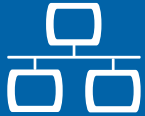


# Versatile Network Switching



## 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



Photo: USAF



# 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

- Fiber Optic Port Configurations
  - 32x 100Base-SX <or> 1000Base-SX <or> 10GBase-SR
  - 8x 40GBase-SR4 <or>
  - Combination of 100Base-SX/1000Base-SX/10GBase-SR and 40GBase-SR4
- IEEE 802.1AS high accuracy generic Precision Time Protocol (gPTP) Grand Master Clock with optional Stratum 3 stability available
- RS-232-C Test Interface
- Address resolution protocol
- MAC Multi-port bridge and VLAN
- NETCONF/YANG configuration
- ARINC 615A Data Loadable

## Tools

- ARINC 664 and TSN network configuration tools suite

Feature	Attribute
<b>Size</b>	TBD
<b>Temperature</b>	-40°C to +70°C
<b>Altitude</b>	TBD
<b>Relative Humidity</b>	> 95%
<b>Cooling</b>	Conduction or Convection

