Data Analysis From Remote Access

CPK Automotive GmbH & Co. KG (CPK), based in Münster, Germany, introduced RemCo II, a remote control system that supplements the company's Dyntest family of emissions controls and allows data analysis via remote access to the Dyntest-ControlBox from any place in the world.

RemCo II is composed of a hardware module plus the smartphone application DYN@pp, which available for iOS and Android operating systems.

The hardware communication between the RemCo II module and Dyntest - ControlBox is based on the established Dyntest - bussystem. RemCo II is compatible with current and older Dyntest - ControlBox versions.

The system works with encrypted data, transferred via Bluetooth to the smartphone. DYN@pp sends the data automatically to a server once the smartphone has access to the Internet. The data can be accessed on a web portal by authorized users. In this way, data can be available for analysis while the machine is still in the field and without Internet connection, as for example with vehicles working underground. Possible abnormalities are thus discovered at an early stage and measures can be planned on time,as defined by,, CPK said.

In addition to data download, RemCo II allows remote access to the ControlBox and also to the RemCo II module itself. By using the CPK Terminal software, the user logs in on the server via an internet connection and a list is shown with all RemCo II systems that are ready for connection. That means a smartphone with active DYN@pp is connected with both a RemCo II system and also the Internet.

After selecting one RemCo II module, the system provides the full functionality of the CPK Terminal software, as for example changing parameter settings, watching data online and even modifying software remotely.

"The requirements for the RemCo II module were developed in numerous workshops with our customers," said CPK's CEO Frank Noack. "The technical realization enables our customers to fulfill their service contracts in an efficient and resource-saving manner. Applications for RemCo II are not limited to the exhaust aftertreatment market."

CPK said that additional applications for the RemCo II system include the remote monitoring of oil quality or bearing condition for predictive maintenance. Rental companies for construction equipment have also a special interest in where their equipment is operated; RemCo II, in a future version with GPS module, can satisfy these requirements and also send alarm messages once the machine leaves a pre-defined area (geo-fencing function).

In its base version, the RemCo II comes with RS485 interface; a CAN interface will be additionally

available in the near future. This will open up the system to even more applications, as for example transferring data from the vehicle CAN bus according to SAE J1939 protocol.

The RemCo II module has dimensions of approximately 60 x 60 x 30 mm; the device is specified for working at ambient temperatures of –40 to 85 °C and with supply voltages of 9 to 32 V DC. The module fulfills protection grade IP67.

CPK said that further variants – including the one with integrated GPS data acquisition - are under development.

For more information, go to www.cpk-automotive.com