## MaD티 512 －24

## Mileitary Erade

## 24－PロRT SWITEH SME／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 ${ }^{\circledR}$ and Cisco ${ }^{\circledR}$ products．

The Model 5120－24 is a full military grade，IP66 rated，conduction cooled chassis which houses a ruggedized Ubiquiti® ${ }^{\text {® }}$ 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 $-20^{\circ} \mathrm{C}$ operation， D38999 connectors to replace RJField connectors，and power input options of $18-32 \mathrm{VDC}, 110-220 \mathrm{VAC} 50 / 60 \mathrm{~Hz}$ or $115 \mathrm{VAC} 47-440 \mathrm{~Hz}$ ．

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－ 440 Hz 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 $-20^{\circ} \mathrm{C}$ operation

AS 9100
BUREAU VERITAS
Certification
Certificate No：US008267－1

 MaDEL 512ロ－24

| Environmental | HARACTERISTICS |
| :---: | :---: |
| Temperature，operating | $0^{\circ} \mathrm{C}$ to $+55^{\circ} \mathrm{C}$ <br> $-20^{\circ} \mathrm{C}$ to $+55^{\circ} \mathrm{C} \mathrm{w} /$ heater |
| Temperature，non－operating | $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ |
| Humidity | $0 \%$ to 100\％，non－condensing MIL－STD－810D，Method 507．2，Fig 507．2－3 |
| Altitude，operating | $-1,000$ to $15,000 \mathrm{ft}$（minimum） RTCA／DO－160E，Paragraph 4．6．1，Category A |
| Altitude，non－operating | $-1,000 \mathrm{ft}$ ．to 60，000 ft． RTCA／DO－160E， Paragraph 4．6． |
| 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 5 |
| 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 | 9＂D x 17．32＂W x 3．47＂H |
| Weight | $12 \mathrm{lbs}$. |
| Mounting | Tabletop or Rackmount |
| Sealing | IP66 |
| Chassis Body | Machined aluminum（6061－T6） |
| Cooling | Conduction |
| ELECTRICAL CHARACTERISTICS |  |
| Input Power | 18－32 VDC <br> 110－220VAC（nominal） <br> $115 \mathrm{VAC}, 47-440 \mathrm{~Hz}$ |
| Power Consumption | 250W max <br> 300W with optional heater |
| Voltage Hold Up | MIL－STD－704A（optional） |
| Performance Characteristics |  |
| RJ45 Gigabit Ethernet Ports | 24 |
| SFP Gigabit Ethernet Ports | 2 |
| PoE Interfaces | POE＋IEEE 802．3af／at <br> （Pins 1，2＋；3，6－） <br> 24VDC Passive PoE <br> （Pins 4，5＋；7，8－） |



Ordering Table
95－5120－24HMP－00X


Contact Nova Integration Solutions for custom configurations

## Outline Drawing



[^0] Please contact Nova integration Solutions for further information about our products．


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