



# Alberta’s Largest Fixed Wireless Internet Service Provider Utilizes ICT’s Battery Charger/Power Supply for Wireless Broadband Network

By using ICT’s IntelliCharge Series battery charger/power supply, MCSNet can rely on uninterrupted DC power for network equipment at wireless broadband communication sites.

Using Intelligent Three-Stage Battery Charger/Power Supply to Provide Uninterruptible DC Power

### Company

MCSNet  
Alberta, Canada

### Business Need

Finding a cost-effective way of providing reliable DC power to remote communications sites while also providing charging for backup battery systems.

### Solution

ICT’s IntelliCharge Series battery chargers provide uninterruptible DC power and temperature compensated, three-stage battery charging simultaneously, ensuring reliable DC power at wireless broadband sites.

### Business Benefits

- ▶ Uninterruptible DC power at wireless broadband sites provides MCSNet customers with a higher quality of service
- ▶ Temperature-compensated, three-stage battery charging charges batteries correctly, increasing their lifespan and reducing maintenance costs

### Business Challenge

Providing reliable broadband internet service to remote, rural locations in northeastern Alberta can present many challenges. Due to the remoteness of MCSNet’s fixed wireless broadband network, any network outage can result in loss of broadband service to customers for extended periods. Frequent power outages are not uncommon, so being able to maintain power for network devices is critical. The area also experiences temperature extremes, with temperatures ranging from +30°C in summer, to below -20°C in winter. These temperatures can cause issues with network equipment at communications sites, particularly batteries, which are susceptible to extreme temperatures and may not operate or charge correctly.

**“We switched over to using ICT products because of the reliability. Any time I needed to ask something, I called and got someone right away. I’ve had some more advanced questions and spoken to some of the engineers, which isn’t always possible with other companies. Plus it’s nice that these products are Canadian made.”**

**- Jerico VanBrabant, CTO, MCSNet**

### Business Solution

MCSNet has addressed these business challenges by utilizing the IntelliCharge Series battery charge/power supply from ICT. The IntelliCharge Series is a three-stage battery charger/power supply combination, which enables MCSNet to maintain consistent, reliable 24-volt DC power at their remote communications sites. The IntelliCharge Series provides the power to network devices at communication sites, in addition to charging backup batteries, which are critical for when AC mains power from the utility is lost. When AC power is not available – this is a relatively common occurrence – the IntelliCharge Series battery charger/power supply uses power from the backup battery banks installed at sites to provide continuous power to network devices. When AC power is restored,



the IntelliCharge Series will power all load devices and recharge the depleted battery. Temperature-compensated charging allows for correct charging voltages based on the ambient temperature at the site, which is critical when ambient temperatures fluctuate.

### Business Outcome / Benefits

For MCSNet, the benefits to this approach are:

- ▶ Unreliable AC mains from the utility no longer results in loss of power to the site. Losing power to a communications site can often result in loss of service to customers. By using the IntelliCharge Series charger/power supply, the site will always have power available to keep the network up and running.
- ▶ Reliable DC power at the site increases the quality of service (QoS) for MCSNet's customers. "Always-on" DC power provides uninterruptable power for network devices which results in less network downtime, enhancing the customer experience.
- ▶ Temperature-compensated charging protects batteries and increases their lifespan, reducing maintenance costs. Charging requirements for batteries change based on temperature. Utilizing temperate-compensated charging better protects batteries during extreme temperatures.

**"We were happy when some strong windstorms came in and we didn't have to worry about the tower being down, whereas another company nearby had to put in a generator as they were using a different product and were experiencing power outages."**

**- Jerico VanBrabant, CTO, MCSNet**

### About MCSNet

Founded in 1995, MCSNet is the largest fixed wireless internet service provider in Alberta, Canada. With over 550 communication towers located in northeastern Alberta, MCSNet is able to provide broadband internet to over 25,000 customers in remote locations.

Their main focus is to provide reliable high speed internet to the rural community. Future plans are to expand their coverage area and continue developing services in these rural areas.

For more information please visit: [www.mcsnet.ca](http://www.mcsnet.ca)

### About ICT

ICT is a leading manufacturer of power conversion products for land mobile radio, fixed wireless broadband and industrial power markets. Our power solutions help improve uptime, reliability and quality of service, reduce operating costs, and provide remote power monitoring and management of connected loads over Ethernet, often reducing unnecessary visits to remote sites.

