

Case study - Satellite communication

FOR VEHICLES IN DISASTER AREAS



REQUIREMENT

The system is used in disaster areas where mobile networks broke down to establish satellite communication. The system will be placed on mobile equipment as trucks, environmental conditions can be unforeseen.



CHALLENGE

In such a grueling environment, the system is exposed to extreme contamination levels and temperature fluctuations and meeting requirements in accordance with IP65 is mandatory. High performance computing inside the system is needed to establish proper communication.



SOLUTION



Rugged MicroTCA, MTCA.3, was chosen as it gives the needed robustness and computing power. The cooling performance was optimized by simulations and measurements. A special power supply board was developed to fit into the dimensions of the box and generate enough power for the application.

Project Details

Location	United States
Industry	Security and defense
Application	Satellite communication for vehicles in disaster areas
Technology	MicroTCA
Product scope	Conduction-cooled MTCA system
Date/Time frame	2011
Contract scope	13 prototypes, project cancelled due to government budget cuts