Woodward MicroNet Plus Upgrade

Product Description
- Controls upgrade from Mark VI and Fanuc 90-70 to Woodward MicroNet Plus, the latest evolution of the MicroNet control system that has been developed for Aero LM product lines.
- It is the current GE production standard for the LM2500 and the LM6000 product lines.
- Upgrade consists in replacement of current Mark VI Fuel Controller and Fanuc 90-70 I/O modules, chassis and software, using new hardware and software for MicroNet Plus.
- Concentrates both Mark VI and Fanuc 90-70 PLC into a single Controller and Chassis.
- 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 MicroNet Plus 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 “Plus” features a series of product enhancements/upgrades:
  - Single or Redundant System Configuration (Dual power supplies, dual CPU’s) to provide high availability
  - Synchronized Memory – assures that both CPUs use the same operating information in every rate group
  - One Millisecond Transfer
  - On-line Repairability
  - New Motorola 5200 Processor
  - Real Time Network

Customer Value
- Powerful CPU for demanding applications
- Flexibility to use different configurations, depending on customer’s needs, and current configuration
- Real-time multitasking VxWorks operating system
- Improved control system availability and reliability
- Exceptional accuracy, fast update rates, and high channel-to-channel isolation
- SNTP compliant for time synchronization
- Eliminates transceiver module
- Increased communications capabilities (Ethernet, CAN, ports)
- Time stamping sequence of events can be accomplished from 1ms to 5ms
- Increased expansion chassis options (8 or 14 slots)
- Offers a complete suite of software products for service interface

Applicable Units:

<table>
<thead>
<tr>
<th>Applicable Units</th>
<th>LM6000</th>
<th>LM2500</th>
<th>LM5000</th>
<th>LM1600</th>
<th>TM2500</th>
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<td>LM6000</td>
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Typical MicroNet Plus Architecture

MicroNet Plus CPU Module