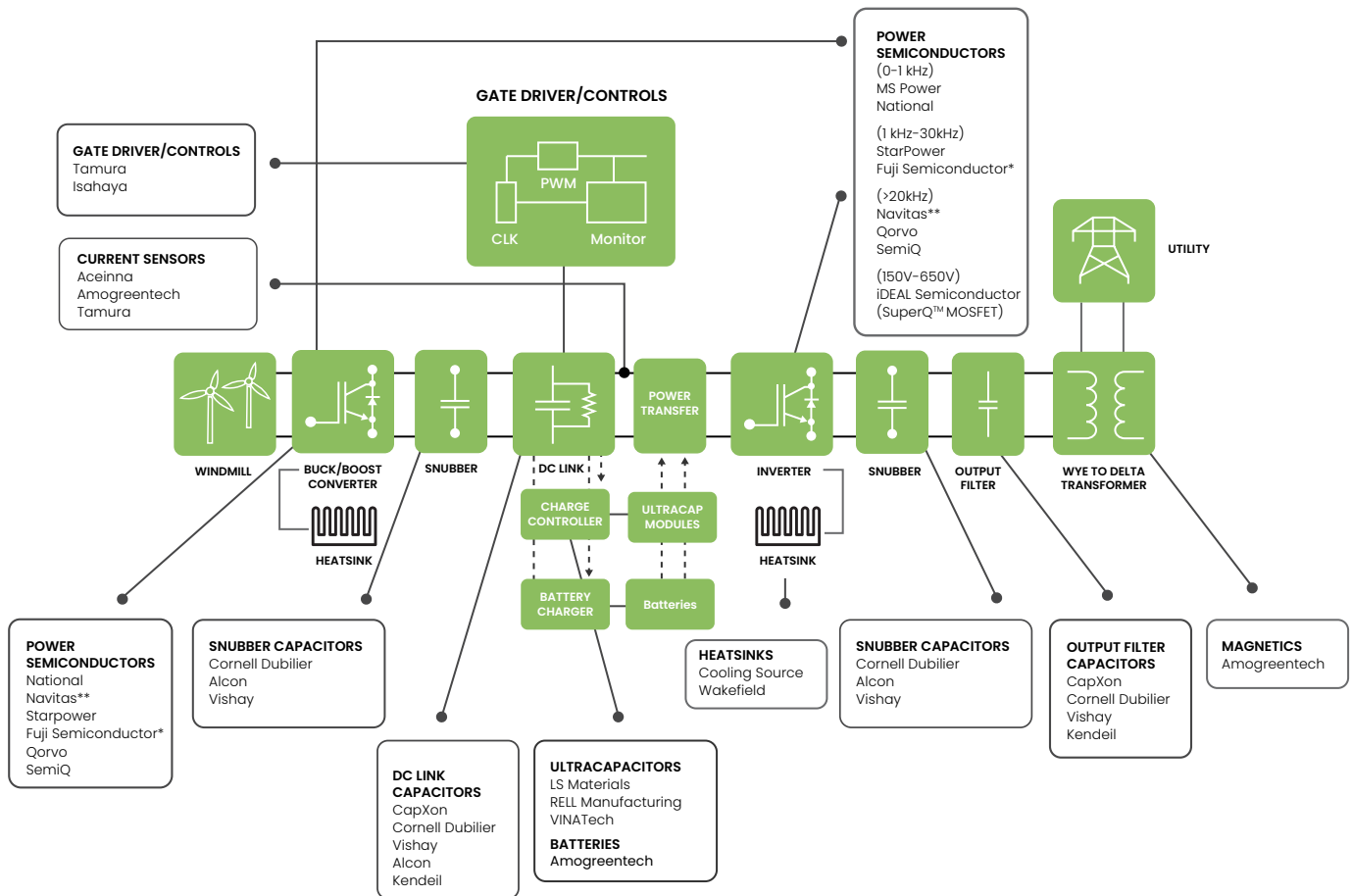


Provide High Quality
Products for Over 75 Years

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POWER & ENERGY - BLOCK DIAGRAM

At Richardson Electronics, our team of experts have created comprehensive block diagrams to help provide a schematic of the components necessary for power management. These block diagrams provide a high-level overview of required components and important working relationships – making them valuable tools for design engineers to make the right choice for their component selection. In addition, we provide solutions and add value through design-in support, systems integration, prototype design, manufacturing, testing, and logistics. Contact us or find the products you need for your design at rellpower.com.



*Fuji Semiconductor is only available in the Americas at this time

**Navitas is only available in North America at this time

Power Semiconductor		
Product	Product Ranges	Suppliers
Diode Rectifier Discrete Module	12A-13,500A, 200V-6500V	Scoms MS Power National
SCR Thyristor Discrete Module	16A-6500A, 200V-8500V	MS Power National
IGBT IPM DIPIPM PIM	10A-3600A, 600V-1700V	Fuji Semiconductor Starpower
Superjunction MOSFET	8A-95A, 600V	Fuji Semiconductor
SuperQ™ MOSFET	150V-650V, RDS _{ON} : 3 - 160mohm	iDEAL Semiconductor
SiC Cascode SiC MOSFET Discrete	7-1000mohm, 650-6500V	Navitas Qorvo SemiQ
SiC Cascode SiC MOSFET Module	40A-400A, 1200V-1700V	Navitas Qorvo SemiQ
SiC JFET	25-1100mohm, 650V-1700V	Qorvo
SiC Diode Discrete Module	1-300A 650-3300V	Navitas Qorvo SemiQ
DC Link Capacitors (Aluminum Electrolytic & Power Film)		
Product	Product Ranges	Suppliers
Aluminum Electrolytic Solid Conductive Polymer Hybrid Conductive Polymer	.47uf-1.5F, 5V-600V	CapXon Cornell Dubilier Kendeil Alcon
Terminal Type: Axial Radial Flatpack Snap Screw SMD		
Power Film	1uf-100,000uf, 1uf-50,000uf	Cornell Dubilier Kendeil Alcon Vishay
Terminal Type: Box Screw Low Profile Module Custom		
Snubber Capacitors		
Product	Product Ranges	Suppliers
Polypropylene Film	1nf-45uf, 160V-3000V	Cornell Dubilier Alcon Vishay
Terminal Types: Axial Box Oil Filled Direct Mount		
DC Output Capacitors (Aluminum Electrolytic & AC Film)		
Product	Product Ranges	Suppliers
Aluminum Electrolytic Solid Conductive Polymer Hybrid Conductive Polymer	33uf-2.7F, 10V-600V	CapXon Cornell Dubilier Kendeil Alcon
Terminal Type: Axial Radial Snap Screw SMD		
AC Film	1uf-4000uf, 240VAC-1400VAC	Cornell Dubilier Alcon Vishay
Terminal Types: Box Screw		
Current Sensors		
Product	Product Ranges	Suppliers
Flux Gate	6A-150A	Amogreentech Tamura
Hall Effect Open	3A-1500A	
Hall Effect Closed	6A-2000A	
Split Type (Ferrite)	60A-400A	
High Accuracy & Low Ratio Error (Nanocrystalline)	5A-120A	
Excellent Linearity & Precision (Amorphous Nanocrystalline)	40A-120A	Aceinna
Advanced AMR Current Sensors	±5A-65A	
Gate Driver DC-DC Converters Hybrid IC's		
Product	Product Ranges	Suppliers
DC-DC Converter (for customers to design own gate drive) Gate Driver Module (need to add gate resistors) Gate Driver complete solution IGBT Mountable Type	15A-3600A Class IGBT & SiC Modules	Isahaya Tamura

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POWER & ENERGY - PRODUCT RANGE & SUPPLIERS

Energy Storage Solutions		
Product	Product Ranges	Suppliers
Batteries LiFePO Lithium Iron Phosphate Cells, Modules Complete Systems with BMS (Battery Management System)	Cell- 3.2V, 150Wh/kg 50Ah-300Ah Module Tray, Shelf, Unit Rack	Amogreentech
Ultracapacitors Cells Modules Complete Assemblies Custom Design Capabilities	Cell- 2.7-3.0V, .5F-3800F Standard Modules 1.5F-500F, 5.4V-403V	LS Materials Richardson Manufacturing VINATech Cornell Dubilier
Hybrid Lithium Ion Capacitor	10F-220F, 2.2V-3.8V	VINATech Cornell Dubilier
Thermal Management		
Product	Suppliers	
Board Level Extrusion Bonded Fin Folded Fin Skived Fin Swaged Fin Stamped Fin Heat Pipe Assembly CPU Coolers Liquid Cold Plates Die Casting Fabricated Complete Solution Thermal Analysis Capabilities Thermal Interface Material (TIM) Thermal Grease SCR & Diode Clamp Systems Custom Fabrication	Amogreentech Cooling Source National Wakefield	
Magnetics		
Product	Suppliers	
Materials: Fe Amorphous Nanocrystalline Fe Based Metal Cores	Amogreentech	
Components: Inductor AC Choke DC Choke Common Mode Choke PFC Choke Output Choke EMI Filter Reactor		
Filter Design: Inductor CMC Capacitor		

Richardson Electronics has been an industry-leader in providing high-quality products and outstanding engineering support for over 75 years. Our extensive global distribution network and world-class partners provide our customers with innovative technologies, products and services.

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