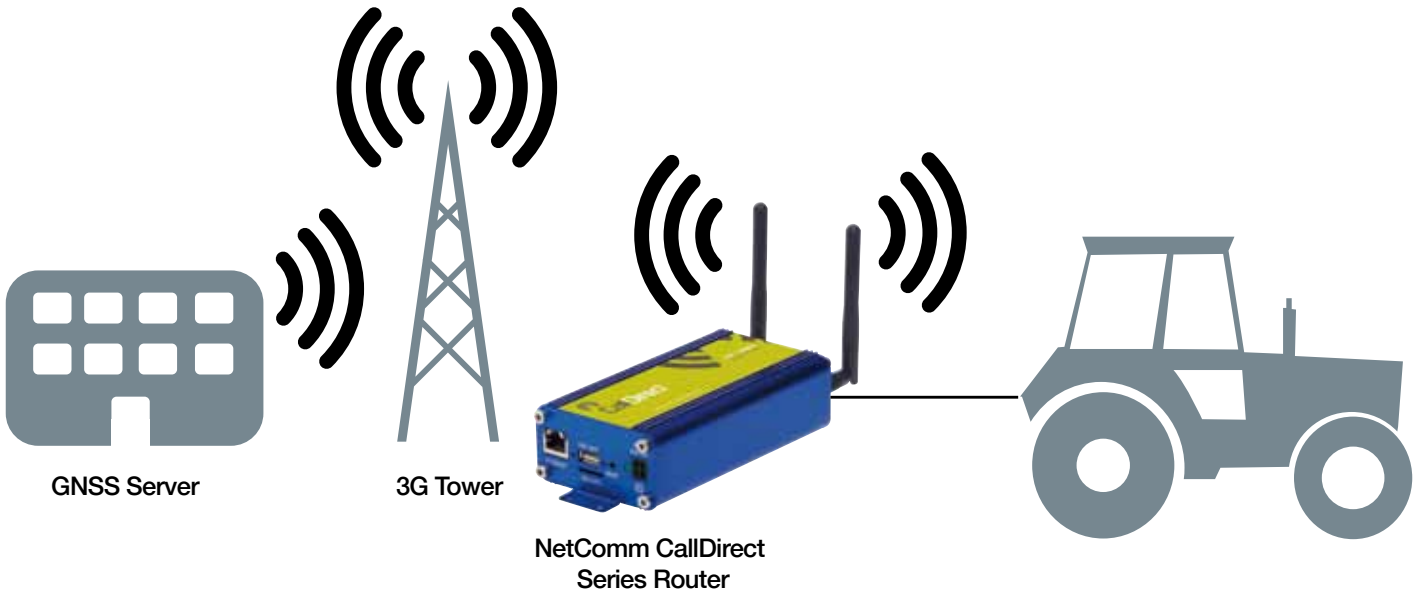


# Wireless Farming



## GENERAL INFORMATION

<b>Issue:</b>	To provide real-time accurate Global Navigation Satellite System (GNSS) corrections wirelessly to agricultural equipment, in order to improve the on-board GPS accuracy
<b>Solution:</b>	Provide the agricultural equipment's existing onboard GPS receiver with the required GNSS corrections via the CallDirect CDR-790 router and Telstra's NextG™ Network.
<b>Hardware:</b>	Netcomm CallDirect CDR-790seu cellular router Telstra's NextG™ Network
<b>Benefits:</b>	<ul style="list-style-type: none"> <li>• Lower investment cost over existing systems offered in the market.</li> <li>• Lower operational costs</li> <li>• More efficient time management allowing for quicker returns on investment</li> <li>• Rapid deployment</li> </ul>

Many farms in Australia now utilise Global Navigation Satellite System (GNSS) technology to make their Controlled Traffic Farming (CTF) operations more efficient. GNSS technology is used to run visual guidance systems and automated tractor-steering. This ensures that tractors and other heavy duty agricultural vehicles maintain the correct wheel alignment while harvesting, minimising damage to crops and the compaction of the soil.

Australian based company Diffnet Solutions Pty Ltd has developed an agricultural GNSS solution called the 'Diffnet GPS CORS Modem' which is designed to make GNSS equipment more productive. Their need to send real-time GNSS corrections reliably in harsh farming conditions across Australia and New Zealand is the reason why Diffnet Solutions uses the CallDirect CDR-790seu router.

The flexibility of the CDR-790seu Linux-based operating platform and available Software Development Kit (SDK) has enabled Diffnet Solutions to customise the router's Firmware for their GNSS project. This has also allowed Diffnet Solutions the ability to control GNSS equipment and analyse data transfers over-the-air, minimising site visits and lowering the cost of operation.

The CDR-790seu is ideal for an agricultural environment because of its robust housing and industrial-grade components. The CDR-790seu shows its versatility by accepting voltage inputs between 8V-28V. It can also operate in a wide temperature range (from -30°C to 70°C +) making it perfect for installation on motorised agricultural equipment.



**NETCOMM LIMITED**  
 PO Box 1200, Lane Cove NSW 2066  
 Sydney, Australia ABN 85 002 490 486

**AUSTRALIAN ENQUIRIES**  
 P: (02) 8205 3888  
 F: (02) 9424 2010  
 W: [www.netcomm.com.au](http://www.netcomm.com.au)

**NEW ZEALAND ENQUIRIES**  
 P: (09) 448 5548  
 F: (09) 448 5549  
 E: [sales@netcomm.co.nz](mailto:sales@netcomm.co.nz)  
 W: [www.netcomm.co.nz](http://www.netcomm.co.nz)

**INTERNATIONAL ENQUIRIES**  
 P: +61 2 9424 2070  
 F: +61 2 9424 2010  
 E: [int.sales@netcomm.com.au](mailto:int.sales@netcomm.com.au)  
 W: [www.netcommlimited.com](http://www.netcommlimited.com)