ESP 2000 Stellar Marine Speed Pilot

System Features & Benefits

Precision navigation

The precision you rely on from your GPS guided AutoPilot is now available for propulsion control. Precision ground speed simplifies navigation and improves on time arrival. The ESP 2000 maintains the requested ground speed to within 0.1 knots (average).

Automatically compensates for load, weather & sea conditions

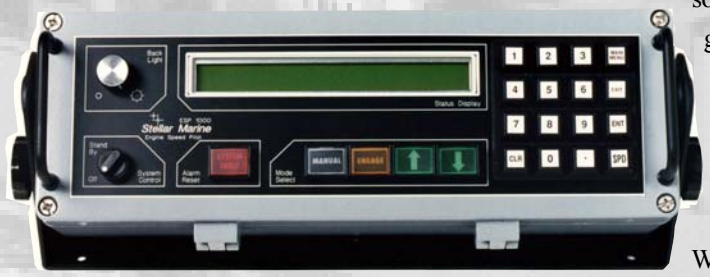
As sea conditions change, the ESP 2000 adjusts throttle setting automatically to maintain the desired ground speed, or RPM. The system even detects shallow water effects and reduces vessel speed accordingly .

Prevents engine overload

The ESP 2000 continuously monitors engine power output (including shaft generators and other engine driven loads) and ensures any throttle setting it selects complies with the engine manufacturers power output curves.

Monitors emissions

Optional software provides data collection and generates quarterly NOx emission reports to verify compliance with emission regulations.



Precise digital setting of set points & limits

Set desired operating RPM, low RPM limit and other parameters with the systems numeric keypad.

Multiple processors for safety

Dedicated bridge and engine room processors monitor each other to ensure fail safe operation. Integral alarm system provides visible and audible alarms if a hardware or software malfunction occurs.

Reduces fuel consumption

The ESP 2000 manages a vessel's propulsion to achieve maximum distance with the least amount of fuel. Tests show the ESP 2000 can achieve fuel savings of 4-6 percent.

Reduces windage effects on steering

The ESP 2000 automatically balances propulsion to reduce costly rudder offset on vessels with multiple propellers. No modifications or connections to the existing steering system are required.

Works with your existing control system

To ensure safe operation of the engine, the ESP 2000 monitors your existing engine control system, automatically reducing engine power output if a problem develops with the engine.

Optional PC data logging

Voyage data is automatically recorded at one minute intervals on the vessels PC. Using this data, the systems DataView software utility lets you generate graphs and compute statistical data for a complete voyage, or any part of it.

Balanced control transfer

When engaging and disengaging, the ESP 2000 provides "bump-less" control transfer by matching its control signals to the setting of the vessel's existing control system.

Regulatory compliance

The ESP 2000 is covered in the Lloyd's Registry Regulations under section 2.9 – Programmable Electronic Systems, and can be demonstrated to comply with sections 2.9.2 to 2.9.19.

Better thermal management

Advanced control algorithms provide precise tracking of recommended minutes per RPM change and horsepower load curves, minimizing cylinder temperature gradients at all RPM settings.