

5100 CLASS

RUGGED ETHERNET SWITCH

MODEL 5110-08

MILITARY GRADE 8-PORT CISCO 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.

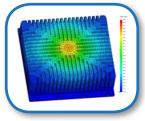
The 5100 Class is a family of conduction cooled switches ideally suited for applications requiring a sealed chassis without the use of forced air convection. This class of products includes 8 to 24 port switches which are managed or unmanaged. The COTS devices used are Small-Medium Business or Enterprise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

The Model 5110-08 is a full military grade, IP66 rated, conduction cooled chassis which houses a ruggedized Cisco® SC110D-08 gigabit ethernet switch. This 8 port device is an easy to use unmanaged 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

NOVR





- > 8 Port Gigabit Ethernet Switch
- > Unmanaged / Small-Medium Business
- > Ruggedized Cisco® SC110D-08 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
- Thermal and sturctural simulations have been completed validating all designs
- > Very low power consumption <10W
- > Tabletop or 1U Rackmount
- Optional heater for -20°C operation



5100 CLASS MODEL 5110-08

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 1.73" H
Weight	3.5 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	6W max 31W with optional heater
Voltage Hold Up	MIL-STD-704A (optional)

PERFORMANCE CHARACTERISTICS

Gigabit ports	8
Switching Capacity	1.6 Gbps
Forwarding Capacity	1.4 mpps
Jumbo frame support	9216 bytes

802.1p priority based 4 hardware queues Quality of service (QoS) Priority queuing and weighted round-robin (WRR) Helps discover loops in Loop detection the network to avoid broadcast storms 128 MB RAM System memory 128 MB Flash IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3ab 1000BASE-T Standards IEEE 802.3z Gigabit Ethernet IEEE 802.3x Flow Control 802.1p priority

> Front I/O panel Heater

Power Input Mounting

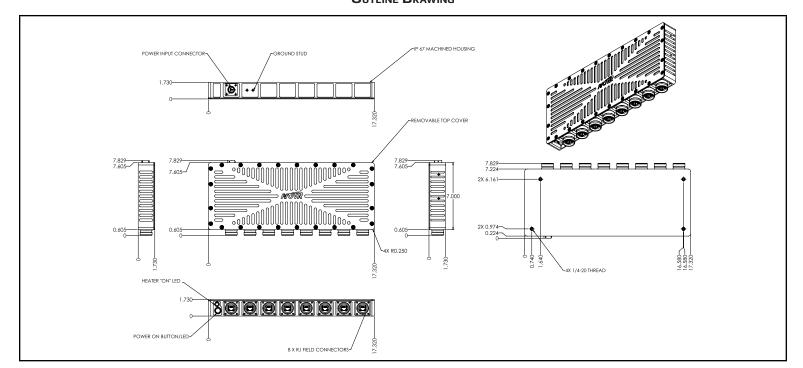
Note: For additional performance characteristics see manual for the Cisco® SG110D-08.

Customization

ORDERING TABLE 95-5110-08HMP-00X HEATER 1 None 4 Installed 2 Rackmount 6 110-220VAC 6 110-220VAC 6 115VAC Specific

Contact Nova Integration Solutions for custom configurations

OUTLINE DRAWING



^{*} 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.