

- ▶ Operating Temperature -40° to 80° C
- ▶ 2x16 or 4x20 Backlit LCD Display
- ▶ 9 Programmable Pushbuttons
- ▶ 4 programmable LED Indicators
- ▶ Available with PLC Functionality
- ▶ 2 High Speed Counters (200KHz)
- ▶ Digital and Analog I/O
- ▶ PWM output Capability
- ▶ PWM Output Current Sensing/Feedback
- ▶ J1939 and OptiCAN Connectivity
- ▶ Sealed from Environment
- ▶ Programs with EZ Ladder® Software
- ▶ Visual Status Indicators (Watchdog and Power)



Typical applications include:

- ▶ Mobile Equipment
- ▶ Agricultural Equipment
- ▶ Off Road Equipment
- ▶ Batching Systems
- ▶ Remote Locations Monitoring & Control
- ▶ Engine Driven Pumps, Compressors and Generators
- ▶ Proportional Valves
- ▶ Material Handling/Movement

Specifications:

Digital I/O: 6 Inputs (2 High Speed for Counters) and 6 Outputs (4 are selectable for PWM)
Inputs: rated 8 to 32VDC isolated
Outputs: 4 each digital Sourcing, rated to 4A Maximum (See User's Manual for derating), PWM frequency programmable 1.5 Hz to 1KHz, PWM, Over-current protected, Output Voltage equal to Input Voltage 2 each digital - Relay SPST rated at 2 Amp (dry contact)
Output Current Sensing: PWM channels provide internal analog current sensing variables for closed loop control
Analog I/O: 2 Inputs - each switch selectable for 0-20ma or 0-5VDC at 10 bits. Optional factory configured at 15 bits.
Counters: 2 Channels, Count Up, 200KHz Max. with field selectable signal input voltage range for sinking/sourcing
LED Indicators: Total of six (6) - 2 Status, 4 User Programmable
Pushbuttons: Total of nine (9) - 5 in Directional Compass configuration, 4 In-line labeled as Function Keys
Display: 2 line x 16 large character / 4 line x 20 standard character backlit LCD
Beeper: 1 User Programmable
Input Voltage: 8 to 32VDC
Operating Temp: -40 to 80° C
Memory: 256K Flash, 12K RAM, 4K EEPROM
Serial Ports: 1 Programming Port (Max baud 57.6K), 1 Optional (Field configured for RS232, RS422, or RS485)
Networking: 1 CAN Ports, J1939 Read Only support or OptiCAN
Program Language: Ladder Logic with Function Block using Divebiss EZ Ladder PC based software
Mounting: Panel Mount using screws
Type: NEMA 4X, Sealed Plastic Housing

NOTE: Specifications are subject to change without notice.

HEC-HMI

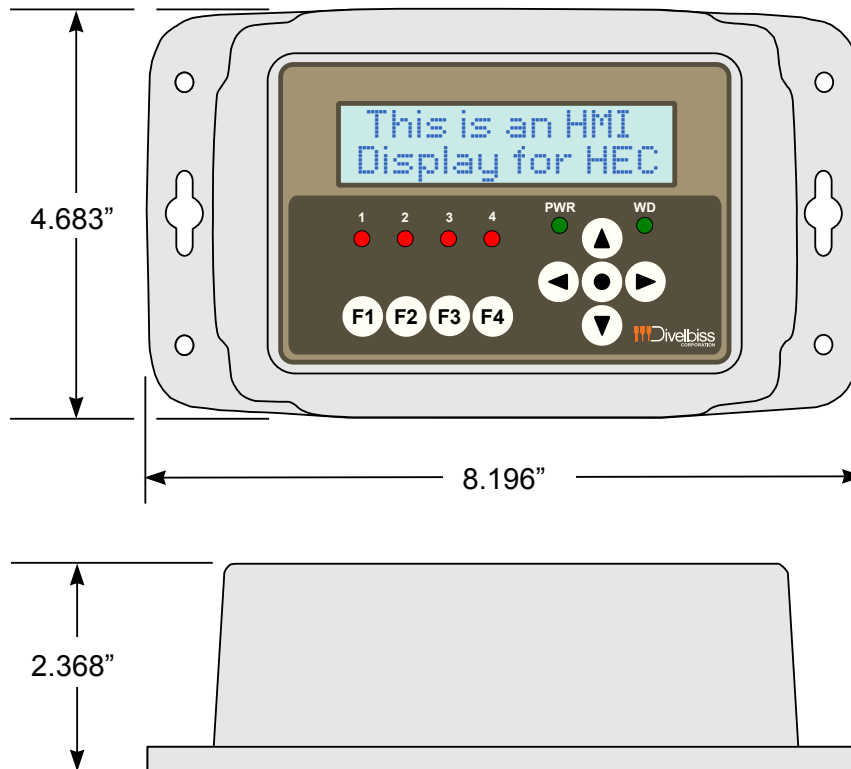
Harsh Environment HMI



Proudly Made in the **USA**

Hardware Selection Guide

Model Number	Description	Display	Analog
HEC-HMI-2	Standard HMI with CAN and Serial communication	2x16 Backlit LCD	10-bit
HEC-HMI-C2100	HMI with PLC functionality	2x16 Backlit LCD	12-bit
HEC-HMI-C2150	HMI with PLC functionality	2x16 Backlit LCD	15-bit
HEC-HMI-4	Standard HMI with CAN and Serial communication	4x20 Backlit LCD	10-bit
HEC-HMI-C4100	HMI with PLC functionality	4x20 Backlit LCD	12-bit
HEC-HMI-C4150	HMI with PLC functionality	4x20 Backlit LCD	15-bit



Programming the Controller

The Harsh Environment Controller HMIs program in Ladder Diagram using the Divalbiss EZ Ladder®, a Ladder Diagram Development Platform. EZ Ladder software parallels the IEC-61131 standard and provides an easy to use interface.

After a ladder diagram program is developed, it can be downloaded to the HEC-HMI controller via the serial port. The program is stored on non-volatile FLASH memory and is automatically executed on power up. Once the download is complete, the HEC-HMI is successfully programmed and begins executing the program.

Refer to the EZ Ladder User's Manual for more detail on creating ladder diagram programs, connecting to targets and downloading the program to targets. The manual can be downloaded from our website: <http://www.divalbiss.com>