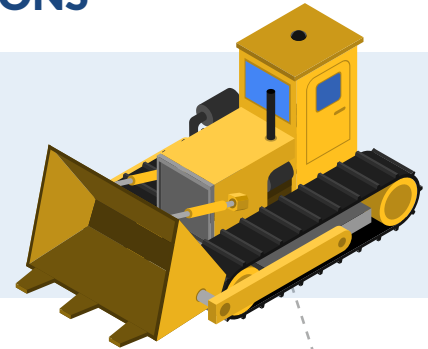


UPGRADING HEAVY EQUIPMENT COMMUNICATIONS

4G Communications for Heavy Machinery

Your fleet of heavy machinery was a significant investment. As a part of maintaining this investment you need to maintain the communications and GPS systems integrated into your earth-moving equipment. As cellular networks change and evolve, action may be necessary to keep your machine's communications working. Currently, as the 3G network sunsets, it is important to examine options to upgrade to 4G and beyond.



Current Challenge | REPLACING OUTDATED 3G TECHNOLOGIES

Farming and construction companies have reached out to RTO, worried about the impending shutdown of the 3G networks their heavy machinery uses to communicate. Several organizations using heavy vehicles like Kabuta Tractors and Bulldozers were looking for ways to minimize the cost of their networking equipment replacements. Specifically, they were looking for solutions that enabled their organizations to utilize as much of their legacy equipment as possible to reduce new device purchases while continuing to utilize existing management systems.

Legacy Systems | TOPCON SL-100 MODEMS AND MC-R3 GPS+

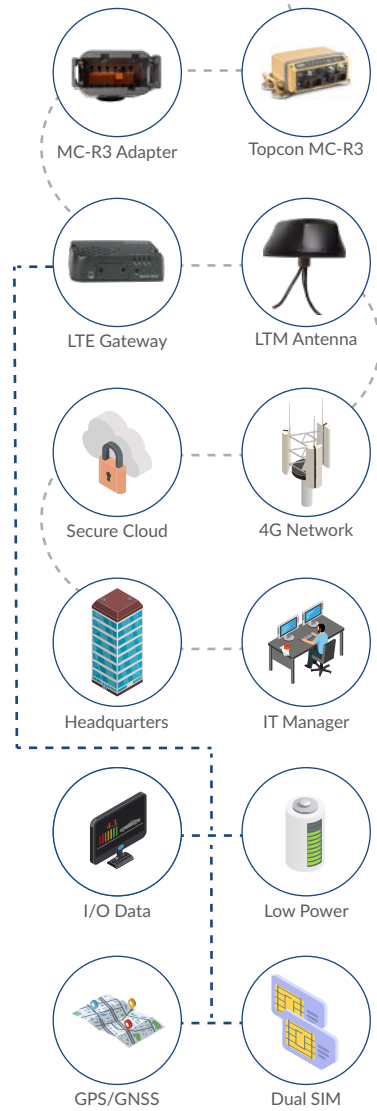
More than one of the organizations that reached out to RTO were utilizing Topcon SL-100 3G Radio Modems tied into Topcon MC-R3 devices for 3D GPS+ Systems. In theory, their needs were simple. They wanted to replace the radio modems and keep the GPS modules. Like many older technologies, they struggled to find solutions that allowed them to achieve this goal.

Custom Solutions | 4G ROUTERS AND CUSTOM CABLE ASSEMBLIES

The solutions engineers at RTO were up to the task. More than just purveyors of third-party equipment, the team at RTO thrives on its ability to engineer customized solutions for clients. RTO developed a series of cable assemblies that made newer 4G AirLink Routers backwards compatible with their MC-R3 devices. These assemblies plug directly into the MC-R3 utilizing their existing Deutsch connectors.

Stellar Results | FIELD TESTED CONNECTIVITY

The field tests went brilliantly. RTO clients could now utilize legacy hardware and expand their device management capabilities with ALMS software. Their new router provides them the ability to perform over-the-air registration, configuration, and software updates. They also gained additional reliability as each router was purpose-built for harsh conditions, with MIL-STD-810G shock, vibration, humidity, and temperature resistance.



Cable Assemblies: MC-R3 Adapters	4G LTE Router: AirLink® RV50X	MIMO Antenna: LTMG302	Software: ALMS
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CONTACT RTO TO ENGINEER YOUR CONNECTIVITY SOLUTION TODAY