

## INNOVATIVE CIRCUIT TECHNOLOGY LTD.

### ABOUT ICT

Founded in 1986, ICT provides DC power conversion products for the wireless communications industry including land mobile radio, mobile power conversion, and site equipment power markets. Our DC power supplies, fault tolerant systems, voltage converters, battery chargers, power inverters, DC backup systems, and Ethernet-enabled intelligent power distribution products are used in emergency response dispatch centers, on vehicles with two-way radios, and in tower and communications sites around the world.

Our focus is to use innovation to develop power products that help our customers solve their business problems while providing the best value and lowest cost of ownership. We design, manufacture, ship and support all of our products from our facilities in Vancouver, Canada. Anywhere DC power is needed, ICT is the reliable choice.

### COMMITTED TO YOUR SUCCESS

At ICT we are committed to meeting your needs. Whether you are a wireless communications distributor, dealer, installer, site manager, fleet manager, end user, or OEM who needs to integrate DC power into your solutions, ICT excels at working closely with you to understand your requirements. From design and development to manufacturing and quality control, to account management and fast, reliable turnaround, every functional department is based in our North American location, ensuring we can best meet the needs of our customers and markets.

We believe that the experience you have with our company, products and people will determine whether you will reward us with your loyalty. We strive every day, in every area, to make sure that the experience we provide you will be positive. We are committed to understanding your needs and challenges for today, and tomorrow.

### QUALITY AND SUPPORT

Three things customers tell us that sets us apart are:

- ▶ The quality and reliability we build into every product
- ▶ Fast, consistent delivery times
- ▶ Our pre and post sales customer support

Because we design and manufacture all of our products ourselves, we specify only the highest quality components, and we fully test all products before they leave our factory. Twenty-five years of power conversion experience means we understand how important quality and reliability is to you, and we have developed a reputation for excellence that we strive to uphold each and every day.

Our technical support department is integrated into our engineering team, meaning that the people who design the products are the ones answering your questions. You can count on knowledgeable, timely answers to all your questions, both before and after the sale.

### OUR MISSION STATEMENT

Providing DC Power Solutions To Meet The World's Growing Need For Wireless Voice, Data And Video Communications.





The Power of Reliability

## MARKETS, APPLICATIONS AND PRODUCTS

	<b>LAND MOBILE RADIO</b> <ul style="list-style-type: none"> <li>▶ Public Safety</li> <li>▶ Government</li> <li>▶ Utilities</li> <li>▶ Resource and Exploration</li> <li>▶ Fleet Communications</li> </ul>	<b>Power Application</b> <p>Reliable, Compact DC Power for Critical Communications Needs of Land Mobile Radio Users.</p>	<b>ICT Products</b> <ul style="list-style-type: none"> <li>▶ Base Station Power Supplies</li> <li>▶ Battery Chargers</li> <li>▶ DC UPS Backup Systems</li> <li>▶ Radio Covers</li> <li>▶ Complete Radio Base Stations</li> </ul>
	<b>MOBILE POWER CONVERSION</b> <ul style="list-style-type: none"> <li>▶ Fire, Police, Ambulance Fleets</li> <li>▶ Heavy Duty Equipment</li> <li>▶ Rail and Rapid Transit</li> <li>▶ Line and Utility Vehicles</li> <li>▶ Class 8 Trucks</li> </ul>	<b>Power Application</b> <p>DC Power Conversion and Battery Protection for On-Board Vehicle Electrical Equipment.</p>	<b>ICT Products</b> <ul style="list-style-type: none"> <li>▶ Non-Isolated DC Converters</li> <li>▶ Isolated DC Converters</li> <li>▶ Battery Voltage Protection Modules</li> <li>▶ Battery Backup Modules</li> <li>▶ Filters and Surge Protectors</li> </ul>
	<b>SITE EQUIPMENT POWER</b> <ul style="list-style-type: none"> <li>▶ Tower Sites</li> <li>▶ Repeater Stations</li> <li>▶ SCADA Monitoring Stations</li> <li>▶ Oil and Gas Plants</li> <li>▶ Outdoor and Solar Powered Systems</li> </ul>	<b>Power Application</b> <p>Reliable, Intelligent DC Power Supplies, Power Distribution, Battery Charging and Voltage Conversion for On and Off Grid Site Equipment.</p>	<b>ICT Products</b> <ul style="list-style-type: none"> <li>▶ Rack Mount DC Power Supplies</li> <li>▶ Fault Tolerant N+1 Systems</li> <li>▶ Intelligent DC Distribution Panels</li> <li>▶ DC-AC Inverters</li> <li>▶ Panel Mount Power Supplies</li> <li>▶ Class 1 Div 2 DC Converters</li> </ul>

### COMMITTED TO QUALITY

- ▶ All products are designed and manufactured in-house
- ▶ We utilize careful sourcing of only high quality components
- ▶ Minimal wiring and solder joints deliver maximum reliability
- ▶ Every product built goes through complete test and burn-in
- ▶ Close coupling of production, test, engineering and support functions maximize quality and design improvements
- ▶ All service calls are logged for trend analysis
- ▶ ICT utilizes an in-house environmental chamber and the latest testing equipment in its labs and production areas



### DRIVEN BY INNOVATION

- ▶ Leader in lightweight, quiet, efficient switch mode technology with extremely high reliability.
- ▶ Customer driven to deliver on new ideas, like DC UPS backup systems, Class 1 Div 2 DC converters, DC to AC inverters for site communications equipment, and 1RU space saving rack mount products.
- ▶ The Intelligent Power initiative from ICT delivers DC power products to wireless installers, managers and users designed to reduce operating costs and increase uptime by providing remote I.P. access and control of the DC power infrastructure at their sites.





# PRODUCT RANGE

LAND  
MOBILE  
RADIO



- ▶ DC POWER SUPPLIES
- ▶ DC UPS BACKUP POWER
- ▶ RADIO COVERS
- ▶ COMPLETE BASE STATIONS
- ▶ BATTERY CHARGERS

MOBILE  
POWER  
CONVERSION



- ▶ DC POWER CONVERTERS
  - Isolated
  - Non-Isolated
  - Class 1 Div 2
- ▶ BATTERY PROTECTION
- ▶ SURGE PROTECTORS
- ▶ LINE FILTERS

SITE  
EQUIPMENT  
POWER



- ▶ HIGH CURRENT POWER SUPPLIES
- ▶ FAULT TOLERANT POWER SUPPLIES
- ▶ BATTERY CHARGERS
- ▶ DC-AC INVERTERS
- ▶ DC POWER DISTRIBUTION
- ▶ INTELLIGENT I.P. ENABLED SYSTEMS

ICT manufactures power conversion products for a range of operating voltages from 12 to 100VDC, in power levels from 5 to 1500 watts. Visit our website at [www.ict-power.com](http://www.ict-power.com) to find the right product or solution for your needs, or contact us for your custom requirements.

## YOUR BUSINESS ADVANTAGE

Choosing ICT can be your business advantage when it comes to DC power. We have an exceptionally low failure rate on our products as a result of the careful design, manufacturing and testing we do, and as a result we are able to provide the best long-term experience and lowest cost of ownership for you.

When it comes to your critical communications needs, the last thing you want to worry about is your DC power infrastructure going down. At ICT we understand this, which is why we go to the lengths we do to design and build the very highest quality and most reliable power products in the industry.

## WHY ICT?

Because at ICT it's about more than just products. We strive to build and maintain your trust, and deliver not only great products, but the best customer service and technical support in the industry.

With one of the largest engineering and support teams in the industry, you can feel confident you are investing not only in our products, but in our company and our people.



## CASE STUDIES

Problem	Solution
<p>Wireless contractors indicated they were having a challenge finding the right DC to AC inverter solution for their 12 and 24 volt communications sites to run links, multiplexers, switches and other AC powered components.</p>	<p>ICT created the Site Inverter as a space-saving 1RU solution with connectors on the back, close to where the wiring connections are, with a scalable design that lets site managers add more power within the same rack space as their needs grow.</p>
<p>Wireless installers and site managers asked us how we could help them save time and costs by providing remote access to the DC equipment at their sites, some of which were very inaccessible and costly to access.</p>	<p>ICT developed the Distribution Series 1RU DC distribution panels with integrated I.P. Ethernet communications and remote power control. By providing remote monitoring and the ability to power cycle their DC equipment, uptime and quality of service were improved, while operating and maintenance costs were significantly reduced.</p>
<p>A global engine manufacturer needed a power conversion solution to integrate into their emission control systems, but could not find a standard DC converter capable of running reliably in a high ambient temperature environment.</p>	<p>ICT worked closely with them to modify and certify a Class 1 Div 2 DC Converter rated for Hazardous Locations, capable of running continuously at their specified operating temperature.</p>
<p>A two-way radio manufacturer was having challenges with unreliable deliveries from a supplier who sourced their products from overseas. They approached ICT to explore a more viable supply chain alternative.</p>	<p>Because ICT designs and manufactures all of its power conversion products in North America, we were able to commit to a one business-week turnaround on their scheduled orders. The manufacturer was pleased to not only rely on consistent delivery performance from ICT, but to realize operating efficiencies and asset management improvements as well.</p>

Call us today to see how we can help solve your challenges.