Since initial development in the 1950’s, Propulsion control remains a core automation product from SAM Electronics. The new PCS Platinum series draws upon all our experience in the marine market and know-how from thousands of installations. The result is a highly flexible system, built up from proven and variable software control functions designed to meet the demands of the modern sea-going vessel.

Hardware and software is tailor-made for the demanding environment and marine industry requirements, with lifelong support engineered into every component. Of course, the respective PCS components (Bridge Manoeuvring System, Engine Governor System, Engine Safety System) are not only proven in use but also approved by main engine manufacturers (Wärtsilä and MAN Diesel) as well as all major class societies with IACS.

PCS - Propulsion Control System
Propulsion Control System encapsulates the complete propulsion control package that SAM has delivered since decades. PCS not only includes several functions from individual systems (due to class requirements), but is also expandable into a shared network using combined Platinum series hardware and software platform. Of course, systems are also in stand-alone variants e.g. stand-alone Engine Safety System for combination with 3rd party telegraph systems, governors etc.
EMS - Engine Manoeuvring System
EMS can be configured from a minimum telegraph system set through to including bridge wing operability and even electric propulsion. Start/stop system, loading up/down, bumpless transfer and PTI/PTO mode are included as standard options. EMS is suitable for the complete range of engine configurations, ranging from 2-stroke single shaft with fixed propeller to 4-stroke diesel-electric propulsions and highly sophisticated gear/propeller arrangements— even closed loop controller for pitch control is offered from our EMS.

EGS - Engine Governor System
The SAM Electronics EGS sets the marine industry standard for controlling 2-stroke engine fuel racks (MAN MC/MC-C, Wärtsilä RTA) and as a controlling set-point for the most modern electronic fuel injection engines (Wärtsilä RT-Flex). As such, our EGS is one of the major market leaders and is of course fully approved by engine makers and all major class societies within IACS.

EPS - Engine Protection System
The SAM Electronics EPS is a solid and reliable safety system designed for stand-alone operations required by class. The hardware and necessary functionality is provided precisely to meet the minimum requirements requested by engine makers and class. Thus, the robust and well-trusted system offers absolute quality in safety critical functions such as engine stopping, lube-oil pressure, emergency push stop button etc.

System Architecture
PCS Platinum is based on individual products deliverable as stand-alone variants or as part of an integrated system in the Platinum series redundant LAN network. When combined with Platinum series Monitoring and Control System, the network system topology offers significant benefits. This provides extended operator interfaces via PC screens and graphical process overviews into the internal operations of the PCS, such as sequence monitoring, start/stop system, load-limiters etc.

PCS Features
- Complete propulsion package from one supplier
- Type approved by all major class societies within IACS
- Extensive alarm information
- Stand-alone or integradable with Platinum series products
- Redundant LAN network or fieldbus for long distance
- Simple or complex set-point system, including 3rd party set-point
- Variety of telegraph system options, including electric shaft
Technical Data

**EGS/EMS Main Cabinet (Floor mounted)**

- **Front view**
- **Side view**

**EMS Operator Panel**

**Local Control Box**
- **MAN type**
- **Wärtsilä type**

**Manual Control Panel**

**EPS Operator Panel**

**Alarm / Event Printer dot-matrix**

- **Supported engine types (2-stroke):** MAN MC / MC-C, MAN ME / ME-C, MAN ME-B, Wärtsilä RT / RTA, Wärtsilä RT-flex
- **Supported engine types (4-stroke):** various makers supported, depending on engine interface

**EGS Main Cabinet (Wall mounted)**

- **Front view**
- **Side view**

**EGS Operator Panel**

**EGS Actuator (Engine mounted)**

- **Supported engine types (2-stroke):** MAN MC / MC-C, Wärtsilä RT / RTA

**Alterations due to technical progress possible. Detailed technical information is available from:**

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