



PRESS RELEASE

More Control Power in Less Space

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FOR IMMEDIATE RELEASE

(Hartford, WI) – HED, Inc., the experts in controlled area network (CAN) technology recently added to their CANLink® family of controls a group of very compact, low cost solid-state microprocessor modules that offer an array of application possibilities. These modules can be used either in a multiplexed CAN system or have single board controller (SBC) capabilities to operate less complex equipment or for dedicated systems or vehicle add-on functions.

“With the introduction of these new modules, HED simultaneously opens new markets previously inaccessible to us and enhances the breadth and flexibility of the total CANLink range of controllers,” stated Joseph P. Maher, Sales & Marketing Manager for HED.

With their space-saving size these modules give designers a large number of I/O’s to handle a number of vehicle functions. Yet their lower cost, light weight and compactness makes these components ideal for providing operational control for add-on vehicle accessories. The modules’ location and function would be instantly recognized by the master vehicle controller when the accessory is attached. “With this concept, precise control of a multitude of accessories is possible without the standard vehicle platform bearing the cost burden,” Maher stated.

For demanding off-road applications, their rugged IP 6K9K rated Deutsch box package enables them to perform with total reliability. To make these modules field rugged, the printed circuit boards are designed for high EMI/RFI protection. Boards are conformal coated with a silicone coating for water/moisture protection.

Convenience features include indicator LEDs for a quick visual check on the status of power supply and functionality of the module. All new modules are also available with optional LED indicator lights on each of the inputs and outputs for simple troubleshooting in the field. This version comes in a clear plastic enclosure allowing

full visibility of the LEDs and the printed circuit board inside, without the need to drill holes in the enclosure. “This design provides optimal visibility of the LEDs without sacrificing one iota of protection against the elements,” stated John Kitzerow, Business & Product Manager for HED. “Ultimately you get all the troubleshooting convenience of easy to read indicators in a highly rugged and reliable package,” Kitzerow added.

The six new modules include one designed to be a master controller (the CL-103 comes loaded with communications ports), four low current input/output modules in various I/O configurations (CL-202, CL-302, CL-414, CL-416), and one high current module (the CL-303 has eight 7A outputs). The wide variety of I/O configurations assures customers can match modules to specific I/O concentrations on their vehicle for optimized distributed intelligence.

The new modules include:

Module	I/O's and other features
CL-103	(3) J1939 ports, (2) RS232 ports, (1) J1708 port, (1) USB port, (2) switch-to-ground or harness codes, optional (1) analog input
CL-202	(12) switch-to-battery inputs, (4) switch-to-ground or harness codes, (2) inputs that can be configured as switch-to-ground or switch-to-battery, (1) input that can be configured switch-to-battery or switch-to-ground or frequency input, (1) input that can be configured switch-to-battery or switch-to-ground or resistive sensor (RTD) input, (1) J1939 CAN input. Optional LED's for input or output status.
CL-302	(8) sinking 500 milliamp digital outputs, (8) sinking 500 milliamp PWM outputs, (4) switch-to-ground or harness codes inputs, J1939 CAN input. Optional LED's for input or output status. Can be used in a multiplexed system or as a SBC or as a gauge driver.
CL-303	(8) seven amp PWM outputs, (4) switch-to-ground harness or code inputs, (1) switch-to-ground input, (1) J1939 CAN input. Optional LED's for input or output status. Can be used in a multiplexed system or as a SBC.
CL-414	(8) sinking 500 milliamp digital outputs, (8) switch-to-battery inputs,

	(4) switch-to-ground or harness code inputs, (1) J1939 CAN input. Can be used in a multiplexed system or as a SBC.
CL-416	(4) inputs configurable as switch-to-ground or harness codes, (4) inputs configurable as switch-to-battery or analog, (2) inputs configurable as switch-to-ground or analog, (8) 500mA sinking PWM outputs, (1) J1939 CAN input. Optional LED's for input or output status. Can be used in a multiplexed system or as a SBC.

Another feature that adds versatility to the design process is the ability to interface the modules with the new HED CANLink Composer™ do-it-yourself programming software. Now design engineers working for equipment manufacturers can more easily program routines handled by these modules, giving them the flexibility to respond to either the demands of the customer or of the application.

HED in brief:

HED is a leading supplier of state-of-the-art electronic control and multiplex technology for on-highway and off-highway mobile vehicle applications. From stand-alone products to integrated vehicle control systems, HED offers both standard products and completely custom solutions, including a range of over 30 unique control modules in the CANLink family.

Programmable either by HED or the customer, CANLink modules are designed for use with do-it-yourself software tools including CANLink Composer™ for programming stand alone modules or full multiplex systems, CANLink® Conductor for diagnosing programming logic and troubleshooting vehicle systems in the field, and CANLink Tuner™ for fine tuning input device signal ranges either at the end of the production line or to calibrate field replacements.

The HED headquarters for product design, manufacturing, sales and service is located in Hartford, Wisconsin USA and is ISO 9001-2000 certified.

Contact HED for a free copy of the new brochure on the expanded CANLink® family.

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