

MODEL 4503

DEVELOPMENT CHASSIS

HALF WIDTH / 42HP

3U PLUG IN BOARDS



NIS's small footprint, instrumentation-style enclosure is a development chassis with 42HP internal width accommodating up to ten (10) 3U x 160mm boards on 4HP centers (0.8 inch) or eight (8) boards on 5HP centers (1.0 inch). A typical VPX configuration consist of a 6 slot backplane on 5HP centers and a single plug in power supply. One or two PICMG 2.11 hot swap/redundant/N+1 plug-in power supplies can also be accommodated, with either AC or DC input.

As with all NIS enclosures, Model 4503 may be configured with a 3U Eurocard backplane, such as VME64x, CompactPCI®, PXI, or VPX/OpenVPX. Optionally, a 3U x 80 mm rear transition module (RTM) subrack may be installed.

Installed below the front subrack is a fan tray that provides aggressive air movement up through the front subrack and channeled through a specially designed plenum that runs along the top of the enclosure, with air egressed out the top.

The 4503 may be configured with NOVA's μ P-based System Environmental Monitor (SEM). The SEM monitors and controls critical system operational parameters such as temperature, fan speed, and input and output power; additionally, the SEM contains user-definable analog and digital channels as well as HTTP and SNMP protocols (in firmware).

For more information visit our web site: www.novaintegration.com

- › Supports 3U x 160mm boards
- › Configurable with single or dual backplanes
- › VME, VME64x, VPX/OpenVPX, CompactPCI or custom backplanes
- › Meets IEEE 1101.1, 1101.10 and 1101.11 mechanical and EMC requirements
- › AC and DC input power options
- › PICMG 2.11 plug-in, N+1 power supplies
- › Board pitches supported include 4HP (0.8") and 5HP (1") pitch
- › Anti-rotation, extrusions with integrated card guides enhance chassis strength and resist torsional flex
- › 3U x 80mm RTM subrack option
- › System Environmental Monitor option
- › Aggressive air cooling via "push" fan tray

ENVIRONMENTAL CHARACTERISTICS

Temperature, operating	-20°C to +70°C
Temperature, non-operating	-40°C to +85°C
Humidity	10% to 95%, non-condensing
Altitude, operating	-1,500 ft. to 25,000 ft.
Altitude, non-operating	-1,500 ft. to 40,000 ft.
Vibration	MIL-STD-810G, Method 514.5, Procedure I
Shock, operating	MIL-STD-810F, Method 516.5, Procedures VI
Shock, non-operating	MIL-STD-810G, Method 516.5, Procedures I, IV & VI
EMC	IEEE 1101.10
ESD	MIL-STD-1686A

HARDWARE PLATFORMS

Eurocard Backplane	Up to 10-slot, front loading subrack 6-slot on 5HP (1.0") pitch typical
Peripherals Bay	Optional
System Environmental Monitor (SEM)	Optional See (SEM) data sheet
Customization	Customer definable rear I/O panel. Customer definable peripheral bay. Power system defined per configuration.

PHYSICAL CHARACTERISTICS

Dimensions	9.5" H x 12.25" W x 12.75" D (typical)
Weight	varies by configuration
Mounting	Tabletop

ELECTRICAL CHARACTERISTICS

Input Power (standard)	85-264 VAC @ 47-63 Hz
Input Power (optional)	20-28 VDC 36-72 VDC Custom options available
Inrush Current	Varies with installed power supply Customer selectable including: NEMA 5-15P
Input Power Connector	MIL-C-26482 (M53472 or M53474) Customer Selectable
Power Consumption	300W Standard Varies with installed PSU
Power Supply Type	Plug-in cPCI (Standard) Hot swap N+1 (optional) Hard mount (optional)

ORDERING TABLE (PARTIAL)

95-4503-06405-500	3U enclosure with 3U x 160mm subrack and 3U x 80mm RTM; 6-slot VME64x backplane (w/ PD); single 3U/8HP, 300W, PICMG 2.11 hot swap/N+1 power supply, 90-264 VAC @ 47-63 Hz input; tabletop
95-4503-06605-500	3U enclosure with 3U x 160mm subrack and 3U x 80mm RTM; 6-slot CompactPCI@ backplane; single 3U/8HP, 300W, PICMG 2.11 hot swap/N+1 power supply, 90-264 VAC @ 47-63 Hz input; tabletop
95-4503-06305-500	3U enclosure with 3U x 160mm subrack and 3U x 80mm RTM; 6-slot OpenVPX backplane; single 3U/8HP, 300W, PICMG 2.11 hot swap/N+1 power supply, 90-264 VAC @ 47-63 Hz input; tabletop
95-4503-06505-500	3U enclosure with 3U x 160mm subrack and 3U x 80mm RTM; 6-slot VPX backplane; single 3U/8HP, 300W, PICMG 2.11 hot swap/N+1 power supply, 90-264 VAC @ 47-63 Hz input; tabletop
Contact factory for additional configurations and options	

OUTLINE DRAWING

Line Drawing Available