

DATA ACQUISITION SYSTEM



REQUIREMENT

The system needed to be deployed on a civil unmanned aerial vehicle to collect geographical information. As the system is located at the outside of the aircraft, the chassis needed to be completely closed and compliant to IP65.



CHALLENGE

Weight restrictions require a sophisticated mechanical design. Conduction cooling is needed to protect the electronics for shock & vibration and water.



SOLUTION



A conduction cooled chassis was selected. In order to achieve the required processing power the PICMG standard CompactPCI was chosen for the system architecture. A special solution was created to seal the chassis according to IP65, even with the thin side, bottom and top plates. The project was completed in cooperation with the system integrator EMCOMO.

Project Details

Location	Germany
Industry	Avionics
Application	Data Acquisition System
Technology	CompactPCI
Product scope	5-Slot CPCI System
Date/Time frame	2014
Contract scope	1 (Research project)