

EPS 1000

The EPS 1000 is a programmable, three-channel equipment protection module designed to perform a variety of functions simultaneously. It is especially suited for engine protection, sequenced operations, and critical timing applications. It can also be used for unattended engine starting using autocrank and glow plug functions.



Features:

- PC programmable, microprocessor based for accurate and stable set points
- Two-piece enclosure allows either recessed panel mounting or base mounting (Patent applied for)
- Front panel LED's provide instant visual data on operational status
- Three output channels for independent configuration of various actions
- Each channel can be configured in one of three modes:
 1. Speed Switch
 2. Autocrank Controller
 3. Glow Plug Controller
- Speed signal input is user selectable for magnetic pickup, ignition, or Hall Effect sensor
- Autocrank mode allows programming for crank time, rest time, and maximum crank attempts
- Glow plug mode controls glow plug ON time
- Test verify function permits testing of relay at 70% of set point (programmable 0 to 99% of set point)
- Normal or reverse relay logic is configurable by user
- Six switch inputs plus engine speed input provide versatile programming
- Protection switch inputs (EP) can be enabled at preset (programmable) RPM after preset time delay
- Two auxiliary outputs indicate status and fault codes
- Engine status indicator displays engine failure codes to aid in troubleshooting engine problems

Order Information:

ORDER No.	Description
SA-4478	EPS 1000 Module
SA-4479	EPS Calibration Tool Kit Includes interface module, program diskette, RS-232 cable, and Operator's Manual

E.E.C. Directive Compliance: All parts supplied by Woodward are classified as components, and therefore are not "CE" marked. Please contact factory direct for details on specific product compliance with 89/336/EEC and 89/392/EEC directives.

Electrical Specifications:

Power Input	9-30 VDC, reverse polarity protected	
Electromagnetic Compatibility	ISO 14982:1998/E	
EMI Immunity (ISO 14982:1998/E)	30 V/M 20 MHz to 1000 MHz	
Nominal Operating Current	<u>12 Volt</u>	<u>24 Volt</u>
Operating:	140 mA	120 mA
Standby:	25 mA	40 mA
Relay Contact Ratings		
Resistive Load:	0.1 to 10 A @ 28 VDC	
Inductive Load:	0.1 to 8 A @ 28 VDC	
Auxiliary Outputs	Aux 1 and Aux 2: 200 mA maximum	

Mechanical Specifications:

Operating Temperature	-40°F to +185°F (-40°C to +85°C)
Vibration	4 G's from 40 to 2000 Hz
Shock	10 G's @ 45 Hz
Case	UV, chemical resistant, and UL 94 V-0 flame retardant. Encapsulated for reliability against harsh environments
Calibration	Requires interface adapter and software for calibration setup.
Terminations	Euro style terminal block
Weight	.85 lbs (.386 kg)

Unique, Patented Enclosure:

Two-part enclosure accommodates either panel or base mounting for convenient, clutter-free installation.

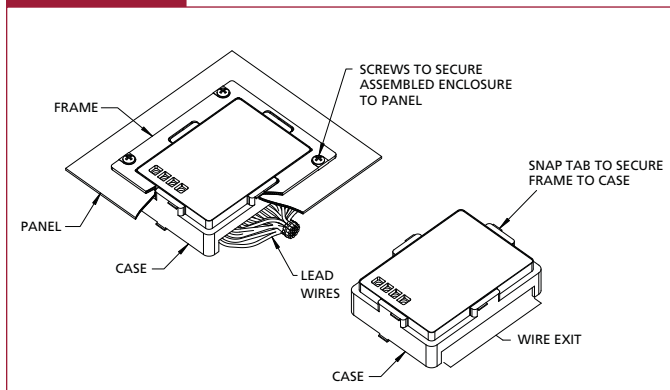
Case

- Lead wires to 21 terminals exit unobtrusively from bottom of case
- Terminal descriptions easily identified on side of case
- LED's and engine failure codes prominently displayed on front panel

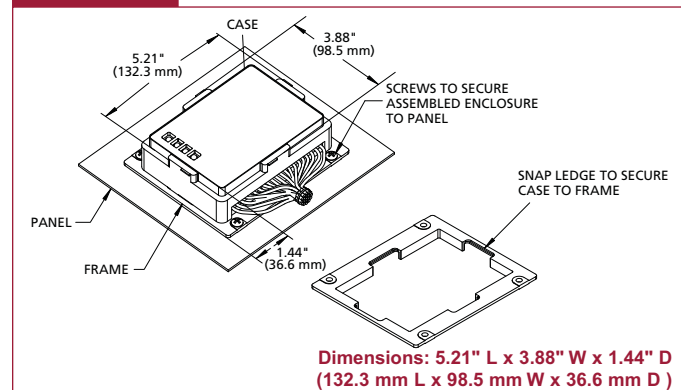
Reversible Frame

- Snap ledges secure case to frame
- When attached to top of case, assembly can be installed below the surface in a cutout in the panel (panel mount)
- When attached to bottom of case, assembly can be mounted on top of panel surface (base mount). Built-in aperture allows a convenient exit for wires and/or connections.

PANEL MOUNT



BASE MOUNT



Specifications are for reference only.