



Motor Sport Case Study



In recent years, data acquisition systems have become powerful tools that are vital to the success of motorsport. These telemetry systems measure and record important vehicle parameters via sensors and are pivotal in communicating track status and warnings between the pit and the driver.

These parameters including; Wheel speeds, Lateral and longitudinal acceleration, Tyre temperatures, Brake pressures, Engine speed (RPM), Engine temperature, Oil pressure and GPS; can be analysed to gain insight into the behaviour of the engine, chassis and driver, which can ultimately result in greater predictability and optimised performance on race day.

Our client has been using two-way radio to transmit data between car and pit, however this presented a number of issues such as; limited data speeds, occasionally having to install radio communications at each location and requiring a separate licence for each county they were using the devices in.

Maxon offered our client the Intelimax serial modem to test in a well known motor racing series held in Australia.

The Intelimax device was easily installed and circumvented the need for setting up receivers and antennas as is the case with RF Data systems. In addition, as FCC approval is already acquired for the Intelimax devices, no additional licences are required.

Once the Intelimax was installed the data speed immediately increased from 38400bps to 115200bps which allowed for faster and more reliable communications.

Using the 3G network improved the privacy of the data being transferred and alleviated any issues of competitors listening in to vital team information.

Our client is very happy with this solution and has plans to roll out Intelimax modems for all other motorsport classes they are involved in such as Formula 1 and V8 Supercars.