Subject: MaxiMet provides measurements to support a solar car race

Reference AN0035

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Introduction

Since 1990, the University of Michigan Solar Car Team has been designing, building, and racing America's best solar vehicles. With 5 consecutive National Championships, 8 overall, 5 Top-3 World finishes, and 1 international championship, they are America's number one team. Complete details about the University of Michigan Team can be found at:

http://www.solarcar.engin.umich.edu

The Car - Aurum

It has been two years since the 2013 World Solar Challenge came to a close. Despite a devastating crash during the race, our team still managed to pull off a top-ten finish after spending all night repairing Generation, our team's 12th vehicle. From the day the race ended, our team has been hard at work to bring the world something better. Something faster. Something that breaks all the records that have been set already.

On July 17th, 2015, the University of Michigan Solar Car Team unveiled their team's 13th vehicle, Aurum. With a sleek new aero body, and top notch electrical and mechanical systems, Aurum is the ultimate electric vehicle.

An asymmetrical catamaran body designed by the team's Aerodynamics Division is projected to be more aerodynamic than any vehicle that their team has ever produced. The power losses from the electrical system have been minimized through innovative design. The mechanical systems have been optimized for weight reduction and an increase in overall strength and reliability. Every aspect of their designs have gone through countless iterations to produce this icon of sustainable engineering.

The Installation

Knowing the wind speeds can also help from a safety aspect. The University of Michigan team were actually blown off of the road during this race in 2013, so they were looking for a more accurate and reliable device to monitor the wind. They will then use the true wind speed and direction readings from the GMX501 that are logged to a database.

World Solar Challenge Race

This team is has been in Australia preparing to race in the 2015 Bridgestone World Solar Challenge Race. It is a 3000km race through the Australian Outback and is the most prestigious race in solar car racing. Complete details about the race can be found at:

http://www.worldsolarchallenge.org/

Update following the race

The compact, all in one solution of MaxiMet GMX501 with GPS is mounted on a 6 ft. pole on top of a car that follows behind the solar race car. They chose the GMX501 so that they could also accurately monitor solar radiation along with wind speed, wind direction, temperature, humidity, and pressure all from a single instrument.



With a 4th place finish within an hour of 1st place at the Bridgestone World Solar Challenge, the University of Michigan Solar Car Team are America's number one team.