AWC 500 PCM5-2
PITCH-, TURBINE- AND PARK CONTROLLER
DEIF's new PCM5·2 Power and Control module, for the AWC 500 series offers extreme processing power and gigabit network connectivity at data server level. Without compromising on its capability to cope with the toughest wind turbine environments, the PCM5·2 is the most rugged and reliable wind turbine controller in the industry.

**New turbine designs or retrofit**

Designed for both new turbines and retrofitting of old turbines, the PCM5·2 has been built to last for a minimum of 20 years and is fully operational in temperatures from -40 °C to +70 °C. Through software updates and maintenance, the turbine operation is continuously updated by turbine control algorithm updates. The PCM5·2 is perfect for Big Data and can learn from a large amount of data, online.

**Go Linux with our 1GHz dual core embedded controller**

PCM5·2 can be used instead of an industrial PC due to its open, real-time Linux-based operating system, while maintaining cost-effective advantages of an embedded controller. For this solution, our C/C++ development package with Eclipse, GNU C++ compiler and build system is provided. Linux as the operating system gives you access to a large amount of open-source software, tools, literature and communities on the Internet. Most importantly, the Linux operating system is maintained 100 % in-house by DEIF giving you access to specific customisations and services.

PCM5·2 can be delivered with CODESYS V3.5 and web visualisation for use as a general PLC, making it easy to run existing PLC code.
Robustness designed into every detail for tough climate conditions
The module can be applied in all sites, located in cold or hot climates, near-shore, offshore, onshore, at high altitudes. Robustness features include:
► CPU with error checking and correction (ECC) on internal cache and the external memory which makes it immune to single-bit errors
► Self-monitoring and error-correcting filesystem
► Watchdogs on 4 different hardware and software levels
► 100 % in-house maintained embedded real-time Linux operating system with fail-safe remote update.

PCM5·2 interfaces to the wind industry’s most widely used protocols like RS-422/485, Profibus, CANopen and EtherCAT. This makes it a versatile controller hardware that can perform as either Pitch-, Main-, or Wind Park Controller.

For further information visit: www.deifwindpower.com/products/awc-500

AWC 500 PCM5·2
Real time Linux based controller

AWC 500 features
► Designed to last more than 20 years
► 100 % production-tested system units
► 5 year warranty
► Full traceability
► Suitable for onshore and offshore installations:
  ▪ -40 to 70 °C operating range
  ▪ 55 °C 97 % RH condensing
  ▪ Coated PCBs
► Up to 4,000 m altitude
► More protection for ESD, Surge and Burst (x2)