Versatile Network Switching
VNetS-3400 High-Bandwidth Network Switch

Our next generation, state-of-the-art, ruggedized avionics high-bandwidth switch unit designed for safety critical applications when determinism matters.

Flexible Network Configurations
• Switching core fabric provides a superset of switch functionality to support the widest possible range of customer applications
• Deterministic or non-deterministic network protocols
• Ethernet ports configurable to bandwidth needs
• Ruggedized for Commercial or Military aircraft usage

Designed to Open Standards
• IEEE 802.1 Time Sensitive Network (TSN)
• SAE AS-6675 TSN Aerospace Profile
• IEEE 802.3 Standard for Ethernet

Critical Functionality Inherent to Design
• Extensive traffic policing, segregation and priority mechanisms
• Ports can be used as mirror ports, flight test interfaces, or a variety of other functions
• Supports in-line encryption and includes root-of-trust
• Grand Master Clock functionality is able to sync to an external 1PPS GPS input or simulate a 1PPS output
• Supports integration of System on a Module (SoM) and mass memory card
• Supports Mission System Health Awareness System (MSHAS)

Configuration Simplified
• Extensive toolset for configuration of the switch
• Delivered in pre-configured state <or> user configured during integration
• Configuration options include TSN, ARINC 653 partitioning, and programmable Remote Data Concentrators
Performance specifications

Baseline Configuration
- 8x 10/100/1000Base-T
- 32x Fiber Optic Ports with each port configurable to:
  - 100Base-SX <or>
  - 1000Base-SX <or>
  - 10GBase-SR <or>
  - 40Base-SR4
- 6x Open/Ground Position Inputs
- 1x Open/Ground Parity Input
- 1x 1PPS in/out
- Controller Interface

Features
- Deterministic Ethernet
  - IEEE 802.1 Time Sensitive Networking (TSN)
  - SAE AS-6675 TSN Aerospace Profile
- Ethernet Port Configurations
  - 8x 10/100/1000Base-T

Tools
- ARINC 664 and TSN network configuration tools suite

<table>
<thead>
<tr>
<th>Feature</th>
<th>Attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>TBD</td>
</tr>
<tr>
<td>Temperature</td>
<td>-40°C to +70°C</td>
</tr>
<tr>
<td>Altitude</td>
<td>TBD</td>
</tr>
<tr>
<td>Relative Humidity</td>
<td>&gt; 95%</td>
</tr>
<tr>
<td>Cooling</td>
<td>Conduction or Convection</td>
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</tbody>
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![Diagram of the system components and connections]