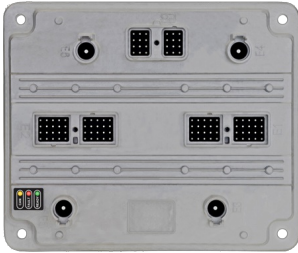


J1939-CONNECTABLE

## **ECU provides 32 switched inputs**

**Ametek has developed the Intelligent Control Module (ICM), a user definable device that connects with multiple vehicle systems to enhance control for end-users.**



*The ICM is suitable for commercial vehicles and implements Simulink (Source: Ametek)*

The ICM electronic control unit (ECU) interfaces through dual CAN interface 32 switched-inputs to control power for up to 40 devices. Utilizing visual logic programming, the product I/O ports can sense and control lighting, HVAC, radio, switches, sensors, motors, solenoids, and other devices on the J1939 network. The device empowers users to leverage advanced diagnostics and a wide array of inputs to enhance a vehicle's telematics system with a more detailed view of the vehicle's status.

Utilizing the built-in Simulink integration, the device offers a more in-depth look at the vehicle's system through visual modeling and simulation. Users can model the system connections and logic and then automatically generate code for the vehicle application. Additionally, users can use Simulink to perform tests early in the development process and as often as they'd like to iteratively develop the system.

"Our customers have asked for more control of the ICM system programming," said Darrell Martin from Ametek. "The implementation of Simulink in this product allows them to not only define the system but also to quickly make the programming changes required to respond to their customers need for customization."

This ECU, coupled with Simulink, provides more customizable capabilities by replacing fuses and relays with smart power and SAE J1939 communications, ultimately providing more custom control of chassis components. It is designed for rugged applications, meeting all SAE J1455 and SAE J1113 requirements for vehicular instrumentation as well as ISO 16750, ISO 20653, ISO 10605, ISO 7637, and ISO 11452.

[hz](#)