

# Application stories



## REAL TIME DATA COLLECTION DUAL SYSTEM 📄

Amplicon was approached by a government funded research institute tasked with investigating the world's climate, in particular the causes of climate change and the ultimate effects that these will have on civilisation.

## SYSTEM REQUIREMENTS 📄

The clients, Geo-Physics Group had developed an airborne radar system that can see through the deepest ice sheets found in Antarctica. This radar, together with other geophysical equipment, is used to look for potential instabilities in the Antarctic ice sheets, which in turn may cause them to fail and release billions of tons of ice into the world's oceans. A large amount of data is collected and needs to be read and stored promptly and reliably.

## SYSTEM DESCRIPTION 📄

For this project we used a two PC solution. The first PC contained the processing power. Housed in a 4U Industrial Rackmount chassis, the server comprised of Dual Intel Xeon 3.06GHz processors chosen for their speed and overall performance – this machine was effectively a number cruncher, so speed was essential. For this project we chose an Intel Server board because of its compatibility with Windows 2000, an impressive 4GB of ECC Registered RAM was also essential. The operating system was installed on an 80GB IDE hard drive and a Zippy MRW-6400P Dual Redundant 400+400 Watt power supply was specified to give redundancy to the system, limiting down time was also high on the priority list. To connect to the storage unit, an Adaptec 2120S U320 single channel RAID controller and an Adaptec 29160 U160 dual channel RAID controller were used and connected via a SCSI Cable to the second PC. The second PC was an industrial 2U chassis housing the storage for the customer's data. We installed six 147GB U320 SCSI hard drives configured as a RAID 5 array for speed and efficiency in transferring data and their well documented reliability. Another Zippy MRW-6400P Dual Redundant 400+400 Watt Power supply completed this system.

Before shipping the system, it was fully tested at our EMC test facility for emissions and immunity to the relevant standards. At Amplicon we only specify components that are known to have good EMC characteristics, but this does not negate the importance of testing.



## WHY AMPLICON 🏆

---

This project was the result of a rapid response from our sales team. From taking the first call, regarding the urgent requirement, and receiving the order from the customer only 6 days elapsed. The first system was delivered 3 weeks later and tests began. It was Amplicon's 30 years of engineering experience and our long-standing relationship with the customer that gave us the edge over the competition.