The Netsyder-ND module is a rugged and compact Ethernet switch module that can be used in a variety of applications, including Onboard avionics and Onboard aerospace, defense, industrial automation, etc. The module is based on the EPSM-10GX4 switch module from Diamond Systems, which provides 8 10/100/1000 Mbps copper ports.

FEATURES

- ➢ Ethernet Switch Layer 2+ Software Support Includes
    - • 8K MAC addresses and 4K VLANs (IEEE 802.1Q)
    - • 8K IPv4 and IPv6 multicast group support
    - • Jumbo frame support at all speeds
    - • Flexible link aggregation support based on Layer-2 through Layer-4 inform Multicast and broadcast storm control, as well as flooding control.
    - • Rapid Spanning Tree protocol (RSTP) and MSTP
    - • Multi-protocol support: IEEE 802.1d, IEEE 802.1w, IEEE 802.1s and IEEE 802.1x
    - • 8 priorities and 8 QoS queues per port with scheduling
- ➢ Ethernet Switch Layer 3+ Software Support Includes
    - • Hardware and Software based IPv6 L3 static routing.
    - • RFC 2328 OSPFv2 dynamic routing
    - • IEEE 1588 precision time protocol (PTP) (Build Option)
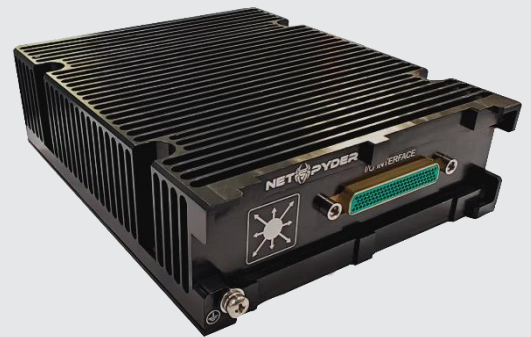
Technical Specifications

Switch Specifications

Features:

- • All the I/O's & Power are routed on 100Pin Micro-D Connector.
- • 8 Port Managed L2/L3 (10/100/1000Mbits) Rugged Ethernet switch
- • Support Inter VLAN Routing
- • Capable of creating multiple VLANs
- • Console Port for debugging

Mechanical:

- • Dimension in mm (W X H X D)**:** 110X37X135
- • Surface finish:
  * All external aluminum surfaces are hard black anodized as per MIL-A-8625F TYPE III CLASS 2.
- • Weight: Less than 500 grams.

Environmental specifications:

- Conduction Cooled Unit
- Operating Temp: -40°C to +85°C.
- Complies to Standards: MIL-STD-461F, MIL-STD- 704 and MIL-STD-810G.

Power Requirements:

- Input Voltage Range: 18 to 32 VDC. Nominal 28VDC (Typical).
- Hold Up capability: 50ms.
- Power Consumption: 10W (max)

Block Diagram