

MODEL 3065

MILITARY GRADE

1 TALL LONG ATR

6U/6SLOT BACKPLANE



Model 3065 is one of NOVA's convection-cooled, top-loading ATR chassis. Manufactured from machined aluminum alloy #6061-T6, this chassis provides superior strength and EMI/EMC mitigation through a proprietary overlapping seams design.

Aggressive system cooling is provided from a rear mounted and customizable fan tray which forces air through side air intakes to the rear fan tray. The result of this cooling system is handling of power loads well over 400W @ 50°C ambient operating temperature and at 10,000 ft altitude. A fan controller or System Environmental Monitor are optional.

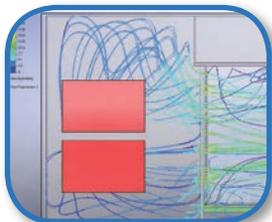
Designed for Eurocard passive backplanes and 6U x 160mm IEEE 1101.1/10 plug-in boards, the 3065 accommodates up to a 10-slot backplane. The internal subrack is manufactured from NIS' single-piece billet for added strength.

The 3065's default power supply options include plug in style 18-32 VDC or 90-264VAC input power, with 500W output supporting 3.3VDC, 5VDC, 12VDC and -12VDC voltages. VPX power and 440Hz input options are available.

Customers may select from numerous D38999 Series-III copper or fiber optic, MIL-STD-26482 or other bulkhead circular types available in the marketplace for use with a customizable removable I/O panel. Where needed, NIS will design a cost effective I/O printed circuit board to reduce cabling between the face plate and the backplane.

This model has successfully flown on the P3-Orion aircraft in various configurations.

- ▶ **A proprietary, overlapping machined panel design results in zero torsional flex and superior sealing for FOD and EMI**
- ▶ **1-Long Convection-cooled ATR chassis**
- ▶ **6U x 160mm Top loading system**
- ▶ **Up to 10-slot on 1" pitch or 12-slot on 0.8" pitch VPX, VME64x, cPCI or custom backplane**
- ▶ **AC or DC input with multiple power options**
- ▶ **Input transients and voltage hold up per MIL-STD-1275/704E (optional)**
- ▶ **Shock & vibration as per MIL-STD-810F; EMI/EMC per MIL-STD-461F**
- ▶ **MIL-C-5541E chemfilm with a black hard anodized or painted exterior surface**
- ▶ **Customizable front I/O panel**
- ▶ **ARINC shock mounting configuration shown**
- ▶ **Thermal and structural simulations have been completed validating all designs**
- ▶ **Custom options or modifications available**



AS 9100
BUREAU VERITAS
Certification
Certificate No: US008267-1



ENVIRONMENTAL CHARACTERISTICS

High temperature, operating	+55°C per MIL-STD-810F, Method 501.4, Procedure I & II
Low temperature, operating	0°C standard, -40°C optional per MIL-STD-810F, Method 502.4, Procedure I & II
High temperature, non-operating	+85°C per MIL-STD-810F, Method 501.4, Procedure I & II
Low temperature, non-operating	-40°C per MIL-STD-810F, Method 502.4, Procedure I & II
Thermal shock	Designed to meet MIL-STD-810F, Method 503.4, Procedure I
Humidity	0% to 95%, non-condensing per MIL-STD-810F, Method 507.4, Procedure III
Altitude, operating	-1,500 ft. to 40,000 ft. per MIL-STD-810F, Method 500.4, Procedure I, II & III
Altitude, non-operating	-1,500 ft. to 65,000 ft.
Vibration	Designed to meet MIL-STD-810F, Method 514.5, Procedure I
Shock	20G, 20ms per MIL-STD-810F, Method 516.5, Procedure I & VI
Shock	20G, 11ms per MIL-STD-810F, Method 516.5, Procedure I & IV

EMI/EMC	Designed to meet MIL-STD-461F, Method CE101, CE102, CE106, CS101, CS114, RE101, RE102, RS102, RS103
Electromagnetic environment	Designed to meet MIL-STD-464A
ESD	MIL-STD-1686A
Rain	Designed to meet MIL-STD-810F, Method 506.4, Procedure II
Salt fog	Designed to meet MIL-STD-810F, Method 509.4, Procedure I
Sand & dust	Designed to meet MIL-STD-810F, Method 510.4, Procedure I & II

PHYSICAL CHARACTERISTICS

Dimensions	1 Long ARINC Size (custom) 19.5" L x 10.71" W x 10" H
Weight	35 lbs. (configuration dependent)
Mounting	Hard mount tabletop and shock tray

ELECTRICAL CHARACTERISTICS

Input power (standard)	90-264VAC @ 47-440 Hz
Input power (optional)	18-32 VDC Custom options available
Voltage hold up (optional)	50ms per MIL-STD-704A

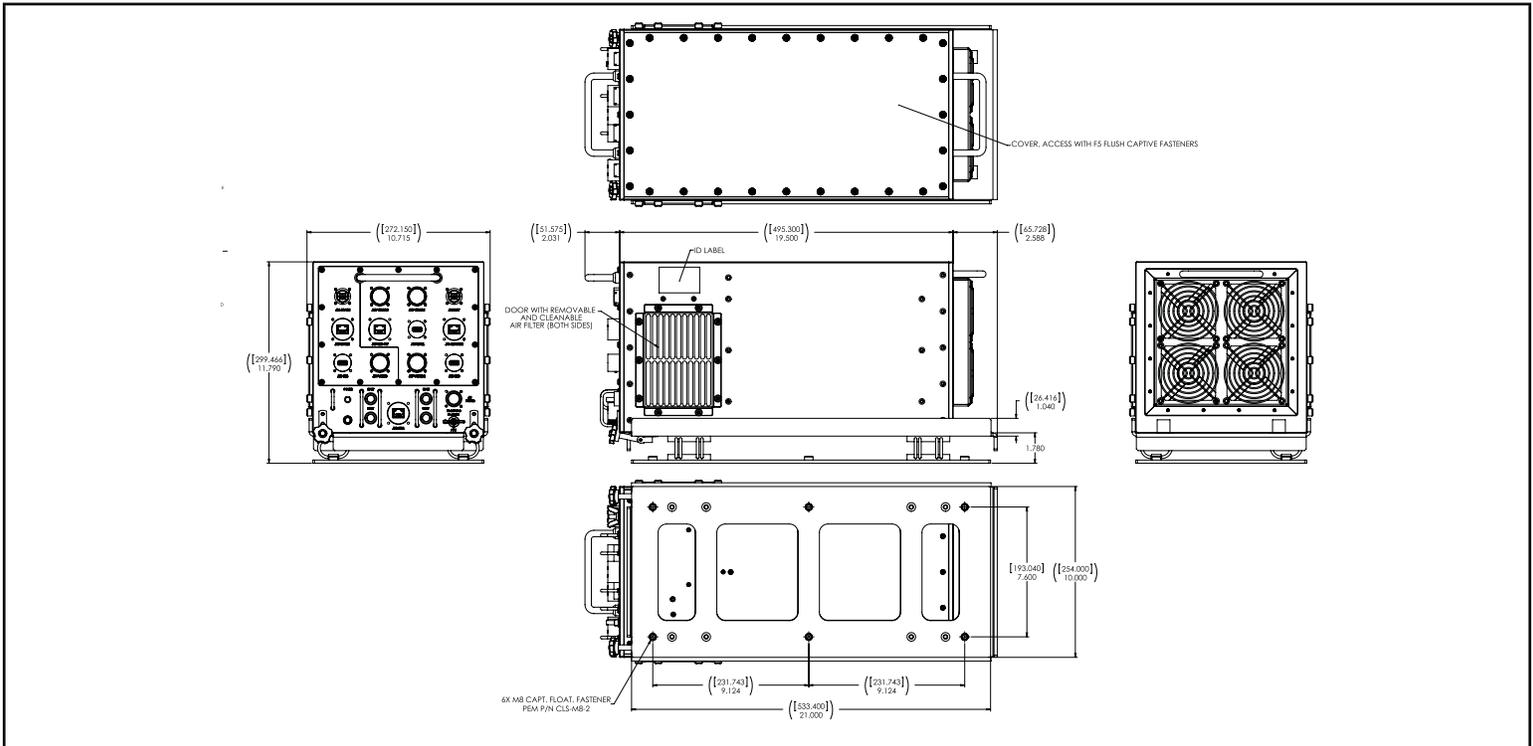
COMMON SPECIFICATIONS

Chassis body	Machined aluminum alloy #6061-T6
Cooling	400W+ at 10,000 ft. altitude at +50°C ambient temperature
User controls	Circuit breaker (MIL-grade) Customer definable and configuration dependant

ORDERING TABLE

95-3065-06061-00x	Model 3065, 6U cPCI, 6 Slot, 28VDC power input
95-3065-06066-00x	Model 3065, 6U cPCI, 6 slot, 110VAC @ 47-440Hz
95-3065-01071-00x	Model 3065, 6U VPX, 7 Slot, 28VDC power input
95-3065-04086-00x	Model 3065, 6U VME64x, 8 slot, 110VAC @ 47-440Hz
Contact factory for additional configurations and options	

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.