

5100 CLASS

Rugged Ethernet Switch

MODEL 5120-24 MILITARY GRADE 24-PORT SWITCH SMB / MANAGED



The 5000 Series consists of a family of COTS IT equipment (such as switches, routers, firewalls and servers) which are then ruggedized and housed in standard and custom "reference design" enclosures. They support highly rugged and MIL-spec applications utilized by the defense/aerospace markets as well as high reliability industrial such as railway and oil/gas.

The 5100 Class is a family of conduction cooled switches ideally suited for applications requiring a sealed chassis without the use of forced air convection. This class of products includes 8 to 24 port switches which are managed or unmanaged. The COTS devices used are Small-Medium Business or Enterprise class Netgear[®] and Cisco[®] products.

The Model 5120-24 is a full military grade, IP66 rated, conduction cooled chassis which houses a ruggedized Ubiquiti[®] EdgeSwitch24 gigabit ethernet switch. This 24 port device with two SFP fiber ports is an easy to use managed switch suited for small-medium business sized networks.

Optional features include rackmounting kit, heater for -20°C operation, D38999 connectors to replace RJField connectors, and power input options of 18-32VDC, 110-220VAC 50/60Hz or 115VAC 47-440Hz.

For more information please visit: www.novaintegration.com

- > 24 Port Gigabit Ethernet Switch
- > 2 SFP Fiber Ports
- > Managed / Small-Medium Business
- NOVA's proprietary, overlapping machined panel design results in zero torsional flex and superior sealing for FOD and EMI
- Conduction cooled IP66 rated housing
- RTCA/DO-160E temperature, altitude, humidity, shock, vibration, explosive atmosphere, salt spray and sand / dust
- > MIL-STD-461E EMI/EMC
- > Customer definable I/O panel
- > 18-32VDC, 110-220VAC or 115VAC / 47-440Hz power input available
- Thermal and sturctural simulations have been completed validating all designs
- > Max power consumption 250W with PoE
- > Tabletop or 2U Rackmount
- Optional heater for -20°C operation





5100 CLASS MODEL 5120-24

ENVIRONMENTAL	CHARACTERISTICS	Fungus Resistance	MIL-STD-454N, Requirement 4	Max PoE+ Wattage per port b
Temperature, operating	0°C to +55°C -20°C to +55°C w/ heater	Fluid Contamination	Jet fuel DERD 2494, hydrolic fluid MIL-H-5606E, lube oil mixtures to DERD 2497/ MIL-L-7808 & soap water	Voltage Range 802.3at Mo
				Max Passive PoE Wattage pe
Temperature, non-operating	-40°C to +85°C			24V Passive PoE Voltage R
Humidity	0% to 100%, non-condensing MIL-STD-810D, Method 507.2, Fig 507.2-3	Physical Characteristics		Total Non-blocking Throug Switching capacity
Altitude, operating	-1,000 to 15,000 ft (minimum) RTCA/DO-160E, Paragraph 4.6.1, Category A	Dimensions	9" D x 17.32" W x 3.47" H	Forwarding rate
		Weight	12 lbs.	To two during race
Altitude, non-operating	-1,000 ft. to 60,000 ft. RTCA/DO-160E, Paragraph 4.6.1	Mounting	Tabletop or Rackmount	
		Sealing	IP66	
Decompression	65,000 ft. tested per RTCA/ DO-160E, Paragraph 4.6.2	Chassis Body	Machined aluminum (6061-T6)	
Vibration	MIL-STD-810F, Method 514.6, Procedure I	Cooling	Conduction	Features
Acceleration	40G, any axis per MIL-STD- 810D method 513.3	ELECTRICAL CHARACTERISTICS		
Shock	MIL-STD-810F, Method 516.6, Procedures I	Input Power	18-32 VDC 110-220VAC (nominal) 115VAC, 47-440Hz	Customization
Shock, non-operating (Bench Handling)	MIL-STD-810F, Method 516.6, Procedures V & VI	Power Consumption	250W max 300W with optional heater	Note: For additional perfo
EMI/EMC	MIL-STD-461F CE102, CE106, CS101, CS114, CS115, CS116, RE102, RS103	Voltage Hold Up	MIL-STD-704A (optional)	manual for the Ubiquiti® F
Electrical Bonding	MIL-HDBK-1857	Performance Characteristics		Ord
ESD	MIL-STD-1686A	RJ45 Giqabit Ethernet Ports	24	95-5120-
Explosive Atmosphere	RTCA/DO-160E, Paragraph 9.7.2, Category E	SFP Gigabit Ethernet Ports	2	HEATER MOUN 1 None 0 Tableto
Salt Spray	RTCA/DO-160E, Paragraph 14.2, Category S	PoE Interfaces	POE+ IEEE 802.3af/at (Pins 1, 2+; 3, 6-) 24VDC Passive PoE	4 Installed 2 Rackmo
Sand and Dust	RTCA/DO-160E, Paragraph 12.3, Category D		(Pins 4, 5+; 7, 8-)	Contact Nova Integration

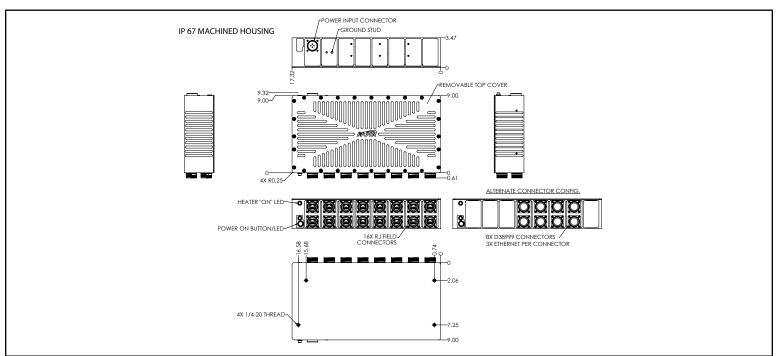
OUTLINE DRAWING

	Max PoE+ Wattage per port by PSE	34.2W
	Voltage Range 802.3at Mode	50-57V
	Max Passive PoE Wattage per Port	17W
	24V Passive PoE Voltage Range	20-27V
	Total Non-blocking Throughput	26 Gbps
	Switching capacity	52 Gbps
	Forwarding rate	38.69 Mpps
	Features	MSTP/RSTP/STP VLAN, Private & Voice VLAN Link Aggregation DHCP & IGMP Snooping TACACS+, RADIUS, 802.1X, MAC Filtering, ACL DiffServ, CoS Static Routing, Policy- Based Routing DHCP Server Functionality
	Customization	Front I/O panel, Heater, Power Input and Mounting

Note: For additional performance characteristics see manual for the Ubiquiti® EdgeSwitch 24 (ES-24-250W).



Contact Nova Integration Solutions for custom configurations



* Products may vary from the specifications and images depicted within this document and are subject to change without notice. Nova Integration Solutions takes no responsibility for damages incurred due to errors contained in this document. Please contact Nova integration Solutions for further information about our products.

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