CAN *Newsletter Online*

OEM CONTROLLER

Controller for IoT and telematics

Divelbiss Corporation has announced the introduction of enhanced models and expansion capabilities of the Versatile Base (VB-2000) series of OEM controllers.

THE VB-2XXX SERIES OFFERS CONTROL CAPABILITIES and can communicate with the Divelbiss Versa Cloud M2M platform. Programmed using the no-cost Divelbiss EZ Ladder Toolkit and based on P-Series PLC-on-a-Chip technology, the family provides flexibility for interfacing to and controlling equipment, communicating with various serial bus protocols, logging system data, or adding Internet of Things (IoT) and telematics capability to existing systems.

Featuring open-board construction, the VB-2XXX is mounted using industry standard DIN rail and has an I/O count with 12 digital inputs, 3 high speed counter inputs, 8 digital outputs rated for 2 A each, 7 analog inputs that are user configurable as 0 V to 5 V, 0 V to 10 V, or 0 mA to 20 mA inputs, and 1 analog output that is user configurable as 0 V to 10 V or 0 mA to 20 mA. Additional digital and analog I/Os, including thermocouple inputs, may be added using plug-in expansion boards.

(Photo: Divelbiss)

One CAN port is available and supports the J1939 and NMEA 2000 protocols. It can be used to communicate to remote digital I/O's and other controllers. Ethernet and Wi-Fi ports can be used for Modbus TCP Server and Client communications, as well as IoT/telematics communications with the Versa Cloud M2M platform. A GPS option is also available. The controllers offer one EIA-232 serial port, one EIA-485 serial port, and each supports Modbus RTU/ASCII protocols as either a Master or a Slave device. The serial ports are also directly programmable via the Structured Text programming language, allowing the implementation of custom protocols, which makes them suitable for communicating to bar code scanners, RFID readers, or other serial devices.

For applications that require data logging, VB-2XXX solutions are available with a real-time-clock, 512 KiB of battery backed SRAM, and can accept a micro SD card. When utilized with the Divelbiss Versa Cloud M2M platform, the controllers can communicate data to Versa Cloud, where it is date/time stamped and stored in the database for later viewing, analysis, and export. The controllers support supply voltages from 8 VDC to 32 VDC and have an operating temperature range of -40 °C to +80 °C, making it suitable for use in applications with extreme environmental requirements.