

The management technology for mining applications with Series 4000.

The **motivline** automation system is an innovative highend technology developed by MTU for mining vehicles. **motivline** performs the control and monitoring functions for the entire engine plant. The modular system guarantees optimum adaptation of the diesel engine to the diversity of operating conditions in mining.

motivline supports:

- flexible adaptation to the vehicle and/or its components and project-specific requirements
- automatic power output adjustment or optional engine shutdown by the integrated safety system and all other necessary monitoring and safety functions
- Interface – MTU telemetric device for GSM* – for MTU **ValueCare** Product Remote Services (optional with user agreement), which provides direct access to the data of your MTU engine
- Easy adaptation by means of MTU interface module **SAM**

motivline harmonizes the engine integration into the vehicle. Because of that optimized conditions generates:

- **high power-efficiency**
- **low fuel consumption**
- **minimal exhaust emissions that are substantially below the legal limits**

For the **Series 4000 engines**, a new engine management system **ADEC** has been developed, whilst there is also an extensive range of standardized solutions available – with options for flexible interfaces. The Engine Monitoring Unit **EMU** provides further enhanced availability by means of additional monitoring and diagnostic options for the engine. Complementing the **SAM** interface module, **POM** optimizes the start process and simplifies cabling to the starter and alternator. The complete **Plug & Play** system makes installation of the engine in the vehicle considerably simpler and faster.

* Global System for Mobile Communications

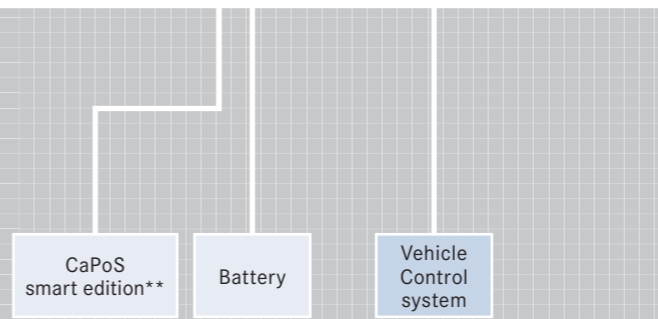
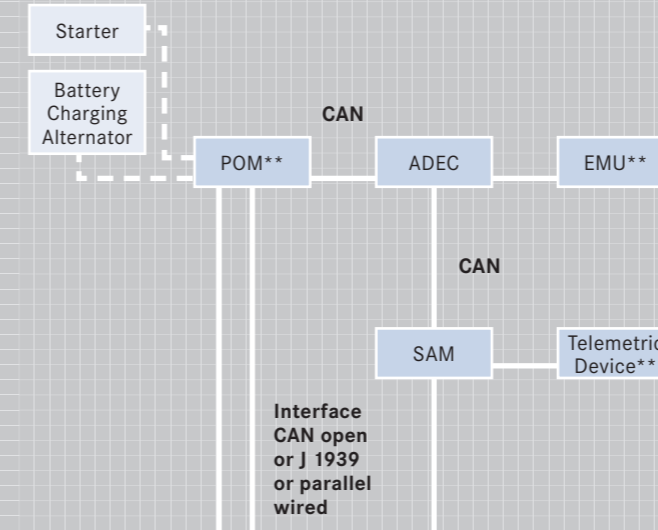
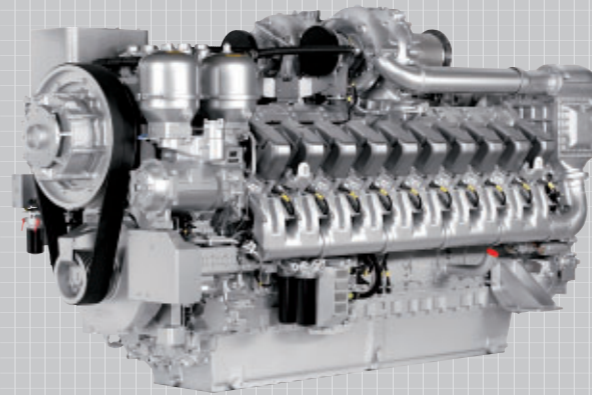
System highlights and benefits:

- Complete system supplied from a single source
- Modular design
- Minimal wiring on engine
- Improved diagnostic functions
- Intelligent bus technology
- Plug & Play equipment

That means:

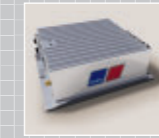
- Low costs for logistics and training
- Low risk
- Rapid project processing and short fitting times
- Trouble free integration

- ADEC = Advanced Diesel Engine Control
- EMU** = Engine Monitoring Unit
- POM** = Power Output Module
- SAM = Service and Application Module
- CaPoS = Capacitor Power System



** Optional

Cab control desk with monitoring and control system



Remote Services**



SAM
Service and Applications Module

Engine with control systems



EMU**
Engine Monitoring Unit



ADEC
Engine Management



POM**
Power Output Module

