NOVA INTEGRATION SOLUTIONS

5100 CLASS

Rugged Ethernet Switch

MODEL 5100-24

Military Grade 24-Port Switch SMB / Unmanaged

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.

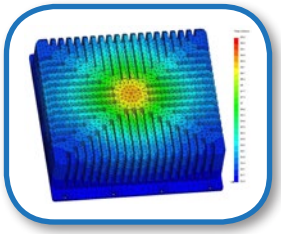
The Model 5100-24 is a full military grade, IP66 rated, conduction cooled chassis which houses a ruggedized Netgear® JGS524 gigabit ethernet switch. This 24 port device is an easy to use unmanaged switch suited for small-medium business sized networks.

10/100/1000 Ethernet ports are accessed via 16ea RJField connectors or 8ea D38999 connectors with 3 ethernet lines installed per connector.

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**
- **Unmanaged / Small-Medium Business**
- **Ruggedized Netgear® JGS524 Switch**
- **NOVA's proprietary, overlapping machined panel design results in zero torsional flex and superior sealing for FOD and EMI**
- **Conduction cooled IP66 rated housing**
- **MIL-STD-810G and 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**
- **Very low power consumption <20W**
- **Tabletop or 2U Rackmount**
- **Optional heater for -20°C operation**



AS 9100
BUREAU VERITAS
Certification
Certificate No: US008267-1

Environmental Characteristics

Temperature, operating	0°C to +55°C -20°C to +55°C w/ heater
Temperature, non-operating	-40°C to +85°C
Humidity	0% to 100%, non-condensing MIL-STD-810D, Method 507.2, Fig 507.2-3
Altitude, operating	-1,000 to 15,000 ft (minimum) RTCA/DO-160E, Paragraph 4.6.1, Category A
Altitude, non-operating	-1,000 ft. to 60,000 ft. RTCA/DO-160E, Paragraph 4.6.1
Decompression	65,000 ft. tested per RTCA/ DO-160E, Paragraph 4.6.2
Vibration	MIL-STD-810F, Method 514.6, Procedure I
Acceleration	40G, any axis per MIL-STD-810D method 513.3
Shock	MIL-STD-810F, Method 516.6, Procedures I
Shock, non-operating (Bench Handling)	MIL-STD-810F, Method 516.6, Procedures V & VI
EMI/EMC	MIL-STD-461F CE102, CE106, CS101, CS114, CS115, CS116, RE102, RS103
Electrical Bonding	MIL-HDBK-1857
ESD	MIL-STD-1686A
Explosive Atmosphere	RTCA/DO-160E, Paragraph 9.7.2, Category E
Salt Spray	RTCA/DO-160E, Paragraph 14.2, Category S
Sand and Dust	RTCA/DO-160E, Paragraph 12.3, Category D
Fungus Resistance	MIL-STD-454N, Requirement 4
Fluid Contamination	Jet fuel DERD 2494, hydrolic fluid MIL-H-5606E, lube oil mixtures to DERD 2497/ MIL-L-7808 & soap water

Physical Characteristics

Dimensions	7" D x 17.32" W x 3.47" H
Weight	7.5 lbs.
Mounting	Tabletop or Rackmount
Sealing	IP66
Chassis Body	Machined aluminum alloy #6061-T6
Cooling	Conduction

Electrical Characteristics

Input Power	18-32 VDC 110-220VAC (nominal) 115VAC, 47-440Hz
Power Consumption	20W max 45W with optional heater
Voltage Hold Up	MIL-STD-704A (optional)

Performance Characteristics

Gigabit Ethernet ports	24
Max MAC entries	8K
Buffer size	256KB
Switching Bandwidth	48 Gbps
Forwarding Rate 10 Mbps port: 100 Mbps port: 1000 Mbps port:	 14,880 frames/sec 148,800 frames/sec 1,488,000 frames/sec
Jumbo frame support	up to 9K packet size
DSCP	Yes
IEEE 802.1p QoS	Yes
Latency (using 64byte packets) 10 Mbps port: 100 Mbps port: 1000 Mbps port:	 35µs (max) 30µs (max) 15µs (max)
Standards Compliance	IEEE 802.3i 10BASE-T Ethernet IEEE 802.3u 100BASE-TX Fast Ethernet IEEE 802.3ab 1000BASE-T Gigabit Ethernet IEEE 802.3x flow control IEEE 802.3 CAMA/CD IEEE 802.3az Energy Efficient Ethernet
Customization	Front I/O panel Heater Power Input Mounting

Note: For additional performance characteristics see manual for the Netgear® JGS524.

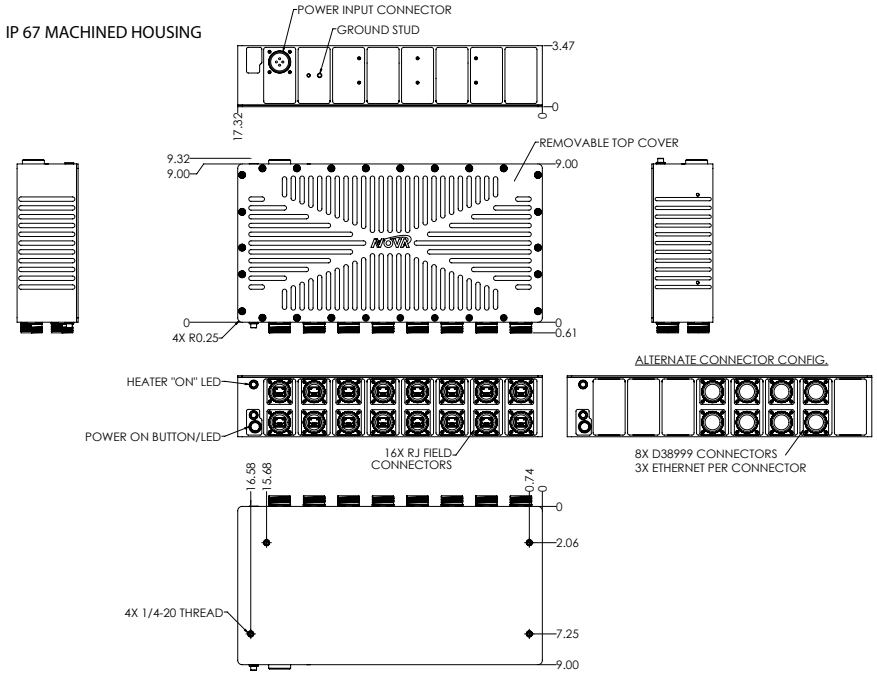
Ordering Table

95-5100-24HMP-00X

HEATER		MOUNT		POWER		CONFIG	
1	None	0	Tabletop	2	18-32VDC	1	Standard
4	Installed	2	Rackmount	5	110-220VAC	x	Customer Specific
				6	115VAC 47-440Hz		

Contact Nova Integration Solutions for custom configurations

Outline Drawing



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