ISLE OF MAN TT RACING CONTROL SYSTEM ⬎

Amplicon were approached to provide a number of control systems used on display boards at the famous Isle of Man TT race. The control system had to interface to the existing displays as the organisers insisted that the systems should be in keeping with the historic look of the Race. The displays were situated mainly at the Start/Finish line and were used to show the race in progress around the Island.

SYSTEM REQUIREMENTS ⬎

A number of key requirements had to be met for the solution to be accepted. Firstly, the new I/O sytem was to be installed into the old displays so that direct water ingress did not present an issue. The typical weather conditions on the Isle of Man meant that an industrial unit was needed to cope with adverse temperature, humidity and to offer the longevity required. Relays were also required to switch lights on and off in a preset order. There was limited installation space so a compact unit was selected for the project. Different display boards had changing I/O requirements so a modular approach was chosen. We also needed to consider easy swap out replacements. Finally the boards were situated on different side of the tracks and cables could not be laid over or under the track.

To meet this requirement we were able to suggest an industrial compact I/O module which could easily have more I/O added and benefited from using wireless ethernet technology. The display board worked using lights dotted around a representation of the course so relays were used to switch them on in a predefined order. Each board has 120 lights so 20 ADAM6060W each with 6 relays were used as well as additional modules as spares. The AWK1100 Industrial wireless ethernet access point made the connection back to a central control point running in house custom software.

WHY AMPLICON? ⬂

Amplicon was able to identify the customers requirements to enable a full solution was offered giving the customer the reassurance that they would have one point of contact for the solution provided.

The system was easy to install. Cabling used simple screw terminals and then wireless I/O. Hardware used DIN Rail mounting to hold it in firmly, all this gave the customer a low installation cost

Using wireless ethernet and modular distributed I/O meant that the system had the potential for expansion to a limitless amount of IO making it future proofed. Further analogue or digital modules could be easily incorporated to expand the system and offer other forms of I/O.

Had the client wanted us to we could have offered software packages and even programming services to complete a total solution offering.

Amplicon was seen as a good supplier as we are able to offer 30 years experience with data acquisition, industrial networking, and computing solutions. Talking to one of our application engineers a solution was put together that was easy to implement, to the required specification which was within budget.