### **EMC - SINGLE E-FAN BANK CONTROLLER**

The EMC is a compact but powerful single fan bank controller designed to control multiple variable speed brushless fans. The EMC is unique such that it can be integrated into simple air handling applications or more complex Tier IV and V cooling systems. Utilize a single thermistor input and control a single e-Fan bank using the **Set-Point** feature for a precision cooling packages or utilize the **On-Demand** feature and prioritize the cooling demand based upon the CAN messages and/or thermistor input temperature profiles.

# The Controller Premoted Help DOT Dashboard lique Sempl Ressage Select Message Date East Control Transmit Mag /\*S Fan Speed /\*S

# **GRAPHICAL USER INTERFACE (GUI)**

The simple and easy-to-use GUI enables the user to perform simple or complex actions based upon the configurable inputs. With an OEM password, the GUI allows the user to configure the input types, e-fan profile, and control logic for maximum cooling performance. Also equipped with data logging capability for troubleshooting and performance monitoring.



Fan Diagnostics

# **LOW CURRENT PWM**

The EMC provides low current varying PWM signal to variable speed brushless electric fans based upon the command inputs.

+ Fan
- Supply Power

### **SMART E-FAN**

Compatible with smart +12Vdc or +24Vdc brushless variable speed electric fans. The EMC is designed to work with Active High and Active Low fans. Invert the duty cycle and adjust the PWM frequency from 33 to 1,000Hz. The flexibility of the EMC makes this controller compatible with any e-Fan operational profile.

# **J1939 COMMUNICATION**

Transmit and receive standard and custom J1939 messages. The EMC utilizes the standard message format in addition to customizable messages for easy setup and installation. As an example, the EMC can convert temperature inputs into CAN messages and transmit to the engine control unit or a secondary EMC controller for diagnostics and system intelligence.



The EMC is designed with 3x configurable switch inputs for application flexibility.

- Ignition
- Reverse

J1939

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רברברו. Data

Ready

Fire



# **SENSOR INPUTS**

Monitor the real time temperature using up to 2x thermistor or potentiometric inputs. The EMC GUI is equipped with existing thermistor profiles using HCT's sensor accessories. Utilize the **Set-Point** feature and close loop on a single temperature input for precision cooling control.