



Mark VIe Upgrade



Product Description

- Controls Upgrade from Mark V, Mark VI, Woodward and Fanuc 90-70 to Mark VIe.
- Mark VIe is GE Vernova's OEM control platform for power generation and oil & gas equipment including Aero, heavy duty GT's, ST's, Wind Turbines.
- Upgrade consists in replacement of current Mark V, Mark VI, Woodward and Fanuc 90-70 I/O modules, chassis and software, using new hardware and software for Mark VIe.
- Concentrates core engine control and package control into a single Mark VIe controller.
- System will interface with existing field devices and on-engine hardware providing core fuel control, package sequencing and protection.
- State-of-the-art digital controller programmable for a wide variety of control applications.
- The Mark VIe Control System provides a flexible, real-time system to control any prime mover and its associated processes. It offers high-speed closed loop control, system sequencing, auxiliary system control, surge control, monitoring/alarming and station control.

The Mark VIe features a series of product enhancements/upgrades:

- Single, dual or TMR Redundant System Configuration (power supplies, CPUs, IO, & protection modules) to provide high availability with appropriate flexibility.
- Synchronized Memory – assures that both CPUs use the same operating information in all situations.
- Real-time true dual redundancy without failover time delays.
- On-line Reparability.
- Real-time Network.

Applicable Units			
LM6000	✓	LM2500	✓
LMS100	✓	LM5000	✓
LM1600	✓	TM2500	✓

Customer Value

- Standard GE Vernova platform for all new Units
- Advanced features under development include grid responsiveness, operability, emissions, and Hydrogen readiness
- Leading troubleshooting tools (Trip History, Dynamic Data Recorders, Trender) enabling rapid root cause discovery, issue resolution, and return to operation Powerful CPU for demanding applications.
- Flexibility to use different configurations, depending on customer's needs, and current configuration.
- Real-time multitasking QnX operating system.
- Improved control system availability and reliability.
- Exceptional accuracy, fast update rates.
- Increased communications capabilities (Ethernet, CAN, IEC 61850, and others).
- Timestamping across the system at 1 MS for all SOEs and Alarms synchronized to a local clock or GPS.
- Eliminates single point failure modes from systems that utilize back planes and chassis for controller and IO subsystems.
- Offers a complete suite of software products for service interface.
- Enabled for support through GE Vernova Controls Lifecare Service programs.

GE Vernova's global service network provides life cycle support for more than 3,500 aeroderivative gas turbines worldwide to help you meet your business challenges and success metrics – anywhere and anytime. Our global service network connects with you locally for rapid response to your service needs.

To learn more about this product and its applicability to your gas turbine, please contact your GE Vernova sales representative.