

## 1 INTRODUCTION

The EAM110 interface module is designed to provide analog signal conditioning between a GAC auto sync / load sharing system and the Cummins QST engine control. With a nominal 5.0V DC at the input, the output will provide a 5.0V DC output signal based on the Cummins QST internal 5.0 Volt reference.

The power to operate the interface module comes from the same 24 V DC battery system that operates the QST engines system.



## 2 SPECIFICATIONS

POWER	
Input Impedance (Terminals A and D)	30 K $\Omega$
Output Impedance (Terminals 16 and 27)	3 K $\Omega$
Nominal Output Voltage (Terminals 16 and 27)	5 V DC
Output Voltage Range (Terminals 16 and 27)	0-2.6V DC
Output Transfer Function	-0.5 Volts Out / Volt In
DC Supply Voltage Range (Terminals 1 and 11)	15 - 32 V DC
DC Supply Current (Terminals 1 and 11)	20 mA
PHYSICAL	
Temperature Range	-40° - 185 ° F [-40° to +85°C]
Dimensions	1.02 x 3.0 x 3.5 in [25.91 x 101.60 x 118.62]
Mounting	Vertical mounting preferred
Relative Humidity	up to 97%

## 3 WIRING AND DIMENSIONS



An overspeed shutdown device, independent of the governor system, should be provided to prevent loss of engine control which may cause personal injury or equipment damage. A secondary shutoff device, such as a fuel solenoid, must be used.

- The common battery minus connections between the QST system, EAM110, and the GAC auto load sharing and sync system should be as direct as possible electrically (minimum voltage difference).
- The input Terminal 16 on the Cummins control is normally connected to the output of the EAM110 Terminal 16.
- An external trim pot may be connected to the EAM110 for manual adjustment of speed. Use a 5K pot connected to Terminals A, B, and E as shown in the Wiring Diagram.



